

FY **2017-**
FY **2018**

BIENNIAL REPORT

TO THE 86TH LEGISLATURE

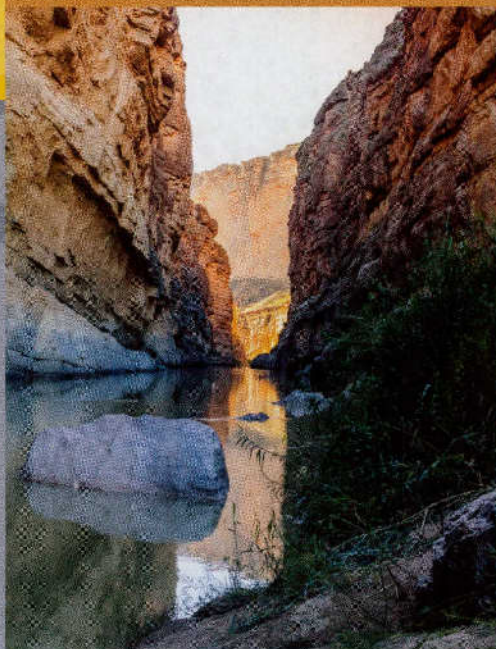


TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

BIENNIAL REPORT

TO THE 86TH LEGISLATURE
FY 2017 - FY 2018

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ENVIRONMENTAL QUALITY





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Report Requirements

The 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 86th 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 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Waste exchange information, page 39 [Texas Health and Safety Code Section 361.0219(c)]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Revenue spending from solid waste disposal and transportation fees, page 46 [THSC 361.014(a) and (b)]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Assessment of complaints received, page 48 [Water Code Section 5.1773]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Permit time-frame reduction process, page 55 [Government Code, Section 2005.007]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Office of Public Interest Counsel evaluation of performance measures, page 64 [Water Code Section 5.2725]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).
- Study on water basins without a watermaster, page 78 [Water Code Sections 11.326(g) and (h)]. This information was last published in December 2016 in the *Biennial Report to the 85th Legislature* (SFR-57/16).

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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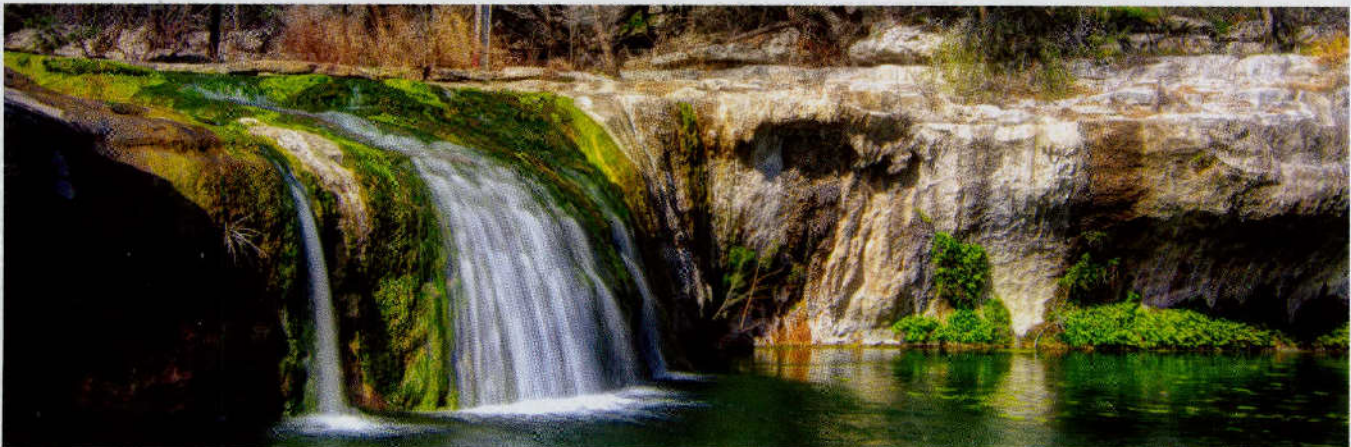
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From the Commission

You will notice some changes in the signature line on this letter. At the end of FY 2018, Commissioner Emily Lindley was appointed by Governor Abbott to replace Toby Baker, who became the agency's executive director. Governor Abbott selected Commissioner Jon Niermann to serve as chairman, in place of Bryan W. Shaw, who retired after nearly 10 years serving in that role.

The state of Texas is changing too. The population in metropolitan areas of the state continues to grow as new jobs are created and existing businesses expand. With such a booming economy, you would expect air quality to suffer. But the numbers tell a different story. Ozone levels, for example, have fallen by an average of 22 percent in Texas's four largest major metropolitan areas since 2000.

Yet while the trendlines in air quality defy the growing economy and population, some challenges remain. And despite progress, ozone remains a persistent issue, particularly in the wake of tightening national standards. Unfortunately, in July, the EPA ill-advisedly designated Bexar County as an ozone non-attainment area, a designation it now shares with the Dallas-Fort Worth and Houston-Galveston-Brazoria areas.

Accordingly, the Texas Emissions Reduction Program remains as important as ever. The program is one of the very few tools Texas has to address mobile sources of nitrogen oxides, a precursor to the formation of ozone. TERP improves monitored air quality *and* helps guard against onerous and punitive regulatory measures that the EPA would more likely take in its absence.

Texas anticipates additional air quality benefits from the Volkswagen Mitigation Trust, created in settlement of claims against Volkswagen for its emissions fraud. Governor Abbott selected the TCEQ as the lead agency responsible for the administration of the approximately \$209 million that the trust will make available for projects that reduce emissions of nitrogen oxides.

Not all change is welcome or positive, but good planning and cooperation can bring things back to normal. During this biennium, the name "Harvey" took on new meaning for Texans. We are proud of our employees and the agency's response to this unprecedented hurricane and associated torrential rains and flooding that devastated many of the state's coastal areas. Our emergency response teams worked before the storm to train and prepare ourselves, the regulated community, and the public. The agency provided information on a dedicated webpage, including forms and guidance on issuing a boil-water notice and other ways to prepare for disaster. After the storm, updates on public water and wastewater systems, debris management sites, and air monitoring results, just to name a few, were posted and frequently updated.

TCEQ responders also worked closely with state, federal and local partners from three unified command sites—Corpus Christi, Houston, and Beaumont—to mitigate environmental impacts. Just a few examples of activities include: assisting water and wastewater systems and getting inundated systems back up and running quickly, debris management, site assessment, tracking and managing recovery of orphaned barrels, and state Superfund site assessment. Many of our employees came to work to help others, even while they were dealing with personal loss at home.

The TCEQ stands ready to deal with future changes that will undoubtedly come our way and, as always, will apply standards fairly and use sound science to make decisions that are consistent with our mission to protect public health and the environment, while supporting a strong Texas economy.

Change is inevitable—managing change well is intentional.


Jon Niermann
 Chairman




Emily Lindley
 Commissioner

CHAPTER

Agency Highlights

As 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 2017 and 2018, the TCEQ found itself dealing with the aftermath of a ferocious tropical storm system, the likes of which have never been seen before. The agency had recent leadership changes, including a new chairman, commissioner, and executive director. Despite an ozone nonattainment designation for Bexar County by the EPA, the TCEQ continues to experience successes in air quality. The TCEQ is working to implement the Volkswagen Environmental Mitigation Trust for State Beneficiaries, which was established by the settlement of claims against Volkswagen and related companies, and also the RESTORE Act, which will continue to provide much-needed funding for the Texas coast following the massive Deepwater Horizon oil spill.

All 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.

Leadership Changes

New Chairman

On Aug. 31, 2018, Gov. Greg Abbott appointed Commissioner Jon Niermann as the new chairman of the TCEQ, replacing Bryan W. Shaw, Ph.D., P.E. Niermann was appointed as a commissioner in 2015—his term will expire in 2021. He 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 for three years. Before that, Niermann worked as an environmental attorney with the law firm of Baker Botts in Austin. In these roles, Niermann worked closely with the TCEQ, among other agencies. His docket included enforcement actions, permitting issues, rulemaking, and rule challenges.

Shaw stepped down as chairman on Aug. 31, 2018. He was appointed to the TCEQ by then-Gov. Rick Perry on Nov. 1, 2007, and appointed chairman on Sept. 10, 2009. Shaw brought a wealth of experience and knowledge to his position on the commission as both a professor and a licensed engineer. He came to the agency from Texas A&M University, where he taught many courses focused on air pollution engineering. The new vacancy on the commission will be filled by the governor.

New Commissioner

On Aug. 20, 2018, Gov. Abbott appointed Emily Lindley to a five-year term on the TCEQ's three-member panel. Lindley returned to the TCEQ after having served briefly as chief of staff for the administrator of the EPA's Region 6. Before that, Lindley was with the TCEQ for 10 years, most recently as the special assistant to the deputy executive director. Her earlier roles at the agency were as special assistant to the deputy director in the Office of Water, government relations liaison in the Intergovernmental Relations Division, and program specialist in the Office of Public Assistance. Lindley replaced Toby Baker on the commission (see below).

New Executive Director

Toby Baker was selected as the executive director of the TCEQ on Aug. 20, 2018. Before that, Baker served as a TCEQ commissioner, having been appointed by then-Gov. Perry in April 2012. He has served as both Gov. Perry and Gov. Abbott's designee to the Gulf Coast Ecosystem Restoration Council, where he oversees the disbursement

of grants in the RESTORE program, stemming from the settlement of the Deepwater Horizon oil spill. He also created a cross-border initiative to meet with his counterparts in Mexico to address shared environmental challenges. Baker replaced Richard Hyde, P.E., who retired as the TCEQ's executive director at the end of March.

Hurricane Harvey

Hurricane Harvey has gone down in the record books as one of the most destructive storms in the history of the United States. Unlike the typical tropical storm that strikes Texas, Harvey made landfall twice and affected a large swath, from Corpus Christi to the border with Louisiana.

Before the Storm

While the storm strengthened in the gulf, the agency worked diligently to prepare for its impact. The TCEQ pre-positioned vital response equipment just outside of forecasted areas to both protect equipment and allow for a quick response to affected zones as soon as storm and flood conditions allowed.

As part of the coordination for Harvey, a unified command was established between the TCEQ, the Environmental Protection Agency, the Texas General Land Office, and the U.S. Coast Guard to oversee response efforts. This unified command was supported by three operational branches: Corpus Christi, Houston, and Port Arthur.

Agency staff coordinated with regulated entities to initiate their emergency plans, while also working to protect their own regional offices and equipment.

The agency developed a pump and chemical protection reference guide to help public water systems protect plant equipment and assess chemical treatment inventory and fuel needs.

The agency sent an email to water systems and operators in potentially affected areas before landfall. The email included the requirements for issuing a boil-water notice and provided boil-water notice templates that the systems could use, contact information for technical-assistance needs, and Texas Water/Wastewater Agency Response Network information.

The agency created a dedicated Hurricane Harvey Response webpage, where it posted a vast amount of regulatory guidance as well as information for private-well owners, support material, and other useful information.

The TCEQ protected its network of ambient air monitoring sites in the storm's path. Forty-eight TCEQ monitoring

stations across the Corpus Christi, Houston, and Beaumont areas were taken offline and prepped to shelter in place.

During the Storm

On Aug. 23, 2017, Harvey—which had been downgraded to a tropical wave—re-formed into a tropical storm. And because of ideal conditions in the Gulf of Mexico, the storm quickly gained power and was already a Category 4 storm before making landfall, near Rockport, on Aug. 25.

The hurricane first moved to the northwest before turning back to the east as a tropical storm, circling around Victoria, going through Matagorda Bay, and then back into the Gulf of Mexico on Aug. 28. The tropical storm stayed close to the Texas coast before making landfall again to the east of Beaumont in Louisiana, on Aug. 30.

In its report on Harvey, the National Weather Service observes that parts of the state received "more than 40 inches of rain in less than 48 hours," and that "Cedar Bayou in Houston received a storm total of 51.88 inches of rainfall, which is a new North American record."

That rainfall record—and the record for any United States storm—was smashed after the weather service reevaluated its data. Nederland, in Jefferson County, recorded 64.6 inches of rain from Aug. 24 to Sept. 1.

The devastation was far-reaching and affected vast swaths of the state, encompassing numerous regulated entities.

At the storm's peak, 61 community public water systems, serving a population of 222,821 people, and 40 wastewater-treatment facilities, serving a population of 168,816 people, were rendered inoperable or even destroyed. A total of 203 community public water systems, serving a population of 376,245 people, issued boil-water notices as a precautionary health and safety measure or due to problems caused by the storm.

Most of the system outages were a result of equipment failures caused by wind damage, storm surge, or flooding conditions. Some systems were completely submerged under floodwaters, damaging critical electrical systems and rendering pumps and other equipment non-operational.

All told, about 300 TCEQ employees work in its Corpus Christi, Houston, and Beaumont regional offices, in its Sugar Land Laboratory, and in its Galveston Bay Estuary Program. Of these employees, 93 suffered significant damage to personal property, including some whose homes were destroyed by the flooding. Despite their own losses, however, they continued to serve, making valuable and significant contributions to the response effort.

After the Storm

A Team Effort

Overall, about 500 TCEQ staffers were involved in responding to the disaster. More than 50 field teams were deployed daily throughout the 58 affected counties.

These field teams conducted a host of vital operations, including rapid needs assessments, oil and hazardous materials discharge assessments and recovery, orphan hazardous materials container evaluations and recovery, public water supply system infrastructure assessments, wastewater system infrastructure assessments, debris-management site assessments, dam safety assessments, and air quality monitoring.

The TCEQ led hazmat operations to monitor facilities that had reported spills or releases and to recover orphan drums and containers, which were found in many of the waterways.

Air Quality

In a coordinated effort to monitor air quality in storm-affected areas, both TCEQ and EPA investigators spent long hours, day and night, monitoring neighborhoods and industrial fence lines with handheld instruments such as optical gas imaging cameras, toxic-vapor analyzers, summa canisters, and multi-gas monitors. These tools provided the most effective way to quickly identify sources of drifting plumes, so swift action could be taken to address the cause of these emissions.

Assessments of specific targets as well as broad areas of storm-affected areas were conducted using optical gas imaging camera aerial surveys, the EPA's Trace Atmospheric Gas Analyzer mobile monitoring system, and the EPA's Airborne Spectral Photometric Environmental Collection Technology aircraft.

The TAGA system conducted monitoring in Houston, Deer Park, Baytown, Sweeny, Texas City, Beaumont, Port Arthur, Victoria, Point Comfort, and Corpus Christi.

The TCEQ conducted aerial surveys in the Houston and Beaumont areas using a helicopter equipped with an optical gas imaging camera, which can spot VOCs and other hydrocarbons invisible to the eye. Investigators followed up with facilities to address potential sources of air emissions identified during the surveys.

The TCEQ's air monitoring stations were restored quickly after landfall. All undamaged or unflooded sites were back online within two weeks. Because of these actions, the TCEQ avoided significant air monitoring data loss and was able to provide valuable information on potential air quality issues in the wake of the storm.

According to the available air monitoring data collected Aug. 24 through Sept. 24, all measured air toxics concentrations in the storm areas were well below levels of health concern.

Damage Control

While the agency did suffer \$170,000 in Harvey-related damages to its monitoring assets, it managed to protect \$5.2 million worth of those assets, thanks to its hurricane-preparedness protocol.

The TCEQ, which is responsible for 17 Superfund sites in affected areas, sent staff to check for damage. Based on sampling and assessments, all of these sites were cleared. The EPA completed site assessments at all 34 of its Superfund sites in the affected areas, and all were cleared, except one. The San Jacinto Waste Pits site was found to have damage to its cap, which required repairs and additional follow-up.

After the storm, 1,155 hazmat orphan drums and containers were recovered, and 266 spills or discharges were reported or observed; all have been responded to appropriately.

Water Issues

Immediately after the storm, through phone calls and on-site visits, the TCEQ began contacting 2,238 public water systems—which serve about 11 million people—in affected areas to ascertain operational status.

The TCEQ worked with various partners, including the National Guard and the Texas State Guard Engineering Group, to help get water and wastewater systems fully operational as soon as feasible.

Assistance teams, staffed with engineers and other public water system experts, were sent to the affected area to work directly with water system staff at their facilities to expedite the reestablishment of service to their customers. The agency expedited the review and approval of engineering plans and specifications for new wells, waterlines, and interconnections with other potable water sources to get systems back online as quickly as possible.

The agency actively worked to monitor flooded industrial and domestic wastewater facilities that reported spills, as well as conduct outreach and provide technical guidance. While wastewater facilities are prepared for increased flows during heavy rainfall events, the magnitude of the record-setting flooding affected facilities in a way that limited their ability to respond. Required public evacuation of flooded areas also interfered with the ability of regulated facilities to observe

and estimate the amounts and constituents potentially discharged during the extreme flooding.

To put it into perspective, the 22.5 million gallons of sanitary-sewer overflows reported to the TCEQ by wastewater facilities equals 0.00012 percent in volume of the 19 trillion gallons of rainwater that Texas received during the storm.

The TCEQ conducted 625 on-site drinking-water assessments and 441 on-site wastewater assessments.

Every water and wastewater facility but one has been restored and is operational. The exception is the Barefoot RV Park community water system, which was destroyed and will not be rebuilt. Instead, residents are being connected to another system.

Cleanup

There were 232 TCEQ-approved temporary debris-management sites set up to help handle the cleanup of Harvey. Seven of those temporary sites have remained active to handle the continued cleanup. To ensure that these sites have been operating in a safe manner, the TCEQ conducted 2,349 inspections. The Texas Division of Emergency Management and the Federal Emergency Management Agency have reported that the total estimated quantity of debris from Harvey was 13.25 million cubic yards. The debris cleanup was 98 percent complete as of Aug. 31, 2018.

The TCEQ, with the assistance of the Office of the Governor, the Texas Division of Emergency Management, and the Office of the Comptroller, provided \$90 million to assist local governments with the cleanup of debris. FEMA grants reimburse up to 90 percent of local-government debris-removal costs. The TCEQ's \$90 million will address the remaining 10 percent not covered by FEMA, affording the opportunity for local governments to be reimbursed fully for debris removal.

Expedited Emergency Dredging Project

The historic flooding from Harvey resulted in excessive accumulations of sediment and debris impeding the free flow of water down the West Fork of the San Jacinto River where it enters Lake Houston. This created a flood hazard that puts homes and businesses at imminent risk.

To address this issue, FEMA, in cooperation with the Texas Division of Emergency Management and the Harris County Flood Control District, requested the U.S. Army Corps of Engineers to perform emergency dredging to remove this sediment and debris.

This activity requires a Clean Water Act Section 401 Water Quality Certification from the TCEQ, to ensure that the project is consistent with state water quality standards. Typically, it takes months, if not years, of communication between the various agencies to complete the plans for such a large-scale project. The TCEQ worked closely with the corps to ensure a streamlined authorization process, reducing the overall project-planning process to weeks rather than months. The TCEQ was able to provide the corps with the 401 certification on the same day that it was requested.

The Volkswagen Settlement Funds

Gov. Abbott selected the TCEQ to be the lead agency for Texas' participation in the Volkswagen Environmental Mitigation Trust for State Beneficiaries, and TCEQ Chairman Niermann to be the TCEQ's primary administrator of the program.

This trust was established as part of the settlement of claims against Volkswagen and related companies for the use of defeat devices to pass emission tests for nitrogen oxides. The state's allocation under the trust agreement is at least \$209 million, to be spent over a period of three to 10 years. These settlement funds are required to be used to reduce emissions of nitrogen oxides. The settlement identified 10 categories of eligible mitigation actions for which settlement funds could be spent.

Under the settlement agreement, each participating state was required to develop a Beneficiary Mitigation Plan outlining how it intended to spend its share of the settlement funds. A draft of Texas' plan was released for public input in the summer of 2018. That input is currently being considered before a final plan is issued later this year.

Restoring Texas' Coast

Through the federal RESTORE Act, approximately \$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. Another component of the RESTORE Act will allow Texas to compete with the other four Gulf of Mexico states and six federal agencies for an additional \$1.6 billion in grants. These federal grant programs are financed by the administrative and civil penalties assessed against British Petroleum and the other parties responsible for the 2010 Deepwater Horizon oil spill in the gulf. The RESTORE grant funds will be available to Texas through 2033.



As Gov. Abbott's appointee to the RESTORE Council, the TCEQ's executive director, Toby Baker, oversees the implementation of the act in Texas. As part of this implementation effort, TCEQ staff, on behalf of Baker, has developed a program to allocate and manage four components of RESTORE grant funds.

In collaboration with the Governor's Office, Baker and TCEQ staff have fulfilled a wide array of responsibilities. They

- worked with and oversaw projects conducted by the two RESTORE centers of excellence in Texas: OneGulf, a consortium led by Texas A&M University–Corpus Christi, and Subsea Systems Institute, a consortium led by the University of Houston.
- submitted a Texas Multi-Year Implementation Plan to the U.S. Department of Treasury for acceptance. A MIP is required before securing RESTORE grant funds under the direct component, or Bucket 1, of the act. This plan was developed following extensive public participation that led to the submission and review of more than 200 projects. The final MIP accepted by Treasury comprises 26 projects.
- continued to develop federal applications for selected projects included in the accepted MIP for submission and approval by Treasury to receive grant funds under Bucket 1 of the RESTORE Act.
- submitted applications for four council-approved projects under the comprehensive component, or Bucket 2, of the RESTORE Act.
- continued to provide oversight and project management for the grants awarded under Bucket 2.
- are completing planning-grant activities under three components of the RESTORE Act: direct (Bucket 1), comprehensive (Bucket 2), and spill impact (Bucket 3).
- posted a draft of the Texas State Expenditure Plan for public comment. A final expenditure plan, approved by the RESTORE Council, is required before securing grant funds under Bucket 3.
- enhanced the Texas RESTORE website, <www.restorethetexascoast.org>, which provides updated information on RESTORE-related activities.
- conducted presentations on activities associated with the implementation of the RESTORE Act.
- attended meetings of the RESTORE Steering Committee to participate in developing policies overseeing the federal act.
- participated in meetings with elected officials, representatives from federal and state agencies and non-governmental organizations, and others to discuss implementation of the act.

These activities will continue and expand as necessary to ensure that Texas has a robust grant program that achieves the highest and best use of RESTORE funds to maximize the environmental and economic benefit to the state's Gulf Coast area.

Air Quality Successes

The EPA sets National Ambient Air Quality Standards for ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, coarse and fine particulate matter (PM₁₀ and PM_{2.5}), and lead. Over the past few decades, Texas has made huge strides in improving air quality. Most recently, the successes have centered around ozone and lead.

Ozone Levels

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 2017 ozone design values, based on 2015, 2016, and 2017 ozone data, are lower in many areas of the state. In fact, Dallas–Fort Worth, at 79 parts per billion, and Houston–Galveston–Brazoria, at 81 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 ozone standard for peak levels of ozone.

Almost everywhere in the state, despite the population growth, the nonattainment or near-nonattainment areas have resumed their steady decrease in ozone. From 2000 to 2017, the population in Texas increased significantly—mostly notably in the Austin–Round Rock area, which saw a 67 percent increase—while the eighthour ozone levels improved as follows:

- Tyler–Longview–Marshall area: 36 percent reduction
- Houston area: 28 percent reduction
- Corpus Christi area: 25 percent reduction

- Dallas–Fort Worth area: 23 percent reduction
- Beaumont–Port Arthur area: 23 percent reduction
- Austin–Round Rock area: 22 percent reduction

Of the state's 13 areas that have had at least 15 years of regulatory ozone monitoring, seven recorded the lowest or tied the lowest eight-hour ozone design values in 2017.

Lead Levels

The state's only nonattainment area for the lead NAAQS has also seen reductions in the ambient air. In 2010, a portion of Collin County near Frisco's Exide Technologies lead-acid battery recycling facility was designated nonattainment for the 2008 lead NAAQS of 0.15 micrograms per cubic meter. The TCEQ worked with Exide and the city of Frisco through the State Implementation Plan process to reduce lead emissions, and the area met the Dec. 31, 2015, compliance deadline for the standard. Subsequently, the TCEQ submitted a request to the EPA to redesignate the Collin County area to attainment for the lead NAAQS. The EPA approved the request, effective Sept. 27, 2017.

Other Highlights

EPA Ozone Designations

In July 2018, the EPA designated Atascosa, Bandera, Comal, Guadalupe, Kendall, Medina, and Wilson counties as attainment/unclassifiable for the 2015 ozone National Ambient Air Quality Standards. However, it designated Bexar County as nonattainment.

The TCEQ disagreed with the EPA's decision to designate Bexar as nonattainment, as this action creates an unnecessary burden on the county's residents, industry, and governing bodies, without any associated benefit from an air-quality perspective. Gov. Abbott had recommended that Bexar County be designated in attainment. And the EPA had the option of supporting Abbott's recommendation, but chose otherwise.

SO₂ Monitor Deployment

The TCEQ completed deployment of the SO₂ monitors near sources triggered by the federal Data Requirements Rule. The Legislature provided funding to the agency for these monitors.

Infrastructure Needs Survey and Assessment

The Safe Drinking Water Act directs the EPA to conduct a survey of the infrastructure needs of public water systems every four years. The surveys collect nationwide data from water systems eligible to receive Drinking Water State Revolving Fund money, regarding their 20-year capital improvement needs, to ensure the continued provision of safe drinking water. Data from these surveys are used to develop formulas for Congress to allot DWSRF grants to each state based on its need.

During 2015–2016, the TCEQ and the Texas Water Development Board assessed the state's public water systems' infrastructure needs for the next 20-year planning period, beginning in 2019. Texas had a drinking water infrastructure needs amount of about \$45 billion and will be eligible for the second largest allotment, after California, of DWSRF funds.

Revised Total Coliform Rule

The agency adopted rules for public water systems in 2017 to implement the new federal Revised Total Coliform Rule. The new rule is designed to protect public health by initiating a find-and-fix approach to prevent fecal contamination and reduce the risks of waterborne pathogens, such as bacteria and viruses, from entering the water system's distribution system. It requires public water systems to identify sanitary defects by completing a system assessment to find potential sources of contamination and then correct them.

The agency continues outreach efforts by providing training to water-system operators throughout the state. Workshops were held in Laredo, San Angelo, Amarillo, Wichita Falls, Frisco, Fort Worth, Dallas, Tyler, Beaumont, Houston, Rosenberg, and Corpus Christi. The agency is also providing free, on-site technical assistance to systems that are required to complete the assessments for compliance with the rule.

Lead-in-School Workshops

Even though Texas' public water systems employ measures to ensure that the water is safe to drink, lead can still leach into a school's drinking water from plumbing materials and fixtures within the school and move through the school's water distribution system. While sampling for lead is not required for schools serviced by a public water system, the agency offered free workshops around the state to help schools establish programs to prevent lead in drinking water.

The TCEQ's workshop was developed to raise awareness of the potential occurrences, causes, and health effects of lead in drinking water; assist school officials in identifying potential areas where elevated lead may occur; help establish a plan to identify and prioritize testing sites; and provide guidance if corrective actions are necessary. The training helps school officials develop communication strategies for telling students, parents, staff, and the larger community about monitoring programs, potential risks, the results of testing, and remediation actions. Workshops were held in Edinburg, Lubbock, Fort Worth, Waco, San Antonio, Houston, and Beaumont.

Cooperative Efforts Between TCEQ and EPA

The TCEQ and EPA Region 6 water quality program managers and staff held a LEAN workshop Dec. 5–7, 2017, for the Texas Pollutant Discharge Elimination System permitting program. LEAN is a program established to evaluate and assess work processes to gain efficiencies and reduce waste. The TCEQ and the EPA customized the workshop to focus on cooperative relationships between the two agencies, to reach agreements on how to reduce backlogs related to EPA objections to TCEQ-drafted TPDES water-quality permits, and to develop procedures to reduce or eliminate future objections that delay timely issuance of permits.

At the beginning of the workshop, in December 2017, a total of 48 objections on TPDES permits remained unresolved. As of July 2018, thanks to the cooperative efforts between the two agencies, the backlog of pending unresolved EPA objections was reduced to 24. Since the workshop, only three objections have been received over a seven-month period, which represents an 84 percent reduction over historical levels.

Water Resource Management Account

The TCEQ's Water Resource Management Account had been experiencing a shortfall that had necessitated the agency's raising of fees. To address this shortfall, the 85th Texas Legislature transferred to the account the automotive oil fee, the Used Oil Recycling Account 0146 balance, and the Used Oil Recycling Program. Currently the account has a healthy balance.

However, with the recent legislative changes and projected expenditures necessary to manage water resources

responsibly, the account's balance is expected to fall to zero by fiscal 2028. Given this prognosis, the TCEQ continues to discuss opportunities for generating a steady revenue stream sufficient to sustain the account over the long term.

Waste Management Account

The Waste Management Account, primarily funded by the Solid Waste Disposal Fee, supports the Municipal Solid Waste, Industrial Hazardous Waste, Voluntary Cleanup, and Radioactive Materials programs. In 2013, the fee was reduced by 25 percent, and the percent allocated to the account increased from 50 percent to 66.7 percent. For fiscal 2017, the program obligations, \$38.2 million, exceeded annual revenues, which were approximately \$37.1 million. The agency expects the account's balance, \$29.2 million at the end of fiscal 2017, to continue to decline, as revenue remains constant and expenditures rise, due to fringe and retirement costs.

Outreach to Underserved Businesses

The TCEQ continues to manage robust Historically Underutilized Business and Disadvantaged Business Enterprise programs. Agency staff prioritize the programs' goals through procurement and contracting, compliance with statutory and regulatory guidelines, and outreach, having participated in 28 events in fiscal 2017 and continuing at the same pace in fiscal 2018. The TCEQ is a top performer among agencies statewide, with more than \$5 million in total expenditures; its HUB utilization ranked 8th in fiscal 2017 and 3rd in the fiscal 2018 semi-annual reporting period.

Expedited Water Rights

The 85th Texas Legislature passed House Bill 3735 and Senate Bill 1430 to provide for the expedited processing of water rights permit amendments to change the diversion point for existing non-saline surface water rights when the applicant begins using desalinated seawater. In 2018, the agency proposed and adopted rules to implement this expedited process.

Texas NetDMR Migration Project

The Enforcement Division's efforts were instrumental in the agency's March 2018 transition from the Texas NetDMR (Network Discharge Monitoring Report) system to the EPA's NetDMR system. This transition was implemented to meet the federal eReporting Rule.

Cody Johnson: New TCOT Spokesperson

The TCEQ's Take Care of Texas program has tapped rising country music star Cody Johnson to perform on public service announcements that began airing on Texas TV in May 2018.

Johnson, best known for the song "With You I Am," is an accomplished songwriter with six albums under his belt. A native Texan who grew up in Sebastopol, he donated his time to write and perform the new tune for the PSAs.

Take Care of Texas is a statewide campaign from the TCEQ that provides helpful information on Texas' success-

es in environmental protection and encourages all Texans to help keep our air and water clean, conserve water and energy, and reduce waste.



TakeCareOfTexas.org



CHAPTER

Agency Activities

The following summarizes the agency's fiscal 2017 and 2018 activities regarding compliance, supplemental environmental projects, compliance history, critical infrastructure, dam safety, emergency management, laboratory accreditation, and the Edwards Aquifer Program.

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 citizen-collected evidence.

In a typical year, the agency will conduct about 105,000 routine investigations and investigate about 4,400 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 for some programs—per day, per violation. In some programs, civil judicial cases carry penalties of up to \$25,000 per day, per violation.

In fiscal 2017, the TCEQ issued 1,496 administrative orders, which required payments of almost \$11 million in penalties and nearly \$5 million for SEPs (see "Supplemental Environmental Projects," below). The average number of days from initiation of an enforcement action to completion (order approved by the commission) was 276 days.

In fiscal 2018, the TCEQ issued 1,370 administrative orders, which required payments of over \$13 million in penalties and almost \$4 million for SEPs. The average number of days from initiation of an enforcement action to completion was 363 days.

The TCEQ can also refer cases to the state attorney general. In fiscal 2017, 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 2018, the AG's office obtained 34 judicial orders, which resulted in approximately \$3.8 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 usually 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 allowing penalty amounts to go toward a Supplemental Environmental Project (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 have already received general approval from the commission. The projects—which are sponsored by both nonprofit organizations and governmental agencies—represent a wide array of 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* as long as the proposed project is environmentally beneficial and the party that would be 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 is called a *compliance SEP*, which may be offered to governmental authorities such as school districts, counties, municipalities, junior-college districts, river authorities, and water districts.

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

Table 1. TCEQ Enforcement Orders

Fiscal Year	Number of Orders	Assessed Penalties	Orders with SEPs	SEP Funds
2017	1,496	\$18.9 million	166	\$4.9 million
2018	1,370	\$13.3 million	169	\$3.9 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 394,000 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 that regulated critical infrastructures, essential to the state and its residents, maintain compliance with environmental regulations; and to support these critical infrastructures during disasters. This latter 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.

Table 2. Compliance-History Designations

Classifications	September 2017		September 2018	
	Number of Entities Subject to Compliance-History Rules	Percent	Number of Entities Subject to Compliance-History Rules	Percent
High	36,097	9.75	36,540	9.26
Satisfactory	9,871	2.67	8,867	2.25
Unsatisfactory	904	0.24	932	0.24
Unclassified	323,360	87.34	348,334	88.25
Total	370,232	100	394,673	100

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 Dam Safety Program regulation. Exempt dams must meet all of the following criteria:

- Be privately owned.
- Be classified either “low hazard” or “significant hazard.”
- Have a maximum capacity of less than 500 acre-feet.
- Be within a county with a population of less than 350,000.
- Be outside city limits.

As a result, the law exempts 3,239 dams.

In 2018, Texas had 4,007 state-regulated dams; of those, 1,379 were high-hazard dams and 354 were significant-hazard dams. The remaining dams were classified as low hazard.

As of August 2018, 85 percent of all high- and significant-hazard dams had been inspected during the past five years. About 777 of the inspected dams are in either “fair” or “poor” condition. Most of the 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 2018.

Homeland Security

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

Texas Compact Waste Facility

The Homeland Security Section is also responsible for compliance at the disposal site for low-level radioactive waste in Andrews County. The disposal site, the Texas Compact Waste Facility, is operated by Waste Control Specialists, Inc. (radioactive-material license R04100). The 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 Texas Compact Waste Facility:

- fiscal 2017: 118 shipments
- fiscal 2018: 125 shipments

Tier II Chemical Reporting Program

Since Sept. 1, 2015, the Homeland Security Section also oversees the Tier II Chemical Reporting Program.

House Bill 942, 84th Legislature, which was signed into law by Gov. Abbott on June 16, 2015, transferred the Tier II Chemical Reporting Program from the Texas Department of State Health Services (DSHS) to the TCEQ. The transfer from the DSHS included 11 full-time-equivalent positions, equipment, and resources. Additionally, a new position was 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, which are 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 74,588 Tier II reports were received for the reporting period of Jan. 1–March 1, 2018.

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, during a

disaster, Disaster-Response Strike Teams (DRSTs), organized in each regional office, serve as the TCEQ's initial and primary responding entities within their 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 joins the regional DRST during disaster responses.

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 sufficient trained personnel so that response staff can rotate during long-term emergency events.

Accredited Laboratories

The TCEQ accepts regulatory data only from laboratories accredited according to standards set by the National Environmental Laboratory Accreditation Program (NELAP) or from laboratories 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 2018, there were 259 laboratories accredited by the TCEQ.

Sugar Land Laboratory

The TCEQ Sugar Land Laboratory, which is accredited by NELAP, serves the agency's 16 regional field offices. The laboratory supports monitoring operations for the TCEQ's air, water, and waste programs, as well as river authorities and other environmental partners, by analyzing 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 U.S. Environmental Protection Agency. The 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 near-instant transmission of electronic data, the TCEQ can now 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, mining, recreation, and the generation of electric power using steam.

The aquifer's pure spring water also supports a unique ecosystem of aquatic life, including several 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. In regulated areas, best management practices for treating stormwater are mandatory during and after construction.

Each year, the TCEQ receives hundreds of plans to be reviewed by the Austin and San Antonio regional offices. Since 2012, due to increased development, the agency has experienced a dramatic increase in the number of plans submitted for review in both regions. The TCEQ reviewed 798 plans in fiscal 2017 and 890 plans in fiscal 2018.

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 standards continue to be the biggest air quality challenge in Texas.

As the TCEQ develops plans—region by region—to address air quality issues, it revises the State Implementation Plan (SIP) and submits these revisions to the EPA.

Ozone Compliance Status

2008 Ozone Standard

On May 21, 2012, the EPA published final designations for the 2008 eight-hour ozone standard of 0.075 ppm. The Dallas–Fort Worth (DFW) area was designated “nonattainment,” with a “moderate” classification, and the Houston–Galveston–Brazoria (HGB) 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. An additional attainment demonstration to address a revised 2017 attainment year was adopted in July 2016.

The EPA approved the DFW reasonable further progress SIP revision in December 2016 and proposed approval of the attainment demonstration in May 2018. The DFW area was required to attain the 2008 eight-hour ozone standard by July 20, 2018, and the HGB area was required to do so by July 20, 2015. Both areas did not attain by the applicable dates. The EPA reclassified the HGB area to moderate nonattainment effective Dec. 14, 2016. The new attainment deadline was July 20, 2018, with a 2017 attainment year, which is the year that the area was required to measure attainment of the applicable standard. The

attainment demonstration and reasonable further progress SIP revisions for the HGB 2008 eight-hour ozone moderate nonattainment area were adopted in December 2016. The EPA proposed approval of the HGB reasonable further progress SIP revision in April 2018 and of the attainment demonstration in May 2018.

Because both areas did not attain by the end of 2017, the EPA is expected to reclassify both the DFW and HGB 2008 ozone nonattainment areas to serious. The reclassifications are expected to be completed in early 2019. It is anticipated that the submission deadline for required serious area attainment demonstration and reasonable further progress SIP revisions will be approximately one year after the EPA’s final reclassification.

2015 Ozone Standard

In October 2015, the EPA finalized the 2015 eight-hour ozone standard of 0.070 parts per million. The EPA was expected to make final designations by Oct. 1, 2017, using design values from 2014 through 2016. On Nov. 16, 2017, the EPA designated a majority of Texas as attainment/unclassifiable for the 2015 eight-hour ozone NAAQS. The designations for four areas—DFW, HGB, El Paso, and San Antonio—remained pending.

On June 4, 2018, the EPA published final designations for the remaining areas, except for the eight counties that

Table 3. Ozone-Compliance Status for the 2015 Eight-Hour Standard

Area of Texas	2015 Eight-Hour Ozone	Attainment Deadline
Houston–Galveston–Brazoria (six-county area)	Marginal Nonattainment	Aug. 3, 2021
Dallas–Fort Worth (nine-county area)	Marginal Nonattainment	Aug. 3, 2021
San Antonio (Bexar County)	Marginal Nonattainment	Sept. 24, 2021
All Other Texas Counties	Attainment	not applicable

Note: The HGB 2015 ozone nonattainment area comprises the counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, and Montgomery. The DFW 2015 ozone nonattainment area comprises the counties of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Tarrant, and Wise.

compose the San Antonio area. Consistent with state designation recommendations, the EPA finalized nonattainment designations for a nine-county DFW marginal nonattainment area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Tarrant, and Wise counties) and a six-county HGB marginal nonattainment area (Brazoria, Chambers, Fort Bend, Galveston, Harris, and Montgomery counties). The EPA designated all the remaining counties, except those

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ypes of Sources

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

Point sources: examples include industrial facilities such as refineries and cement plants

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

On-road mobile sources: cars and trucks

Non-road mobile sources: examples include construction equipment, locomotives, and marine vessels

in the San Antonio area, as attainment/unclassifiable. The designations are effective Aug. 3, 2018.

On July 17, 2018, the EPA designated Bexar County as nonattainment, and the seven other San Antonio area counties—Atascosa, Bandera, Comal, Guadalupe, Kendall, Medina, and Wilson—as attainment/unclassifiable.

The attainment deadline for the DFW and HGB marginal nonattainment areas is Aug. 3, 2021, with a 2020 attainment year. The attainment deadline for the Bexar County marginal nonattainment area is Sept. 24, 2021, with a 2020 attainment year. An emissions inventory SIP revision will be due to the EPA two years following the effective date of nonattainment designations.

Redesignation for Revoked Ozone Standards

On Feb. 16, 2018, the U.S. Court of Appeals for the D.C. Circuit issued an opinion in the case *South Coast Air Quality Management District v. EPA*, 882 F.3d 1138 (D.C. Cir. 2018). The case was a challenge to the EPA's final 2008 eight-hour ozone standard SIP requirements rule, which revoked the 1997 eight-hour ozone NAAQS as part of the implementation of the stricter 2008 eight-hour ozone NAAQS.

The court's decision vacated parts of the EPA's final 2008 eight-hour ozone standard SIP requirements rule, including the redesignation substitute, the removal of anti-backsliding requirements for areas designated nonattainment under the 1997 eight-hour ozone NAAQS, the waiving of requirements for transportation conformity for maintenance areas under the 1997 eight-hour ozone NAAQS, and the elimination of the requirement to submit a second 10-year maintenance plan. On April 23, 2018, the EPA filed a request for rehearing on the case, and is awaiting a decision by the court.

To date, the EPA has provided limited guidance to states regarding the effects of the ruling on transporta-

tion conformity for the 1997 and 2008 eight-hour ozone NAAQS, but no guidance regarding SIP planning obligations arising from the court's initial ruling.

This ruling results in uncertainty for applicants seeking air quality permits and for transportation projects for which conformity analyses may be needed, in areas that were designated nonattainment under the revoked one-hour ozone NAAQS of 0.12 parts per million (ppm) or 124 parts per billion (ppb) and the revoked 1997 eight-hour ozone NAAQS of 0.08 ppm or 84 ppb. Major source thresholds, significance levels, and emission offset requirements for air quality permitting are determined by the designation and classification level that applies in a nonattainment area. Some areas in Texas were classified at more stringent classification levels under the revoked one-hour and 1997 ozone NAAQS than currently applicable for the 2008 ozone NAAQS.

If an area does not have a valid motor vehicle emission budget (MVEB) or cannot demonstrate conformity to an existing MVEB, any transportation project using federal dollars cannot proceed without a demonstration that the emissions are no greater than if the project were not completed. Four areas of Texas are potentially affected by the ruling. To address the potential impacts of the court's ruling, the TCEQ has initiated planning for expedited submittal to the EPA of formal redesignation requests and maintenance plans for each area.

Houston-Galveston-Brazoria

The HGB area (Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties) is classified as a severe nonattainment area for both the one-hour and 1997 eight-hour ozone NAAQS. Because the area has monitored design values meeting both ozone NAAQS, the TCEQ submitted, and the EPA approved, redesignation substitutes for the HGB area for both NAAQS.

Dallas–Fort Worth

The DFW one-hour ozone area (Collin, Dallas, Denton, and Tarrant counties) is classified as serious nonattainment. The DFW 1997 eight-hour ozone area (Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant counties) is classified as serious nonattainment. Because the area has monitored design values meeting both NAAQS, the TCEQ submitted, and the EPA approved, redesignation substitutes for the DFW area for both NAAQS.

Beaumont-Port Arthur

The BPA area (Hardin, Jefferson, and Orange counties) is classified as serious nonattainment for the one-hour ozone NAAQS. The area was redesignated by the EPA to attainment for the 1997 eight-hour ozone standard in 2010 after approval of the TCEQ's formal redesignation request and maintenance plan for the area. The BPA area is affected by the ruling in two ways. First, the vacatur of waiver of transportation conformity for redesignated areas may reinstate those requirements for the area, requiring compliance with MVEBs that may be difficult for the area to meet. Second, the ruling would reinstate the requirement for a second 10-year maintenance plan for the BPA area under the 1997 eight-hour ozone NAAQS.

El Paso

The El Paso area (El Paso County) is classified as serious nonattainment for the one-hour ozone NAAQS. Though the area was never formally redesignated, the EPA lifted anti-backsliding requirements for the area that would normally only be lifted after formal redesignation. The court's vacatur of removal of anti-backsliding requirements for areas designated nonattainment under the 1997 NAAQS may also apply to areas that were designated nonattainment under the one-hour ozone NAAQS.

2010 Sulfur Dioxide Standard

The EPA revised the sulfur dioxide (SO₂) 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, which did not include Texas, in nonattainment of the 2010 standard. On March 3, 2015, a U.S. district court order set deadlines for the EPA to complete designations for the SO₂ NAAQS. It required that the EPA designate by July 2, 2016, any areas monitoring violations or with the largest SO₂ sources fitting specific criteria for SO₂ emissions.

The EPA identified 12 sources in Texas meeting these criteria for Round 2 designations. The EPA designated Atascosa (San Miguel), Fort Bend (WA Parish), Goliad (Coletto Creek), Lamb (Tolk), Limestone (Limestone Station), McLennan (Sandy Creek), and Robertson (Twin Oaks) counties as unclassifiable/attainment and designated Potter County (Harrington) as unclassifiable, effective Sept. 12, 2016. Designations for the remaining four EPA-identified Texas power plants—Big Brown, Martin Lake, Monticello, and Sandow—were delayed and the EPA published a supplement to the Round 2 SO₂ designations on Dec. 13, 2016. Effective Jan. 12, 2017, portions of Freestone and Anderson counties (Big Brown), portions of Rusk and Panola counties (Martin Lake), and a portion of Titus County (Monticello) were designated nonattainment. Milam County was designated unclassifiable.

Sources with more than 2,000 tons per year of SO₂ emissions not designated in 2016 would be designated based on modeling data by December 2017 in Round 3 or monitoring data by December 2020 in Round 4. In accordance with the August 2015 Data Requirements Rule, Texas identified 24 sources with 2014 SO₂ emissions of 2,000 tons per year or more, which included the 12 sources identified in Round 2. The TCEQ evaluated the Oklaunion facility in Wilbarger County through modeling submitted to the EPA, for designation in Round 3. The EPA completed Round 3 designations for the 2010 SO₂ NAAQS, effective April 9, 2018, designating Wilbarger County as unclassifiable/attainment along with unclassifiable/attainment designations for 237 other Texas counties or portions of counties. The areas designated unclassifiable/attainment in Anderson, Panola, Rusk, and Freestone counties are the parts of those counties not previously designated nonattainment in Round 2. All remaining areas not designated in rounds 2 or 3 are to be designated in Round 4 by Dec. 31, 2020, including the following areas of Texas, currently being monitored: Jefferson, Hutchinson, Navarro, Bexar, Howard, Harrison, and Titus (remaining partial area) counties.

In October 2017, Luminant (Vistra Energy) filed notices with the Electric Reliability Council of Texas (ERCOT) stating its plans to retire the Monticello, Sandow, and Big Brown power generation plants. Late in 2017, Vistra received determinations from ERCOT that these retirements would not affect system reliability. The TCEQ voided permits for these three plants on March 30, 2018. Big Brown and Monticello were the primary SO₂ emissions sources of the areas designated nonattainment in Anderson, Freestone, and Titus counties. The Martin Lake plant, in the nonattainment area in Rusk and Panola counties, continues to operate.

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. Final values for 316 pollutants have been derived so far. Texas has received compliments about these values from numerous federal agencies and academic institutions, and many other states and countries use the TCEQ's toxicity values.

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

TCEQ toxicologists oversee 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.

Four areas of the state are currently on the watch list, which is available at <www.tceq.texas.gov/toxicology/apwl>. The TCEQ continues to evaluate the current APWL areas to determine whether improvements in air quality have occurred. For example, the TCEQ conducted two mobile monitoring trips this biennium around existing APWL areas that lack stationary air monitors. The TCEQ has also identified areas in other parts of the state with monitoring data close or slightly above AMCVs, and worked proactively with nearby companies to reduce air toxic concentrations, obviating the need for listing these areas on the APWL.

Oil and Gas: Boom of Shale Plays

The early activities associated with the Barnett Shale formation in the Dallas–Fort Worth area presented an unusual challenge for the TCEQ, considering that this was the first time that a significant number of natural gas production and storage facilities were built and operated in Texas within heavily populated areas. In response, the TCEQ initiated improved collection of emissions data from oil and gas production areas.

The TCEQ conducts in-depth measurements at all 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.

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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 monitoring, on-site investigations, and enforcement activities in the shale areas also complement increased air-permitting activities. 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 the public, county judges and other elected officials, workshops for local governments and industry, town-hall meetings, legislative briefings, and guidance documents. For example, the agency recently issued a new publication, *Flaring at Oil and Natural Gas Production Sites* (TCEQ GI-457). This brochure is designed to provide a helpful starting point for discussions with citizens; TCEQ staff can then provide more details as needed with each person. The agency also maintains a multimedia website, <www.TexasOilandGasHelp.org>, with links to rules, monitoring data, environmental complaint procedures, regulatory guidance, and frequently asked questions.

The TCEQ continues to evaluate its statewide network for air quality monitoring and will expand those operations when needed. 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), north of the Eagle Ford Shale; the station began operating on July 18, 2013. Another monitoring station has been established in Karnes City, which is in Karnes County; this station 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 , SO_2 , and PM. Regional Haze program requirements include an updated plan (Texas Regional Haze SIP revision) that is due to the EPA every 10 years and a progress report that is due to the EPA every five years, 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 Ohio River Valley and international sources. On Jan. 5, 2016, the EPA finalized a partial disapproval of the 2009 SIP revision and proposed a federal implementation plan (FIP) effective Feb. 4, 2016. In July 2016, Texas and other petitioners, contending that the EPA acted outside its statutory authority, sought a stay pending review of the FIP; the U.S. Court of Appeals for the Fifth Circuit ruled in favor of Texas and the other petitioners and stayed the FIP. The FIP would have required 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 for non-electric utility generating units, but due to continuing issues with the Cross-State Air Pollution Rule, the EPA could not act on BART requirements for electric utility generating units (EGUs).

On Oct. 17, 2017, the EPA adopted a FIP to address BART for EGUs in Texas, which included an alternative trading program for SO_2 . The EPA will administer the trading program, which included only specific EGUs in Texas and no out-of-state trading. For NO_x , Texas remains in CSAPR. For PM, the EPA determined no further action was required. On March 20, 2018, the U.S. Court of Appeals for the D.C. Circuit issued a ruling upholding "CSAPR-better-than-BART" for regional haze.

Texas' 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 Jan. 10, 2017, the EPA published the final Regional Haze Rule Amendments to update aspects of the reasonably available visibility impairment (RAVI) and regional haze programs, including:

- Strengthening the federal land manager consultation requirements.
- Extending the RAVI requirements so that all states must address situations where a single source or small number of sources is affecting visibility at a Class I area.
- Extending the SIP submittal deadline for the second planning period from July 31, 2018, to July 31, 2021, to allow states to consider planning for other federal programs like the Mercury and Air Toxics Standards, the 2010 one-hour SO₂ NAAQS, and the 2012 annual PM_{2.5} NAAQS.
- Adjusting the interim progress report submission deadline so that second progress reports would be due by Jan. 31, 2025.
- Removing the requirement for progress reports to be SIP revisions.

In January 2018, the EPA announced it would revisit the 2017 amendment to the Regional Haze Rule, though no formal action has been taken regarding the rule.

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 Texas Emission Reduction Plan (TERP) program gives financial incentives to owners and operators of heavy-duty vehicles and equipment for projects that will lower nitrogen oxides (NO_x) emissions. Because NO_x are a leading contributor to the formation of ground-level ozone, reducing these emissions is key to achieving compliance with the federal ozone standard. Incentive programs under TERP also support the increased use of alternative fuels for transportation in Texas, including fueling infrastructure.

- The **Diesel Emissions Reduction Incentive (DERI) 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-Bra-

zoria. 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 2017, the DERI program awarded more than \$1 billion for the upgrade or replacement of 19,001 heavy-duty vehicles, locomotives, marine vessels, and pieces of equipment. Over the life of these projects, 179,427 tons of NO_x are projected to be reduced, which in 2018 equated to approximately 30 tons per day. The Emissions Reduction Incentive Grants Program, a program of the DERI, will be accepting applications through Aug. 15, 2018.

- The **Texas Clean Fleet Program** funds replacement of diesel vehicles with alternative-fuel or hybrid vehicles. From 2009 through August 2017, 28 grants funded 644 replacement vehicles for a total of \$58.2 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 660 tons over the life of the projects. The next Texas Clean Fleet Program grant round is expected to open in August 2018.
- The **Clean Transportation Triangle Program (CTTP)** and the **Alternative Fueling Facilities Program (AFFP)** were combined under the AFFP by the Legislature in fiscal 2017 to provide grants to ensure that alternative-fuel vehicles have access to fuel and to build the foundation for a self-sustaining market for alternative fuels in Texas. The programs previously aimed at fueling stations along the interstate highways connecting the Houston, Dallas, Fort Worth, and San Antonio areas, the counties within the triangle formed by those interstate highways, as well as other areas also eligible under the DERI program. The eligible areas were expanded to become the Clean Transportation Zone (CTZ) in 2017, with the addition of the interstate highways and counties between the Laredo and Corpus Christi areas. From 2012 through August 2018, the CTTP and AFFP programs have funded 172 grants for a total of more than \$34.5 million. Grants include the new construction or expansion of 69 natural gas fueling stations, 12 biodiesel fueling stations, 6 propane stations, and 85 electric charging stations. All grant funds have been awarded for the fiscal biennium of 2017-2018.

- 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- or liquid petroleum gas-powered vehicles and engines. Eligible vehicles must be operated within the CTZ counties. From 2009 through August 2017, the program funded 105 grants to replace 923 vehicles for a total of \$41.9 million. These projects are projected to reduce more than 1,493 tons of NO_x over the life of the projects. The program will be accepting applications through May 2019 or until all available funds have been awarded.
- 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 2018, the program funded eight grants for a total of \$10.6 million. The next New Technology Implementation Grant Program grant round is expected to open in September 2018.
- 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. In 2017, the legislature renamed the name the program the **Seaport and Rail Yard Areas Emissions Reduction (SPRY) Program**, and expanded the statutory criteria to include the replacement of cargo-handling equipment as well as drayage trucks. Through August 2018, the program funded 17 grants for the replacement of 77 trucks and pieces of cargo-handling equipment, for a total of \$6.2 million. It is estimated that these projects will reduce more than 357 tons of NO_x in eligible Texas seaports and railyards over the life of the projects. The next SPRY Program grant round is expected to open in September 2018.
- The **Light-Duty Motor Vehicle Purchase or Lease Incentive Program (LDPLIP)** was established by the Legislature in 2013 to provide up to \$2,500 for the purchase of a light-duty vehicle operating on natural gas, liquefied petroleum gas (lpg), or plug-in electric drive. Through its expiration, in August 2015, the program provided incentives for the purchase of 1,897 electric plug-in vehicles and 196 vehicles operating on compressed natural gas or pro-

pane, for a total \$7.8 million. In 2017, the Legislature reinstated the LDPLIP to provide rebates of up to \$5,000 for the purchase or lease of natural gas or lpg-powered light-duty vehicles, and up to \$2,500 for light-duty vehicles powered by electric drives. The program is currently open and accepting applications through May 2019, or until all available funds have been awarded.

- The **Governmental Alternative Fuel Fleet Program (GAFFP)** was established by the Legislature in 2017 to help state agencies, political subdivisions, and transit or school transportation providers fund the replacement or upgrade of their vehicle fleets to alternative fuels, including natural gas, propane, hydrogen fuel cells, and electric. The Legislature required the TCEQ to consider the feasibility and benefits of implementing the GAFFP and, if feasible, allowed the commission to adopt rules governing the program and the eligibility of entities to receive grants. However, funding for this program was not included in the Appropriations Act. Therefore, implementation is not currently feasible.

TERP grants and activities are further detailed in a separate report, *TERP Biennial Report to the Texas Legislature* (TCEQ publication SFR-079/18).

Texas Clean School Bus Program

The Texas Clean School Bus Program (TCSBP) provided grants for technologies that reduce diesel-exhaust emissions inside the cabin of a school bus, as well as educational materials to school districts on other ways to reduce emissions, such as idling reduction. From 2008 to August 2017, the TCSBP used state and federal funds to reimburse approximately \$29.8 million to retrofit 7,560 school buses in Texas. In 2017, the Legislature expanded the criteria for the TCSBP to also include grants for the replacement of older school buses with newer models. From September 2017 through August 2018, the TCSBP awarded approximately \$2.9 million to replace 61 school buses across the state. An additional \$3.1 million is expected to be awarded beginning September 2018 for the replacement of 66 school buses.

Texas Volkswagen Environmental Mitigation Program

In December 2017, Gov. Greg Abbott selected the TCEQ as the lead agency responsible for the administration of

funds received from the Volkswagen State Environmental Mitigation Trust. A minimum of \$209 million dollars will be made available for projects that mitigate the additional nitrogen oxides emissions resulting from specific vehicles using defeat devices to pass emissions tests. The TCEQ is currently developing a Beneficiary Mitigation Plan for Texas, as required by the trust, that will summarize how the funds allocated to Texas will be used. In general, funds provided under the trust must be awarded through grants to governmental and non-governmental entities in accordance with the priorities established in the Mitigation Plan.

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 (DACM) program is available to qualifying vehicle owners in 16 participating counties in the areas of HGB, DFW, and Austin–Round Rock. The counties in these areas conduct annual inspections of vehicle emissions. From the program’s debut in December 2007 through May 2018, qualifying vehicle owners have received more than \$218 million. This funding helped replace 64,509 vehicles and repair 45,153.

Following the governor’s veto of the appropriations funding for the LIRAP and the Local Initiative Projects program for fiscal biennium 2018–19, all 16 participating counties opted out and collection of the LIRAP fee has been terminated. Funding carried over from fiscal biennium 2016–17 appropriations may continue to be used for the DACM program until Aug. 31, 2019.

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 funded both by the TCEQ from LIRAP appropriations and through a dollar-for-dollar match 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; and bus transit services.

Although all 16 counties participating in the LIRAP have opted out, LIP funding carried over from fiscal biennium 2016–17 appropriations may continue to be used by these counties for the LIP program until Aug. 31, 2019.

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 that build on scientific research on air quality from the previous biennium.

The AQRP and the TCEQ sponsored a field campaign during May 2017 to study ozone in the San Antonio area. Detailed atmospheric chemistry and meteorology measurements were made at six sites in the area. Ongoing analysis of these data will allow the TCEQ to better understand ozone in San Antonio.

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

- Projects that examine the role of wildfires and agricultural burning upon air quality in Texas, including fires outside of Texas and the United States.
- A study of the activity data used to estimate NO_x emissions from cars and trucks in Texas, and how locally derived data can contribute to these estimates.
- Improvements in the tools used to estimate biogenic volatile organic compound emissions in Texas.

In addition to research carried out through the AQRP, the TCEQ used grants and contracts to support ongoing air quality research. These are some of the many notable projects:

- A review-and-synthesis study examining atmospheric impacts of oil and gas development on ozone and particulate matter pollution in Texas.
- Analyses of biomass burning impacts on Texas air quality using two different modeling methods, with an emphasis on identifying exceptional events that may affect air quality.
- Updating emissions inventories for emissions from flash tanks, asphalt paving; ocean-going tanker-vessel lightering (i.e., transferring liquids from one tanker to another); aircraft; railyard activity; and industrial, commercial, or institutional fuel use.
- Improving the boundary conditions used in ozone modeling in Texas by updating the model chemistry.

- Measurements of biogenic VOC emissions and improvements of the tools used to estimate those emissions both inside Texas and throughout the ozone-modeling domain.

The latest findings from these research projects help the state understand and appropriately address some of the challenging air quality issues faced by Texans because 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 establishing 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 2018. Major revisions included:

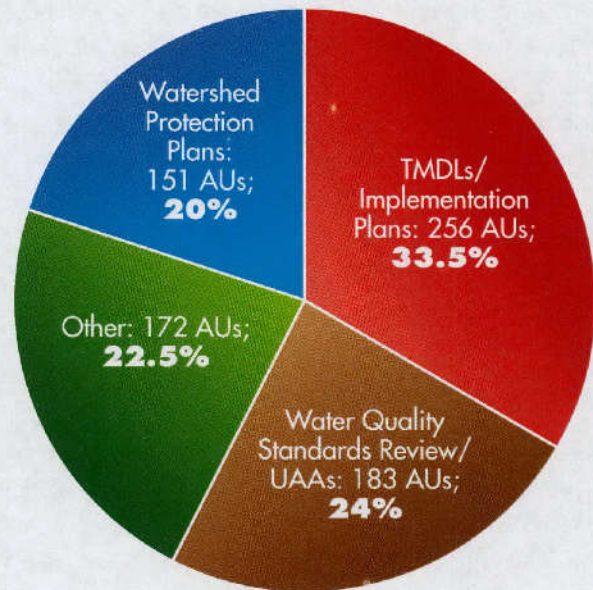
- A new single sample criterion for coastal recreation waters as mandated by the BEACH Act.
- Revisions to toxicity criteria to incorporate new data on toxicity effects and local water quality characteristics that affect toxicity.
- Numerous revisions and additions to the uses and criteria of individual 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 proceeded with its 2017 triennial standards review. The commission approved the 2018 Texas Surface Water Quality Standards in February 2018. It was sent to the EPA and is awaiting approval.

Figure 1. 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: 762

The TCEQ can address water impairments in a variety of ways. Selection of an appropriate restoration strategy is coordinated with stakeholders through the Watershed Action Planning (WAP) process.

Source: WAP database and the 2014 Texas Integrated Report

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 were adopted in the 2018 revision of the standards for individual water bodies.

A use-attainability analysis 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 2018 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 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 60–70 percent of the data available in the state’s surface water quality database used for water-resource 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

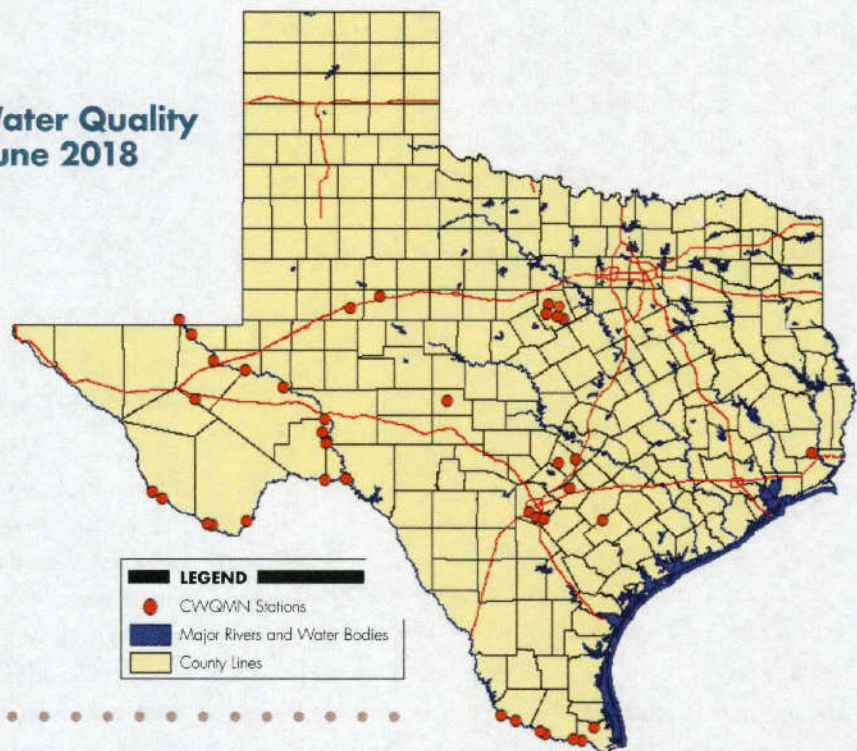
Surface water quality is monitored across the state in relation to human-health concerns, ecological conditions, and designated uses. The resulting data form a basis for policies that promote the protection and restoration of surface water in Texas. Special projects contribute water quality monitoring data and information on the condition of biological communities. This provides a basis for developing and refining criteria and metrics used to assess the condition of aquatic resources.

Coordinated Routine Monitoring

Each spring, TCEQ staff meets with various water quality organizations to coordinate 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

Figure 2. TCEQ Continuous Water Quality Monitoring Stations – June 2018

In June 2018, the TCEQ had 41 active stations around the state as part of the Continuous Water Quality Monitoring Network. Instruments at these sites measure basic water quality conditions every 15 minutes. The data is used to make decisions about managing water resources and water quality. The number and locations of sites may vary from year to year.



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 consists 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 water-resource management, as well as to target field investigations, evaluate the effectiveness of water quality management programs such as TMDL implementation plans and watershed-protection 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, the TCEQ developed a network of 15 CWQMN sites on the Rio Grande and the Pecos River, primarily to monitor levels of dissolved salts to protect the water supply in 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/waterquality/assessment>).

The *Integrated 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 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 in the TCEQ approval process and the draft 2018 *Integrated Report* is 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 (WAP) 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 WAP 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 WAP process.

Total Maximum Daily Load Program

The Total Maximum Daily Load (TMDL) Program is one of the agency's mechanisms for improving the quality of impaired 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 still 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 relies on the engagement and consensus of the communities in the affected 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 (I-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 279 TMDLs for 196 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 September 2014 to June 2018, the commission adopted TMDLs to address instances where bacteria had impaired the contact-recreation use. TMDLs were adopted for 10 surface water body segments consisting of 310 assessment units. A TMDL is developed for each assessment unit: Jarbo Bayou (one), Tres Palacios Creek (one), Upstream of Mountain Creek Lake (four), Town and Quinlan creeks (two), and Aransas River and Poesta Creek (two). During that time, the commission also approved one I-Plan, for Tres Palacios Creek. The commission approved Jarbo Bayou, Town and Quinlan creeks, Aransas River and Poesta Creek, and Upstream of Mountain Creek Lake to join existing I-Plans.

The Greater Trinity River Bacteria TMDL I-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 nine strategies for activities that address four TMDL projects.

Nonpoint Source Program

The Nonpoint Source (NPS) 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 these goals.

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 matching. In fiscal 2018, \$3.8 million was matched with \$2.5 million, for a total of \$6.3 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. Fourteen projects were selected in fiscal 2017, and 16 in fiscal 2018. 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, the construction and implementation of best management practices, and the 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. The program received \$617,000 in funding from the EPA in fiscal 2017 and \$612,000 in fiscal 2018.

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 2017 and 2018, 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 began updating the Galveston Bay Plan through a collaborative stakeholder process, and also continued to develop the Back the Bay campaign, which strives to increase public awareness and stakeholder involvement, and reinforce the priorities of the Galveston Bay Plan.

In fiscal 2017 and 2018, about 2,586 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 29,713 acres of important coastal habitats.

Through collaborative partnerships established by the program, approximately \$5.84 in private, local, and federal contributions was leveraged for every \$1 the state dedicated to the program.

Coastal Bend Bays and Estuaries Program

During fiscal 2017 and 2018, the CBBEP implemented 59 projects, including habitat restoration and protection in areas totaling 2,913 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 \$2,833,504 in additional funds to leverage 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 that 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 drop in 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 approximately 7,000 public water systems (PWSs) in Texas, about 4,650 are community systems, mostly operated by cities. These systems serve about 97 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 at <www.tceq.texas.gov/goto/dww> provides analytical results from the compliance sampling of PWSs. In addition, the Source Water Assessment Viewer at <www.tceq.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 PWSs 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 by-products, 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 56,000 water samples are analyzed each year just for chemical compliance. Most of the chemical samples are collected by contractors and then submitted to an accredited laboratory. The analytical results are sent to the TCEQ and the PWSs.

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 PWS to ensure that consumer confidence reports are developed correctly.

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

Table 4. Violations of Drinking-Water Regulations

	Fiscal 2017	Fiscal 2018
Enforcement Orders	324	360
Assessed Penalties	\$328,533	\$398,343
Offsets by SEPs	\$12,472	\$23,836

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 PWSs 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 98 percent of the state's population is served by a PWS producing water that meets or exceeds the National Primary Drinking Water Standards.

Review of Engineering Plans and Specifications

PWSs 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 2017, the TCEQ completed compliance review of 2,305 engineering plans for PWSs; in fiscal 2018, 2,396.

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 1,099 assignments were made through this contract in fiscal 2017, and 1,307 assignments in fiscal 2018.

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 2017, the agency reviewed 576 water-district applications; in fiscal 2018, 514.

Wastewater Permitting

The Texas Pollutant Discharge Elimination System was created in 1998, when the EPA transferred the authority of the National Pollutant Discharge Elimination System for 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 2017, the TCEQ issued 139 industrial wastewater permits; in fiscal 2018, 138. Municipal wastewater permits are issued for the discharge of wastewater generated from municipal and domestic activities. In fiscal 2017, the TCEQ issued 654 municipal wastewater permits; in fiscal 2018, 635.

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 167 notices of intent, 75 no-exposure certifications, and 17 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 643 notices of intent and 386 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 23 individual MS4 permits and 583 MS4s are authorized under a general permit. MS4s must develop and implement a stormwater management plan.

Table 5. Stormwater General Permits

	Applications Affected (issued)		Applications Received (monthly average)		Applications Received (total)	
	Fiscal 2017	Fiscal 2018	Fiscal 2017	Fiscal 2018	Fiscal 2017	Fiscal 2018
Industrial (facilities) ^a	8,581	2,675	186	126	9,678	1,514
Construction (large sites)	7,801	16,471	684	1,334	8,211	16,019
MS ₄ s (public entities)	13	12	1	1	11	7

^a. Includes No-Exposure Certifications.

trema or exceptional drought. By mid-2016, less than 2 percent of the state experienced abnormally dry conditions; however, in mid-2018, severe or worse drought conditions had returned to around 20 percent of Texas.

The TCEQ is engaged to respond to extreme drought. The agency’s focus on drought response and its activities include monitoring conditions across

the state, expedited processing of drought-related water rights applications, priority call response, and participating in multi-disciplinary task force meetings. The TCEQ also communicates information about drought to state leaders, legislative officials, county judges, county extension agents, holders of water right permits, and the media.

In June, July, and August 2018, drought-alert letters were mailed to public water suppliers, water rights holders, county judges, and county extension agents in drought-affected areas to provide notification that dry conditions may persist in the coming months for some parts of Texas and that if a priority call is made, the TCEQ may have to suspend water rights in some areas of the state.

Water Availability

Managing Surface Water Rights

The TCEQ is charged with managing state surface water in Texas. One way the agency implements its authority is through permitting of surface water rights. The use of water for domestic or livestock purposes is considered a superior water right that does not require a permit. The TCEQ is responsible for protecting senior and superior water rights, as well as for ensuring that water right holders divert state water only in accordance with their permits.

Texas water law specifies that in times of shortage, permitted water rights will be administered based on the priority date of each water right, also known as the prior appropriation doctrine; that is, the earliest in time is senior. Additionally, exempt domestic and livestock uses are superior to permitted rights. Among permitted water right holders, the permit holders that received their authorization first (senior water rights) are entitled to take their water before water right holders that received their authorization on a later date (junior water rights). Senior or superior water right holders not able to take their authorized water can call on the TCEQ to enforce the priority doctrine (a priority call).

Under the *TCEQ v. Texas Farm Bureau* decision, the TCEQ will not be able to exempt any junior water rights based on public health, safety, or welfare concerns, including junior water rights used for municipal purposes or power generation, if suspension is necessary to satisfy a priority call by a senior or superior water right.

Managing Water Availability During Drought

Widespread drought conditions developed and persisted across Texas from 2009 through 2015. The drought of 2011 broke records, with 97 percent of the state in ex-

Drinking Water Systems

The Public Drinking Water Program is responsible for ensuring that the citizens of Texas receive a safe and adequate supply of drinking water. The TCEQ carries out this responsibility by implementing the Safe Drinking Water Act. All PWSs are required to register with the TCEQ, provide documentation to show that they meet state and federal requirements, and evaluate the quality of the drinking water.

Drought Response and Assistance for Public Water Systems

Drought-response activities are 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 PWSs. 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 2018—meets monthly, to discuss the systems being tracked and opportunities for outreach and assistance.

The agency continues to monitor a targeted list of PWSs that have a limited or 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 PWSs—to help prevent PWSs from running out of water. The agency contacts PWSs to urge implementation of drought contingency plans. TCEQ staff offer assistance to any PWS continuing to experience critical conditions.

From 2012 to the present, the TCEQ has provided technical assistance to more than 427 public water systems by expediting approximately 625 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 the capacity of other systems.

In fiscal 2018, a total of 688 PWSs implemented mandatory water restrictions, while another 398 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, and given the lasting effects of the drought, Texans have had to plan far in advance to sustain their water needs. Because of these challenges, PWSs have begun to use less-conventional sources of water and the TCEQ began reviewing several innovative water-supply projects. The TCEQ has engineers and scientists with the expertise to guide PWSs 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 streamlined construction approval for PWSs asking to conduct brackish-water desalination. To further assist communities with decreased water supplies, the TCEQ offers other streamlined approval processes such as concurrent reviews of designs and models.

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 Permitting

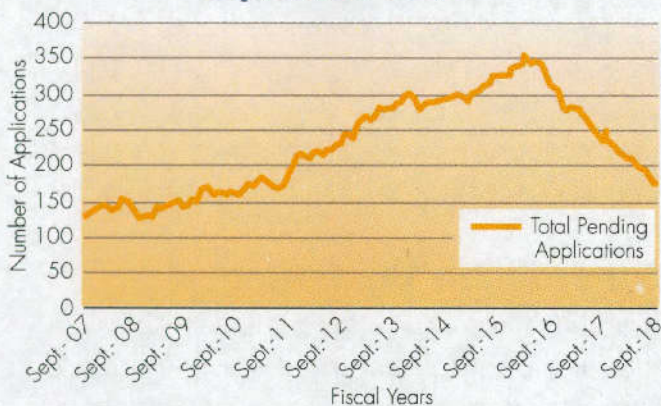
Water flowing in Texas creeks, rivers, lakes, and bays is state water. The right to use state water may be acquired through appropriation via permitting as established in state law. An authorization (permit or certificate of adjudication) is required to divert, use, or store state water or to use the bed and banks of a watercourse to convey water. However, there are several specific uses of state water that are exempt from the requirement to obtain a water right permit, such as domestic and livestock (D&L) purposes. For any new appropriation of state surface water, the Texas Water Code requires the TCEQ to determine whether water is available in the source of supply. Once obtained, a surface water authorization is perpetual, with exception to some temporary and term authorizations.

The TCEQ reviews permit applications for new appropriations of state water for administrative and technical requirements related to conservation, water availability, and the environment. In addition to new appropriation requests, the agency also reviews amendment applications and other applications including bed-and-bank authorizations, reuse, and temporary water rights. In fiscal 2017

and 2018, the agency processed 1,630 water rights actions, including new permits, amendments, water-supply contracts, and transfers of ownership.

Major changes to state water policy (for example, developing environmental flow standards), drought, complex applications, and other projects can shift TCEQ water rights permitting staff from permitting activities. Beginning in 2007, several of these factors affected water rights processing. In September 2007, there were 127 pending water right applications. That number climbed to 355 in early 2016 and has since been reduced to 177 as of September 2018. Figure 3 shows the number of water right permit applications pending with the TCEQ from September 2007 to September 2018. This graph shows how changes to state water policy, drought, complex permits, and other projects affect water rights permitting during this timeframe.

Figure 3. Pending Water Rights Applications, September 2007 – September 2018



During the last biennium, the TCEQ conducted a critical review of water rights permitting and change-of-ownership processes that resulted in changes. These changes included allocating additional personnel to the program, strongly encouraging pre-application meetings to assist applicants in developing more complete applications, limiting time extensions granted to applicants to respond to requests for information, and implementing return policies when an applicant is unresponsive. Internal application-tracking tools have also been implemented to streamline processes. This critical review is an iterative process with improvements continuing. 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 reached out to water rights stakeholders and has increased its presence and availability at water conferences and other events.

Fast Track Permitting

Not all water right applications require the same level of technical review. Reuse applications, applications that seek a new appropriation of water, and applications to move a diversion point (outside the Rio Grande) require a more intensive technical review.

In July 2016, the Water Rights Permitting program began a "Fast Track" pilot program for those "Other" applications. A separate, more streamlined process and dedicated staff allow Fast Track applications to be processed more quickly. Since the pilot program began, 219 Fast Track applications have been processed. Of those received after the program began, the average processing time is 213 days. The TCEQ continues to evaluate the Fast Track program to see which applications fit well in the program.

Changes of Ownership and Water Use Reports

The TCEQ processes ownership changes in support of water rights permitting statewide. Current ownership information ensures that proper notice information is received by water rights permit holders. Additionally, current owner information is critical to ensure that information is conveyed to the appropriate permit holder to achieve the desired effect of actions taken to meet a priority call during drought.

The TCEQ also requires the completion of Water Use Reports to support modeling efforts and enforcement of water rights. Water Use Reports are sent to water rights permit holders outside of Watermaster areas on Jan. 1 of each year and are due back to TCEQ on March 1. The return rate for these reports is between 75 and 85 percent of the reports mailed out, but this actually represents approximately 95 percent of the permitted water in the state.

Water Conservation and Drought Contingency Plans

The TCEQ is currently working to improve instructional material available on its website in preparation for the upcoming five-year review and May 1, 2019, submittal of water conservation and drought contingency plans. The TCEQ is engaged in outreach efforts to notify entities that are required to develop, implement, and submit Water Conservation Plans, Drought Contingency Plans, and Water Conservation Implementation Reports to the TCEQ every five years of the upcoming deadline.

Changes in Water Rights

In 2017, the 85th Texas Legislature passed four bills relating to surface water rights that required changes to the

TCEQ's rules. House Bill (HB) 1648 amended requirements relating to certain retail public utilities and their designation of a water conservation coordinator. HB 3735 amended TCEQ surface water application map requirements and codified the commission's practice regarding consideration of the public welfare in water rights applications. Senate Bill (SB) 864 amended the notice requirements relating to alternate sources of water used in surface water rights applications. Finally, SB 1430 and HB 3735 required the TCEQ to create an expedited amendment process to change the diversion point for existing non-saline surface water rights when the applicant begins using desalinated seawater. The TCEQ implemented the requirements of these bills in a single rulemaking adopted in July 2018.

In 2018, the TCEQ revised water rights application forms and instructional material available on its website to assist applicants in developing more complete applications. The new application forms are resulting in applications that are more complete; thereby helping to reduce processing timeframes. The TCEQ continues to search for more improvements that will expedite permitting without neglecting any statutory responsibilities. Overall, these actions have resulted in increased production in water rights permitting and the total number of pending water right applications continues to decline.

Environmental Flows

In 2007, the legislature passed two landmark measures relating to the development, management, and preservation of water resources, including the protection of instream flows and freshwater inflows. The measures changed how the state determines the flow that needs to be preserved in the watercourse for the environment, requiring the consideration of both environmental and other public interests.

The TCEQ adopted rules for environmental flow standards for Texas' rivers and bays. The third rulemaking for the environmental flow standards was completed in February 2014. The TCEQ's ongoing goal is to protect the flow standards—along with the interests of senior water-rights holders—in the agency's water rights permitting process for new appropriations and amendments that increase the amount of water to be taken, stored, or diverted.

The Texas Instream Flow Program (TIFF) was established in 2001 before environmental flow standards were required, developed, and adopted into the water rights permitting process. The TIFF has been a collaboration between the TCEQ, the Texas Water Development Board, and the Texas Parks and Wildlife Department to collect

and evaluate instream flow data and to conduct studies to determine instream flow conditions necessary to support a sound ecological environment in specific watersheds. These responsibilities have been replaced by the dynamic 2007 environmental flows process.

Final recommendations of instream flow studies of the lower San Antonio and middle and lower Brazos river basins were completed in fiscal 2018. Instream flow studies are concluding in the middle Trinity and lower Guadalupe river basins. Completion of the middle Trinity and lower Guadalupe studies will conclude the work of the TIFF.

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 TCEQ has completed one five-year cycle of evaluations. The agency is currently in the second five-year cycle. In 2017, the TCEQ evaluated the Colorado and Upper Brazos river basins along with the San Jacinto–Brazos, Brazos Colorado, and Colorado Lavaca coastal basins. In 2018, the TCEQ evaluated the Trinity and San Jacinto river basins, along with the Trinity San Jacinto and Neches Trinity coastal basins.

The commission did not create a watermaster program on its own motion at the conclusion of any evaluation year. In the first five-year cycle, the TCEQ expended approximately \$570,000 total in staff time, travel costs, and other administrative costs to conduct evaluations. In the first year of the second five-year cycle, the agency expended approximately \$170,000.

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

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.

Figure 4. Rio Grande Watershed



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 according to the 57:43 percent division, based on the relative amounts of project acreage originally identified in each state. Two districts receive project water: Elephant Butte Irrigation District (EBID), in New Mexico, and El Paso County Water Improvement District No. 1 (EP #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 Commission of Texas 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, the United States filed a motion to intervene as a plaintiff on Texas' side, which was granted.

As Texas develops 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 United States almost always involve live testimony and it would be too unwieldy for nine justices to rule on evidentiary objections in real time.

Motions to Intervene filed by EP#1 and EBID were referred to the special master. Following a hearing on the motions conducted August 19-20, 2016, the special master filed his First Interim Report with the Supreme Court on Feb. 13, 2017. He recommended denying the motions to intervene filed by EP#1 and EBID as well as New Mexico's motion to dismiss. The First Interim Report was also very favorable to Texas' position.

The Supreme Court ruled on Oct. 10, 2017: the motion of New Mexico to dismiss Texas's complaint was denied; the motions of EBID and EP#1 to intervene were denied; the motions of New Mexico State University and New Mexico Pecan Growers for leave to file briefs as amicus curiae were granted. The exception of the United States and the first exception of Colorado to the First Interim Report of the Special Master were heard during oral arguments by the Supreme Court on Jan. 8, 2018. On March 5, 2018, the Supreme Court ruled that the United States may pursue the compact claims it has pleaded in the litigation and all other exceptions were denied.

A new special master was appointed by the Supreme Court on April 2, 2018. New Mexico filed a response to Texas' complaint on May 22, 2018, denying the allegations and filed counterclaims against Texas and the United States. Responses to New Mexico were submitted on July 20, 2018. It is anticipated that discovery will commence Sept. 1, 2018, with a trial expected in the spring of 2020.

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. This stands in contrast to the manner in which the United States treats Mexico with regard 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 (PGMAs) and creating groundwater conservation districts in response to landowner petitions or through the PGMA process.

In 2019, the TCEQ and the Texas Water Development Board will submit a joint legislative report that details activities in fiscal biennium 2017–18 relating to PGMAs and the creation and operation of groundwater conservation districts.

Groundwater conservation districts (GCDs), 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 (TGPC). 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.

Three of the TGPC's principal 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 Texas Low-Level Radioactive Waste Compact is made up of the states of Texas and Vermont. LLRW

generated in the Texas Compact may be disposed of in the Compact Waste Facility (CWF). The CWF can also accept non-compact wastes provided that the importation is approved by the Texas Low-Level Radioactive Waste Disposal Compact Commission. A separate, adjacent facility, the Federal Waste Facility (FWF), authorized by the same license as the CWF, may accept LLRW and mixed waste (waste that contains both a hazardous and a radioactive constituent) from federal facilities. Upon eventual closure of the FWF, the facility will be owned by the U.S. Department of Energy (DOE).

After the TCEQ authorized commencement of operations at the CWF portion of the site, the facility received its first waste shipment in April 2012. The TCEQ then authorized operations to begin at the FWF portion of the site, and the facility received its first waste shipment in June 2013. Since operations began at both sites, more than 400,000 cubic feet of waste have been safely disposed of, and over \$47 million in disposal and processing fees have been collected as revenue for the state through the third quarter of fiscal 2018.

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

- paper
- rags
- plastic
- glassware
- syringes
- protective clothing (gloves, coveralls)
- cardboard
- packaging material
- organic material
- used, sealed radioactive sources

Nuclear power plants contribute the largest portion of LLRW in the form of spent ion-exchange resins and filters, contaminated tools and clothing, and irradiated metals and other hardware. LLRW does not include high-level waste and spent nuclear fuel.

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*. The disposal rate has been reviewed annually and revised as necessary, or at the request of the compact facility operator and the compact generators.

Disposal of Radioactive By-Product Material

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

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

Underground Injection Control Program

Underground Injection Control (UIC) is a federally authorized program that was established under the authority of the federal Safe Drinking Water Act to protect underground sources of drinking water from degradation caused by unsafe injection of fluids underground. The state of Texas gained primacy for the UIC program in 1982 and jurisdiction is shared between the TCEQ and the Railroad Commission of Texas (RRC). There are six classes of injection wells. The TCEQ's jurisdiction covers Classes I, III, IV, and V injection wells.

- Class I wells are used for deep injection of hazardous and non-hazardous wastes.
- Class II wells are used to extract minerals other than oil and gas, and are regulated by the TCEQ or the RRC, depending on the type of well.
- Class IV wells are only authorized by the TCEQ or the EPA in special circumstances regarding environmental cleanup operations.
- Class V wells are used for many different activities and are regulated by either the TCEQ or the RRC, depending on the type of well.

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 used in the past for uranium production created impoundments for disposal of by-product waste. These impoundment sites have all been capped, are no longer accepting waste, and will be transferred to the DOE upon license termination.

Currently, Texas has five uranium mining licenses comprising eight sites and two licensed uranium-processing facilities.

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 2017, Texas had 111 active sites in the state and federal Superfund programs. One new site in Winkler County was proposed and listed on the National Priorities List (NPL) during the fiscal year. Remedial actions were completed at three state Superfund sites, in Brazoria, Grayson, and Mitchell counties.

In fiscal 2018, one new site in Bexar County and one new site in Dallas County were listed on the NPL, for a total of 113 active sites. Additionally, one new site in Dallas County was proposed for listing on the NPL. Remedial actions were completed at one Texas Superfund Registry site located in Mitchell County and at one NPL site located in Galveston 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 28,043 leaking PST sites—primarily at gasoline stations.

By the end of fiscal 2018, cleanup had been completed at 26,753 sites, and corrective action was under way at 1,290 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 2,869 applicants and has issued 2,330 certificates of completion.

In the last two years, the program received 110 applications and issued 198 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 91 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.

In 2007, the Legislature 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 2017, there were 2,982 dry-cleaner registrations and more than \$3.3 million in invoiced fees; in fiscal 2018, there were a total of 2,726 registrations and approximately \$3.2 million in invoiced fees.

Managing Industrial and Hazardous Waste

The Resource Conservation Recovery Act (RCRA) 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 (I&HW) permits. Texas has 181 permitted industrial and hazardous waste treatment, storage, and disposal facilities.

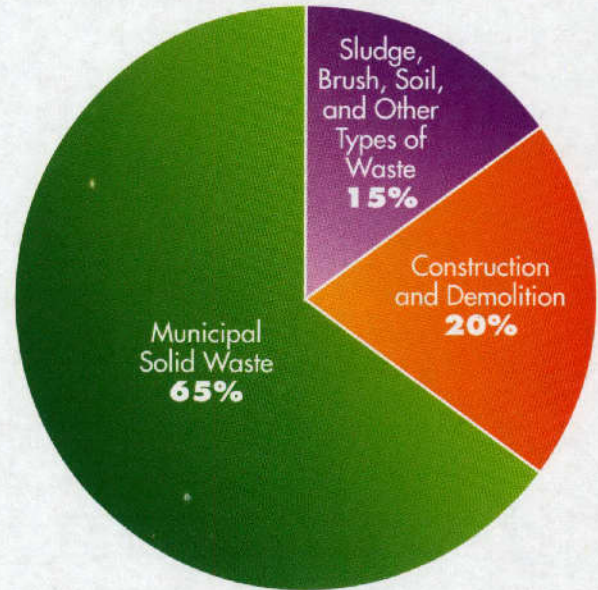
During fiscal 2017 and 2018, the TCEQ issued 26 I&HW permit renewals, performed approximately 1,121 industrial waste-stream audits, and oversaw remediation of a total of 336 sites.

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.

Figure 5. Municipal Solid Waste

Texas had 196 active municipal solid waste landfills in fiscal 2017. Municipal solid waste disposal reached about 35.3 million tons.



In fiscal 2017 (the most recent data available), there were 196 active municipal solid-waste landfills in the state. Over 35.5 million tons of waste were disposed of, an increase of 5.5 percent from fiscal 2015. In fiscal 2017, the average per capita disposal rate was 6.8 pounds per person per day.

At the end of fiscal 2017, overall municipal solid-waste capacity was over 1.9 billion tons, representing an average of 55 years of remaining disposal capacity. The net capacity increased approximately 61 million tons, or roughly 44 million cubic yards, compared with the capacity in fiscal 2015. 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.

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 (COGs). The planning initiatives are based on goals specified in each COG's regional solid-waste-management plan.

For the 2016–17 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, FY2016–2017*, 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 2019.

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 2017 and 2018, the division responded to 16,857 requests for assistance from small businesses and local governments. Of those, 597 received one-on-one assistance at their business site or facility.

For fiscal 2017, the EAD's Site Visit program continued 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 fiscal 2017, 162 site visits occurred, resulting in 114 Energy Act compliant facilities. Those facilities that were not compliant received recommendations for resolving non-compliance issues so that they can prepare for a future investigation under the Energy Policy Act.

At the end of fiscal 2017, after Hurricane Harvey made landfall on the Texas Coast, the Site Visit Program once again was repurposed for fiscal 2018 to provide damage-assessment site visits to PST facilities in the areas most affected by Harvey. At the beginning of fiscal 2018, the Site Visit Program completed 589 damage-assessment site visits at facilities located in the Houston, Beaumont, and Corpus Christi regions. Additionally, the EAD sent letters to the 8,053 PST facilities in the affected counties requesting that they submit an online survey reporting damage sustained from Harvey. A total of 1,106 PST facilities submitted online damage-assessment surveys. Combined, 136 facilities sustained PST system damage from Hurricane Harvey, primarily wind and water damage to canopies and fuel dispensers.

In March of 2017, the TCEQ adopted rules to be consistent with the federal Revised Total Coliform Rule (RTCR) and to maintain primacy over the Public Drinking Water System Supervision Program in Texas. Outreach was conducted by the EAD in conjunction with the Water Supply Division. In fiscal 2017, workshops were held in San Angelo, Laredo, Corpus Christi, Wichita Falls and Amarillo. In total, the workshops had 213 attendees, of which 154 were licensed operators, representing 118 unique PWSs. In fiscal 2018, workshops were completed in Beaumont, Tyler (2), Ft. Worth (2), Frisco, Houston, Rosenberg, Dallas, and Corpus Christi. In total, the workshops had 391 attendees, of which 370 were licensed operators, representing 261 unique PWSs.

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 14 seminars to provide technical information to almost 13,300 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 2.5 million tons and toxic chemicals by about 698,365 tons during fiscal biennium 2017–18.

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 2017 and 2018, 178 users signed up to use RENEW, and 221 new listings were posted.

CHAPTER

Legislation from the 85th Session

During the regular legislative session in 2017, state lawmakers considered 959 bills that had the potential to affect the programs and activities of the Texas Commission on Environmental Quality.

Of those, 209 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.

Public Notice Consolidation for Certain Air Quality Permit Applications (SB 1045)

Senate Bill 1045, introduced by Sen. Craig Estes, allows consolidation of the Notice of Receipt of Application and Intent to Obtain Permit (commonly referred to as "NORI" or "first notice") and Notice of Application and Preliminary Decision (commonly referred to as "NAPD" or "second notice") into one 30-day notice period during which comments and requests for public meetings or contested case hearings can be submitted to the TCEQ. This allows for a more efficient air quality permit application process.

The consolidation of the timeframes for NORI and NAPD apply to new air quality permit or permit amendment applications that are solely for the addition or modification of facilities that are commonly authorized and for which TCEQ staff has extensive experience reviewing. This option is available only to air quality applications that the agency determines are administratively and technically complete, and for which a draft permit is prepared within 15 days of receipt of the application.

The number of applications and the types of facilities that are eligible for this option depends upon the complexity of the project for which authorization is sought and the quality of the air quality application, both of which affect the agency's ability to prepare the draft permit within 15 days of receipt of the application.

The bill was effective on Sept. 1, 2017. TCEQ rules implementing the bill became effective May 31, 2018.

Used Oil Recycling and the Water Resource Management Account (SB 1105)

Senate Bill 1105, introduced by senators Juan "Chuy" Hinojosa and Craig Estes, abolished Used Oil Recycling Account No. 146 (to which fees, penalties, and interest collected on used oil sales were deposited) and transferred the account's balance, future revenue, and program costs to Water Resource Management Account No. 153. The agency fully implemented the legislation on Sept. 1, 2017. Among the actions taken: transferring the \$22 million fund balance, updating the revenue chart of accounts and Uniform Statewide Accounting System, and redirecting the revenue as stipulated.

Low-Level Radioactive Waste Disposal Fund (SB 1330)

SB 1330, introduced by Sen. Kel Seliger, without modifying existing fees, changed the account deposit requirements for fees collected on waste delivered to the Texas Low-Level Radioactive Waste Disposal Compact Commission. The TCEQ fully implemented the legislation on Sept. 1, 2017, updating the revenue chart of accounts and Uniform Statewide Accounting System, and redirecting the revenue to correctly deposit in Low-Level Radioactive Waste Fund No. Account 0088 instead of General Revenue.

Texas Emissions Reduction Plan (SB 1731)

SB 1731, introduced by Sen. Brian Birdwell, amended the Texas Health and Safety Code to extend the Texas Emission Reduction Plan programs until the U.S. Environmental

Protection Agency designates each area in Texas under 40 C.F.R. Section 81.344 to be in attainment or unclassifiable with respect to each National Ambient Air Quality Standard for ozone under that section. The TERP fees and surcharges were not extended and are scheduled to expire Aug. 31, 2019. The TERP programs may continue to be implemented using appropriations from the TERP Fund, which has an estimated remaining balance of \$1.4 billion in August 2019. The bill also eliminated the TERP Advisory Board and allowed the commission to transfer unobligated TERP funds among the programs when those funds cannot be otherwise expended.

SB 1731 provided up to \$500,000 per fiscal year for port authorities located in nonattainment areas or affected counties to study or implement pilot programs for incentives to reduce NO_x emissions from cargo movement. The TCEQ awarded \$500,000 to the Port of Houston Authority in May 2018 to assess opportunities for reducing NO_x emissions in the port area.

The bill re-instated the Texas Light-Duty Motor Vehicle Purchase or Lease Incentive Program, which expired in fiscal 2015. The TCEQ adopted rules amending Texas Administrative Code, Chapter 114, to implement the LDPLIP in April 2018 and opened the program in May 2018 to award rebates for qualifying electric and natural gas-powered vehicles purchased in Texas after Aug. 31, 2017. The bill also directed the TCEQ to implement the Government Alternative Fuel Fleet Program once funds are appropriated to do so. No funds were appropriated to the program in FY2018 or FY2019.

Finally, SB 1731 changed the name and adjusted the eligibility criteria and program requirements for certain TERP programs.

Texas Low-Level Radioactive Waste Disposal Compact Waste Disposal Facility (HB 2662)

House Bill 2662, introduced by Rep. Brooks Landgraf, amended Texas Health and Safety Code Chapters 401 and 403 regarding disposal of low-level radioactive waste in the following manner:

- Changes the surcharge of the total contracted rate assessed for the disposal of nonparty compact waste at the compact waste disposal facility from 20 percent to 10 percent for the biennium of Sept. 1, 2017 to Aug. 31, 2019, after which time the same surcharge is automatically reinstated.

- Requires the TCEQ to conduct a study every four years, with the next study due Dec. 1, 2020, regarding the available volume and curie capacity of the compact waste disposal facility for the disposal of party state compact waste and nonparty compact waste.
- Removes the requirement to collect 5 percent of gross receipts on all compact and federal waste disposed at the compact waste disposal facility for the biennium of Sept. 1, 2017 to Aug. 31, 2019, after which time the same collection rate is automatically reinstated.
- Creates a legislative oversight committee to assess the compact waste disposal facility and then prepare a final report to the appropriate senate and house committees no later than Dec. 1, 2018. The committee will be abolished Dec. 31, 2018.

New and Amended Water Rights Applications (HB 3735 and SB 1430)

HB 3735, introduced by Rep. James Frank, relates to an application for a new or amended water right submitted to the TCEQ. HB 3735 amended Texas Water Code, Subsection 11.125, to change specific map requirements with a more general requirement to submit maps in the form prescribed by the commission and remove additional specific map requirements. HB 3735 also added TWC, Subsection 11.134(b-1), which codified the commission's practice to limit the commission's consideration of the public welfare in water rights applications to "those factors that are within the commission's jurisdiction and expertise."

The engrossed version of HB 3735 also added the provisions of SB 1430, introduced by Sen. Charles Perry, which relates to a requirement that the TCEQ provide an expedited procedure for acting on certain applications for an amendment to a water right by certain applicants that use desalinated seawater:

- Added new TWC, Subsection 11.122(b-1), which provides that an applicant has a right, under certain circumstances, to expedited consideration of an application to change the diversion point for their existing non-saline surface water right when the applicant begins using desalinated seawater.
- Added new TWC, Subsection 11.122(b-2), which further requires the executive director or the commission to prioritize the technical review of such an application over the technical review of other applications that are not subject to that subsection.

- Amended Texas Government Code, Subsections 2003.047(e-3) and (e-6) to require the State Office of Administrative Hearings Administrative Law Judge (ALJ) to complete a proceeding and provide a proposal for decision to the commission not later than the 270th day after the date the matter was referred for a contested case hearing relating to an application under new TWC, Subsection 11.122(b-1).
- Amended Texas Government Code, Subsection 2003.047(e-3), to authorize the ALJ to extend a TWC, Subsection 11.122(b-1) proceeding by agreement of the parties with the approval of the ALJ; or by the ALJ if the judge determines that failure to extend the deadline would unduly deprive a party of due process or another constitutional right. For the purposes of Texas Government Code, Subsection 2003.047(e-3), a political subdivision has the same constitutional rights as an individual.

The rulemaking to implement HB 3735 and SB 1430 amended Title 30, Texas Administrative Code Chapters 80, 295, and 297.

- Chapter 80 was amended to establish contested case hearing deadlines and criteria for extension of the deadlines by an ALJ for TWC, Subsection 11.122(b-1) applications.

- Chapter 295 was amended to implement TWC, Subsection 11.122(b-1) requirements to allow for expedited technical review of certain amendments to begin using desalinated seawater, and to implement the provision in HB 3735 to revise outdated mapping requirements.
- Chapter 297 was amended to implement the changes required by HB 3735, which requires the commission to consider only the factors that are within the jurisdiction and expertise of the commission as established by TWC, Chapter 11, in determining whether an appropriation is detrimental to the public welfare.

Rules for bill implementation were adopted on July 25, 2018, and became effective on Aug. 16, 2018.

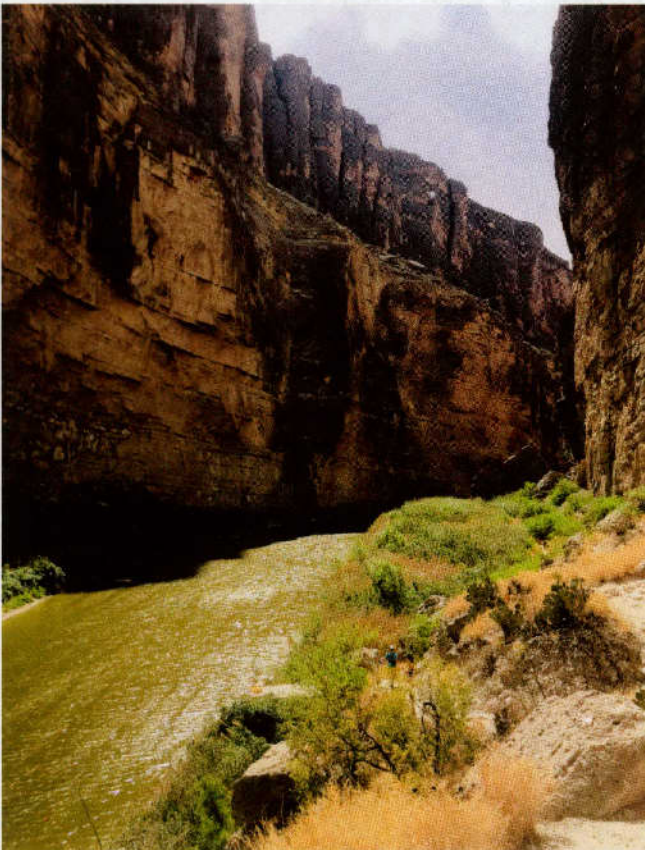
Electronic Transmission of New Source Review Air Permit Renewal Notices and Federal Operating Permit Proposed Final Action Notices *(HB 4181)*

HB 4181, introduced by Rep. Mary Ann Perez, revised provisions of the Texas Clean Air Act to give the TCEQ authority to use electronic methods as an alternative to traditional postal mail when sending renewal notices for New Source Review (NSR) air permits and notices of proposed final actions for Federal Operating Permits. The effective date of the legislation was Sept. 1, 2017.

HB 4181 did not explicitly require the TCEQ to conduct rulemaking, but rule changes to Chapters 116 and 122 are necessary to implement the new options for providing these notices electronically. The commission proposed corresponding rule revisions to Chapters 116 and 122 on May 9, 2018. These rule revisions are scheduled to be considered for adoption by the commission on Oct. 31, 2018.

HB 4181 also requires the TCEQ to develop a verification method to ensure that NSR permit renewal notices sent electronically are received by the permit holder. To satisfy this requirement, the agency has identified a software application that will provide an electronic receipt when the recipient opens the renewal notice.

The TCEQ intends to begin sending these permit notices electronically once the rule revisions are adopted and go into effect. If adopted, the effective date of the rule changes will be Nov. 22, 2018.



CHAPTER

Agency Resources

This chapter outlines the agency’s workforce and financial resources.

The TCEQ 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 \$461.5 million in fiscal 2017 and \$374.2 million in fiscal 2018. Most of the budget is supported from revenues collected from fees.

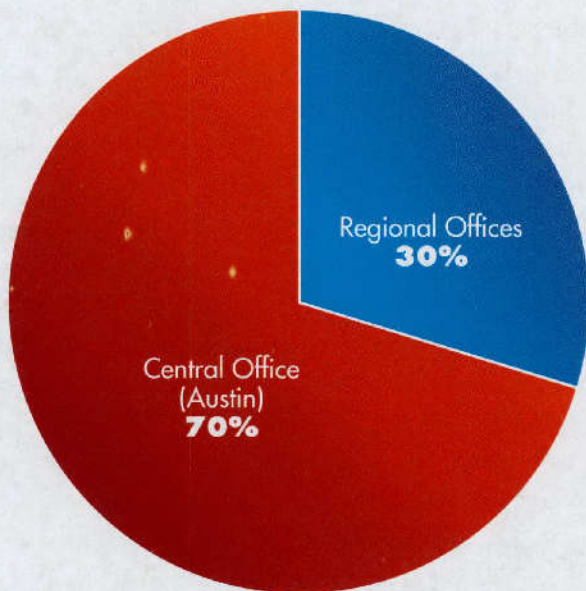
The TCEQ posts its quarterly expenditures online. The data is reported in broad categories, such as, salaries, travel, utilities, and maintenance. The webpage also links to an expenditure database, called “Where the Money Goes,” at the state comptroller’s website. These online postings are in response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

Workforce

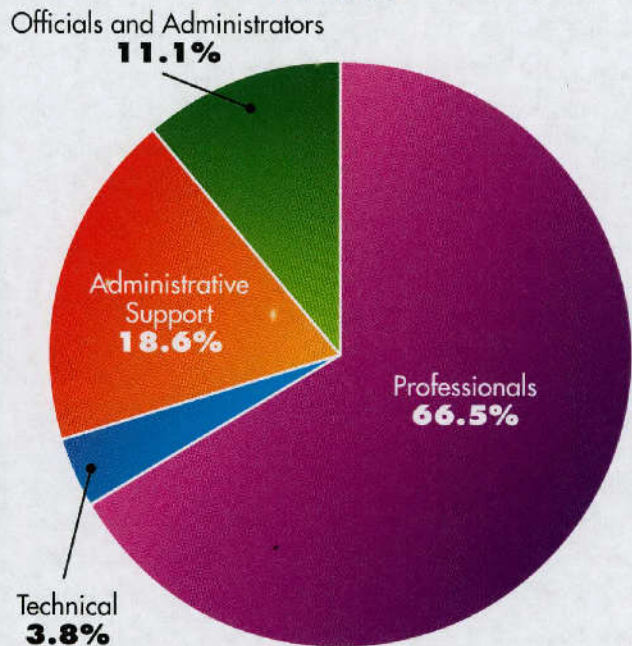
Size and Job Categories

The overall size of the TCEQ workforce remains fairly consistent. In fiscal 2017, the agency was authorized to have 2,780.2 full-time-equivalent (FTE) positions, and the average number of FTEs utilized was 2,675.8. In fiscal 2018,

**Locations of TCEQ Employees
FY 2018**



**Job Categories of TCEQ Workforce
FY 2018**



the authorized FTEs were 2,794.8; the TCEQ averaged 2,614.7 during that time.

TCEQ staff is composed largely of professionals trained in science, technology, engineering, computer science, and related fields. In fiscal 2018, professionals represented 66.5 percent of the workforce; technical and administrative support staff made up 22.4 percent; and officials and administrators (managers) filled 11.1 percent of positions. These percentages reflect almost no change in the distribution of job categories within the agency from fiscal 2017, with professionals up only 0.3 percent, technical and administrative support staff up 0.6 percent, and officials and administrators (managers) down 0.35 percent.

Equal Employment

The TCEQ’s policy is 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.

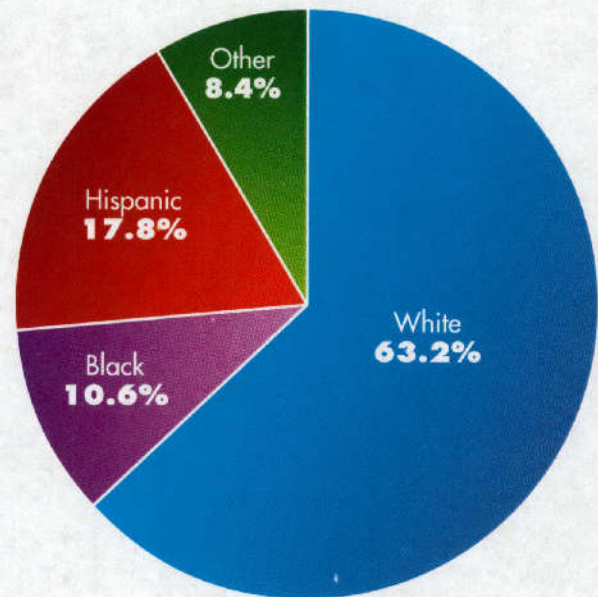
With regard to race and ethnicity, the agency’s workforce composition in fiscal 2018 was categorized as 63.2 percent white, 10.6 percent black, 17.8 percent Hispanic, and 8.4 percent other ethnicities (including Asian, Pacific Islander, American Indian, and Alaskan Native). With regard to gender, women continue to be in the majority at the TCEQ: female employees represented 53 percent; males, 47 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 beginning 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 2018, the TCEQ exceeded the percentage of the available black labor force in the job category

**Ethnicities of TCEQ Workforce
FY 2018**



of administrative support by 8.8 percent. The agency’s female workforce exceeded the available female labor force in top management (officials and administrators/managers) by 7.5 percent, as well as in administrative support, by 11.1 percent.

Recruitment and Retention

In fiscal 2018, staff turnover was 13.53 percent, 1.7 percent above fiscal 2017. The TCEQ’s turnover continues to fall below the overall average for full- and parttime classified employees at state agencies, significantly due to the effectiveness of the agency’s recruitment and retention programs.

The TCEQ administers multiple hiring programs tailored to meet the agency’s unique hiring needs. As an example, the Engineer Hiring Program is designed for individuals who hold a professional engineering license (PE). Express Hire allows supervisors to extend a conditional offer of employment at recruiting events, and Transitions Hiring expedites hiring and provides a diverse applicant pool for entry-level positions requiring a college degree.

The agency recruits widely, including at colleges and universities throughout the state. And recently it began using recruitment bonuses to attract candidates for positions—offered in remote locations and requiring highly technical skills.

The TCEQ also administers the Mickey Leland Environmental Internship Program. MLEIP offers summer internship opportunities for minorities and female students pursuing environmental, engineering, science-related, and public-administration careers. Intern familiarity with the agency's mission and working environment often spurs their future interest in full-time employment at the agency.

Retention strategies include employee recognition and administrative-leave awards, wellness programs, flexible schedules, and retention bonuses for staff classified in mission-critical occupations experiencing significant turnover. To retain and deepen employee expertise, the TCEQ offers robust programs. The recently rolled out onboarding program offers new employees planned activities to ensure that they become fully acclimatized to TCEQ programs and personnel.

Another retention tool is the agency's facilitation of employee movement internally. In addition to the employee's ability to apply for posted positions, there is the Lateral Transfer Opportunity Program. Lateral transfers facilitate career enhancement, allowing for mastery of other subject matter without impacting classification or pay. As staff look toward leadership and management opportunities, the Leadership and Management Excellence Program offers eligible employees training that promotes the alignment of their leadership and management development with the TCEQ's organizational goals.

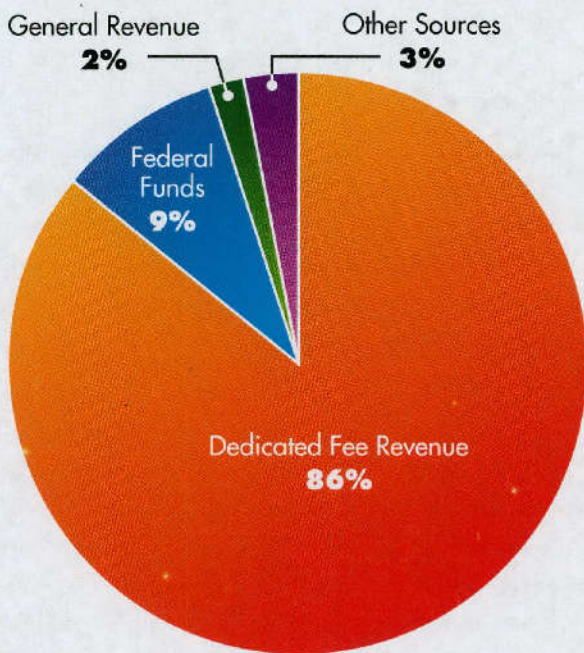
Finances

In fiscal 2017, the agency's approved operating budget was \$461.5 million. Of that, \$398.8 million was appropriated from general revenue-dedicated fee revenue, \$40.0 million from federal funds, and \$10.5 million from general revenue. Other sources provided the remaining \$12.2 million.

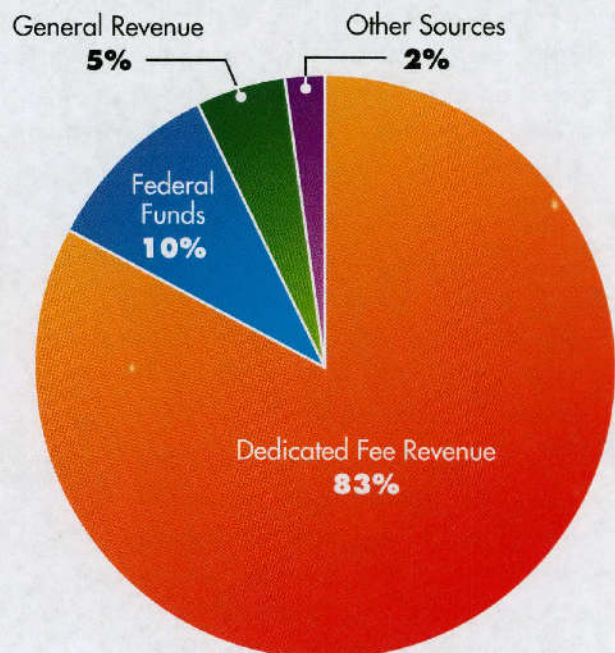
In fiscal 2018, the approved operating budget totaled \$374.2 million. Of that, \$311.0 million was appropriated from dedicated fee revenue, \$38.0 million from federal funds, and \$16.9 million from general revenue. Other sources supplied the remaining \$8.2 million.

Pass-through funds accounted for 48 percent of the agency's operating budget in fiscal 2017 and 34 percent in fiscal 2018. Pass-through funds primarily support grants, remediation, and reimbursements for agency programs. Such programs included the Texas Emissions Reduction Plan (TERP), Clean Rivers, and Municipal Solid Waste Programs; Petroleum Storage Tank and Superfund cleanups; and the since vetoed Low-Income Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program. The LIRAP veto accounted for the majority of the pass-through funding variance between fiscal 2017 and fiscal 2018.

Fiscal Year 2017: \$461.5 Million



Fiscal Year 2018: \$374.2 Million



Funds other than those passed through are devoted to day-to-day agency operations. Salaries accounted for 37 percent in fiscal 2017 and 46 percent in fiscal 2018. The remaining operating funds support professional services, supplies, utilities, rent, travel, training, and capital needs.

Fees

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

- **Texas Emission Reduction Plan** (\$231 million in fiscal 2017, \$247.1 million in fiscal 2018). TERP funding supports programs vital to implementing the State Implementation Plan. The TERP Account (5071) draws from five fees and surcharges, assessed on the sale, registration and inspection of vehicles. The TCEQ, the authorized manager of the account, handles the management and transfer of funds. The Comptroller of Public Accounts (CPA), the Texas Department of Public Safety, and the Texas Department of Motor Vehicles collect the fees on behalf of the TCEQ.
- **Petroleum-Product Delivery Fee** (\$16 million in fiscal 2017, \$17 million in fiscal 2018). The fee is assessed on the bulk delivery of petroleum products. The CPA collects and deposits the fee to the Petroleum Storage Tank Remediation Account (0655).
- **Air Emissions Fee** (\$42 million in fiscal 2017, \$36.3 million in fiscal 2018). The fee recovers the costs of developing and administering the Title V Operating Permit Program. Revenue is deposited to the Operating Permit Fees Account (5094).
- **Solid-Waste Disposal Fee** (\$32 million in fiscal 2017, \$34 million in fiscal 2018). The fee is assessed on the operators of municipal solid-waste facilities for the disposal of solid waste. Account 0549 receives 66.7 percent of the revenue collected; Account 5000 receives 33.3 percent.
- **Motor-Vehicle Safety-Inspection fee** (\$44.4 million in fiscal 2017, \$45.9 million in fiscal 2018). The fee, assessed per vehicle, is assessed on the sale of state safety-inspection stickers at inspection stations, auto dealers, and other service providers. Revenue is deposited to the Clean Air Account (0151).
- **Consolidated Water Quality Fee** (\$27.8 million in fiscal 2017, \$28 million in fiscal 2018). The fee is assessed against each permit, issued under the Texas

Water Code, Chapter 26, authorizing the treatment and/or discharge of wastewater. It is calculated based on factors including flow volume and type, traditional pollutants, toxicity, and whether a facility is designated as major or minor. The fee revenue is deposited to Water Resource Management Account 0153.

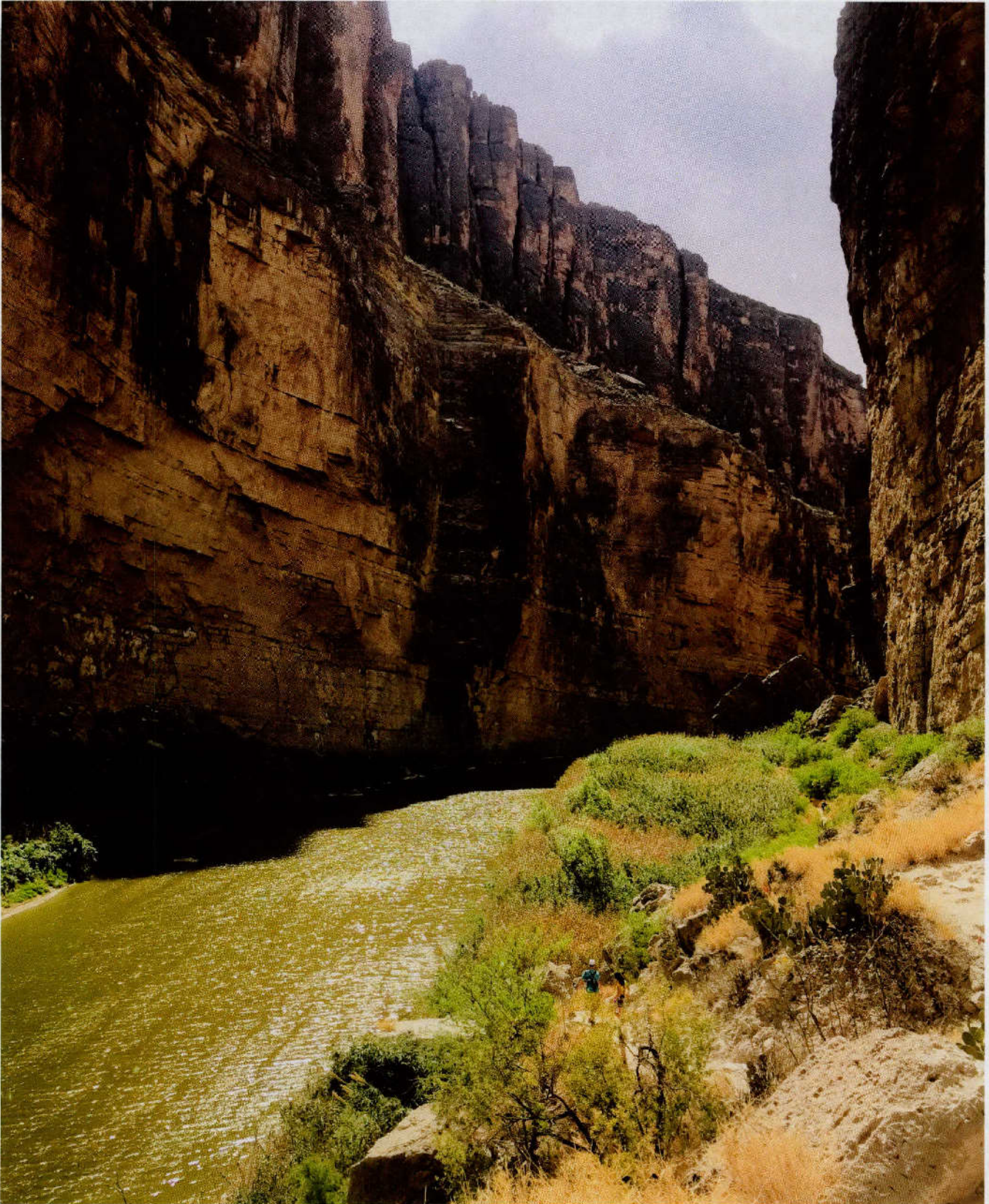
- **Public Health Service Fee** (\$23.7 million in fiscal 2017, \$24.3 million in fiscal 2018). This fee, based on the number of connections, is assessed on owners or operators of public drinking water supply systems. Revenue is deposited to Water Resource Management Account 0153.
- **Lead Acid Battery Fee** (\$21.7 million in fiscal 2017, \$22.5 million in fiscal 2018). The fee is assessed on the retail sale of lead acid batteries. A fee of \$2.00 is assessed on the purchase of lead acid batteries less than 12 volts—the surcharge on batteries 12 volts and higher is \$3.00. The CPA collects and deposits the revenue to the Hazardous and Solid Waste Remediation Account (0550) on behalf of the TCEQ.

Fee Revisions

State legislation passed in 2017 changed the TCEQ's fees and funding structure as follows:

- Senate Bill 1330 required the TCEQ to deposit the gross receipts surcharge fee used to fund the Low-Level Radioactive Waste Compact Commission to Low-Level Radioactive Waste Fund Account 0088, instead of to General Revenue.
- Senate Bill 1105 abolished Used Oil Recycling Account 0146 and transferred the account's balance and future revenue to Water Resource Management Account 0153. Fees, penalties, and interest collected on used oil sales were deposited to the then Used Oil Recycling Account.
- For the 2018-2019 biennium, House Bill 2662 reduced the surcharge of the total contracted rate assessed for the disposal of nonparty compact waste at the compact waste disposal facility located in Andrews County. That reduction was from 20 percent to 10 percent. HB 2662 also halted collecting the 5 percent surcharge assessed on the gross receipts on all compact and federal waste disposed at the compact waste disposal facility for the biennium. After August 2019, the previous assessments will be reinstated automatically.

- HB 2771 required that the \$10 fee collected for the processing of an on-site wastewater treatment permit application be used only for on-site septic research grants and administrative costs.
- A veto of Low-Income Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program funding was followed by participating counties opting out. No additional fee revenue is expected.



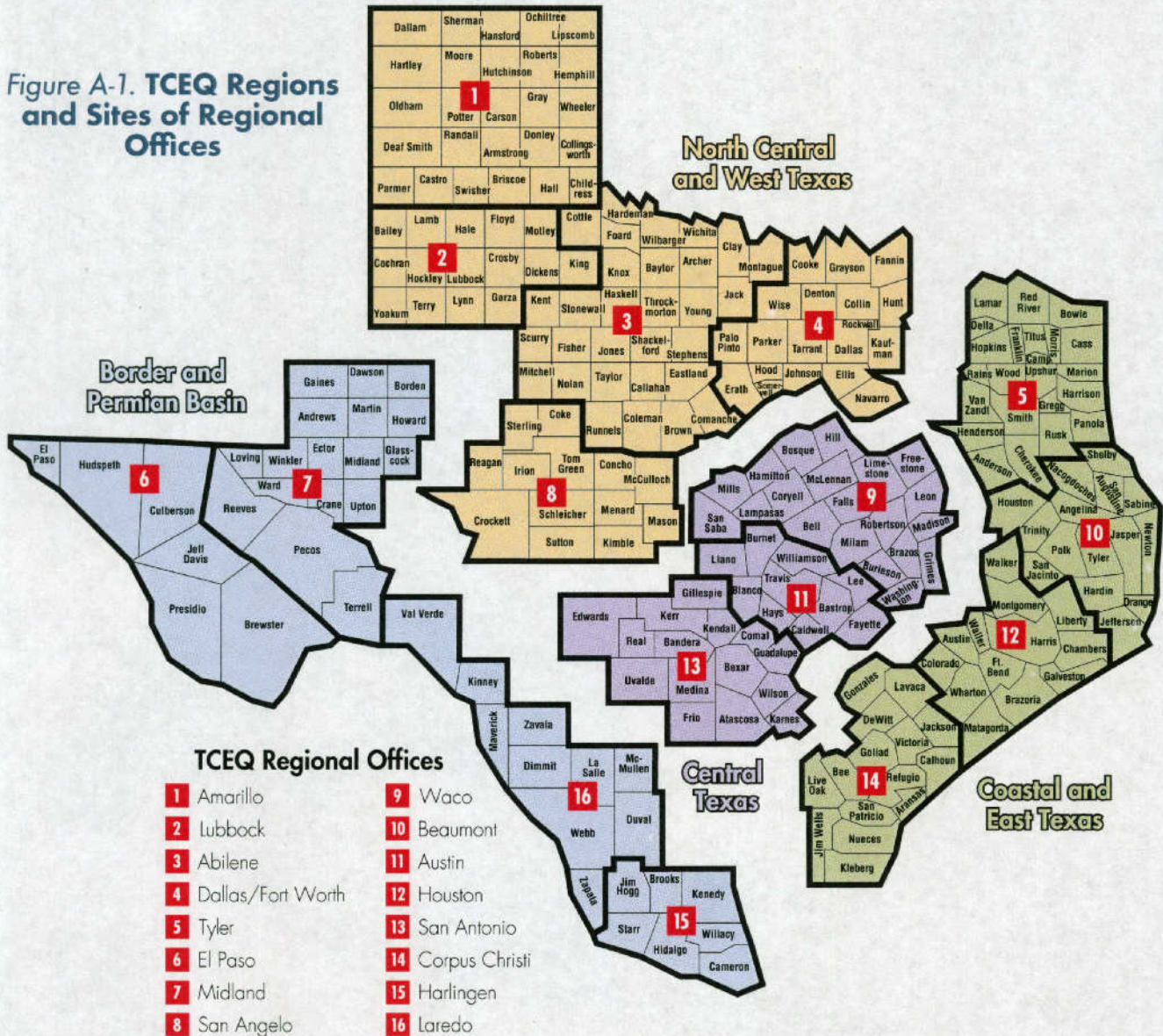
A P P E N D I X

Assessment of Complaints Received

The 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, email, or letter to our central office or one of 16 regional offices for response. The agency maintains a 24-hour toll-free hotline (888-777-3186) for receiving such calls and a website where complaints can be submitted online.

Figure A-1. TCEQ Regions and Sites of Regional Offices



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 Sections 5.1773 and 5.178 of the Texas Water Code.

Complaint Data Collection and Reporting

After the Office of Compliance and Enforcement receives an environmental complaint, the data related to the initial complaint are recorded in the Consolidated Compliance and Enforcement Data System. If an investigation is warranted, an investigator is assigned who then enters all resulting data into CCEDS. Management reviews, approves, and documents the investigation in CCEDS.

All the data summarized in this appendix were extracted from CCEDS. This report reflects activity that occurred in the agency’s 16 regions and at the central office during fiscal 2017 (Sept. 1, 2016, through Aug. 31, 2017) and fiscal 2018 (Sept. 1, 2017, through Aug. 31, 2018). The data are presented in Figures A-2 to A-9.

Complaints by Region

In fiscal 2017, the TCEQ received a total of 10,193 complaints; in fiscal 2018, the total was 11,091. Figures A-2 and A-3 show the complaints received annually.

The number of complaints varies according to regional population. In fiscal 2017, 53 percent of all complaints came from the two largest metropolitan areas, the Dallas-Fort Worth region (17 percent) and the Houston region (36 percent). In fiscal year 2018, 57 percent of all the complaints were received by the Dallas-Fort Worth region (19 percent) and Houston region (38 percent).

Figure A-2. FY 2017 Complaints by Region

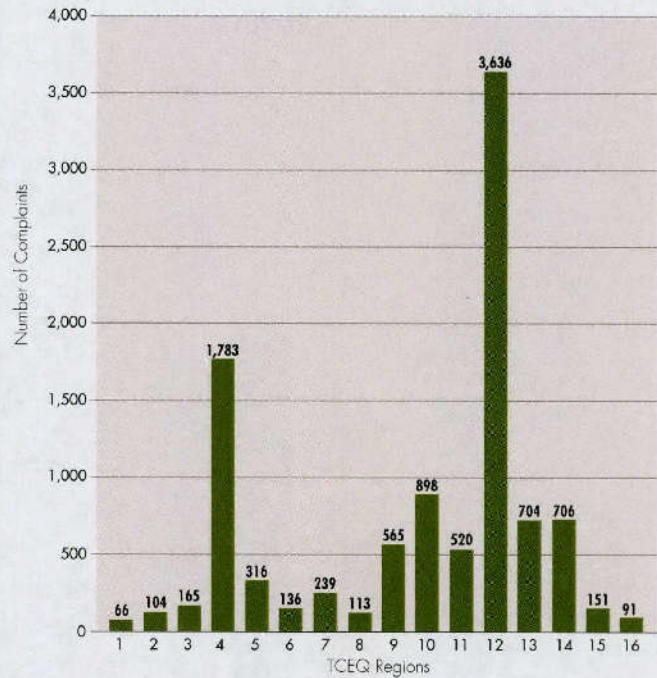


Figure A-3. FY 2018 Complaints by Region

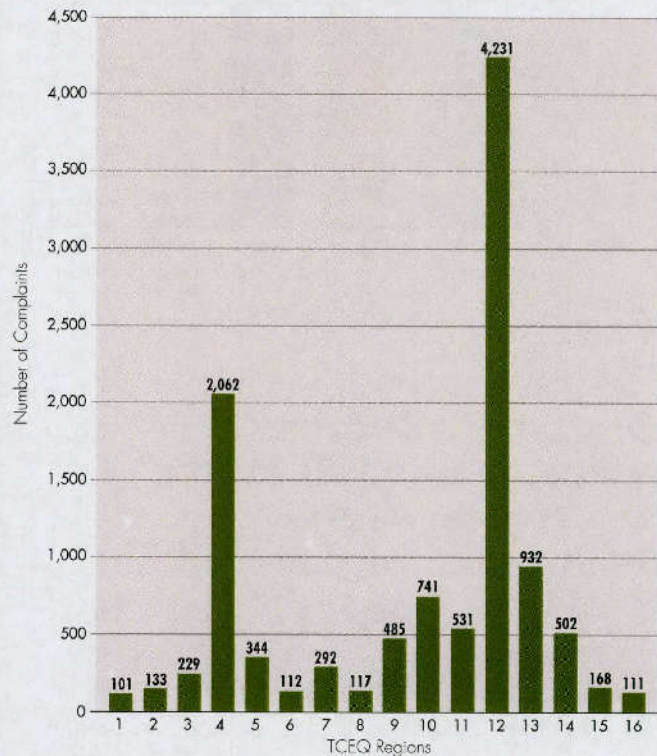
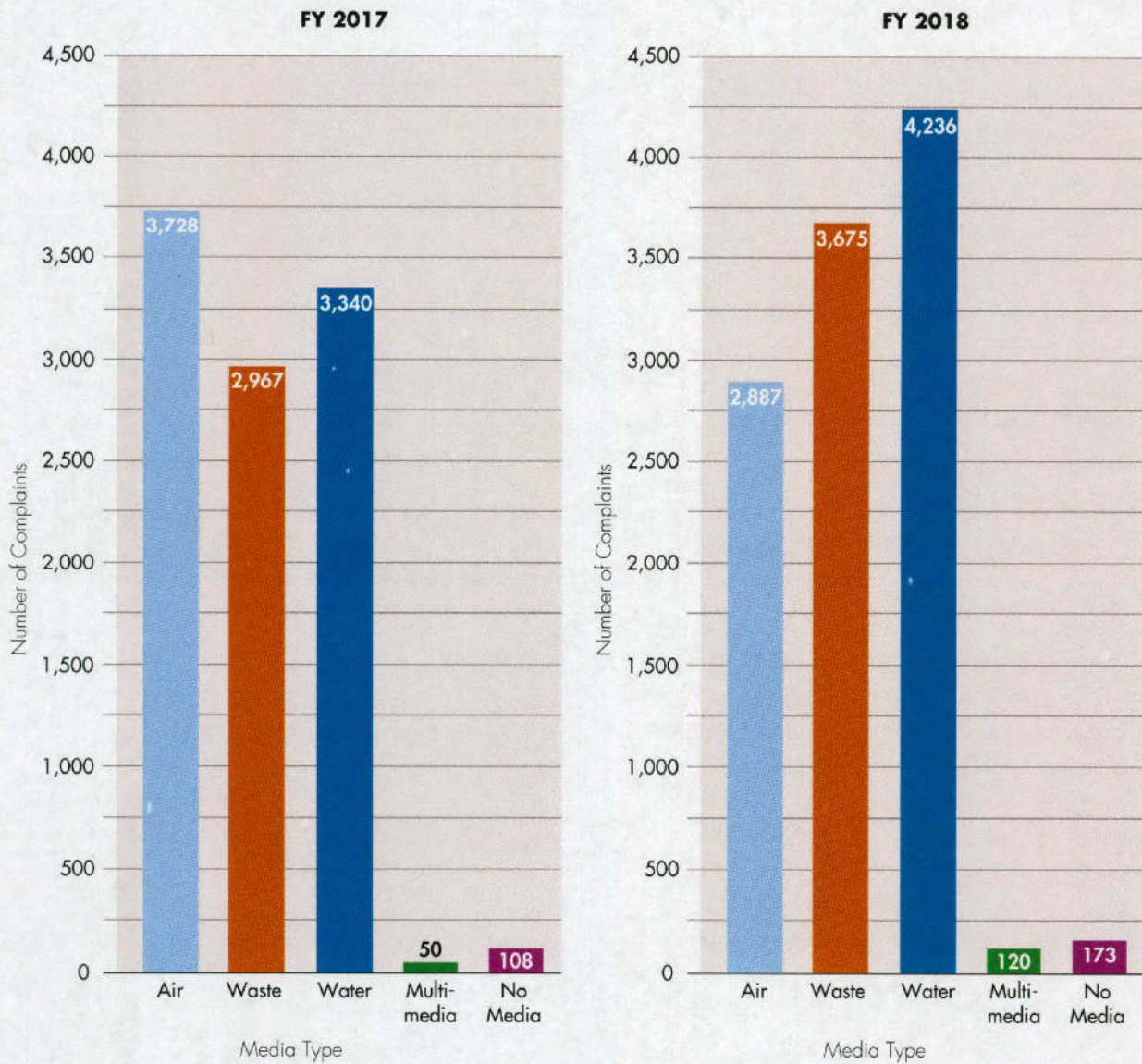


Figure A-4. Complaints by Media Type, Statewide



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

Total complaints were 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 medias (for example, noise). As seen in Figure A-4, air complaints represent the most complaints in fiscal 2017 and water complaints the most in fiscal 2018.

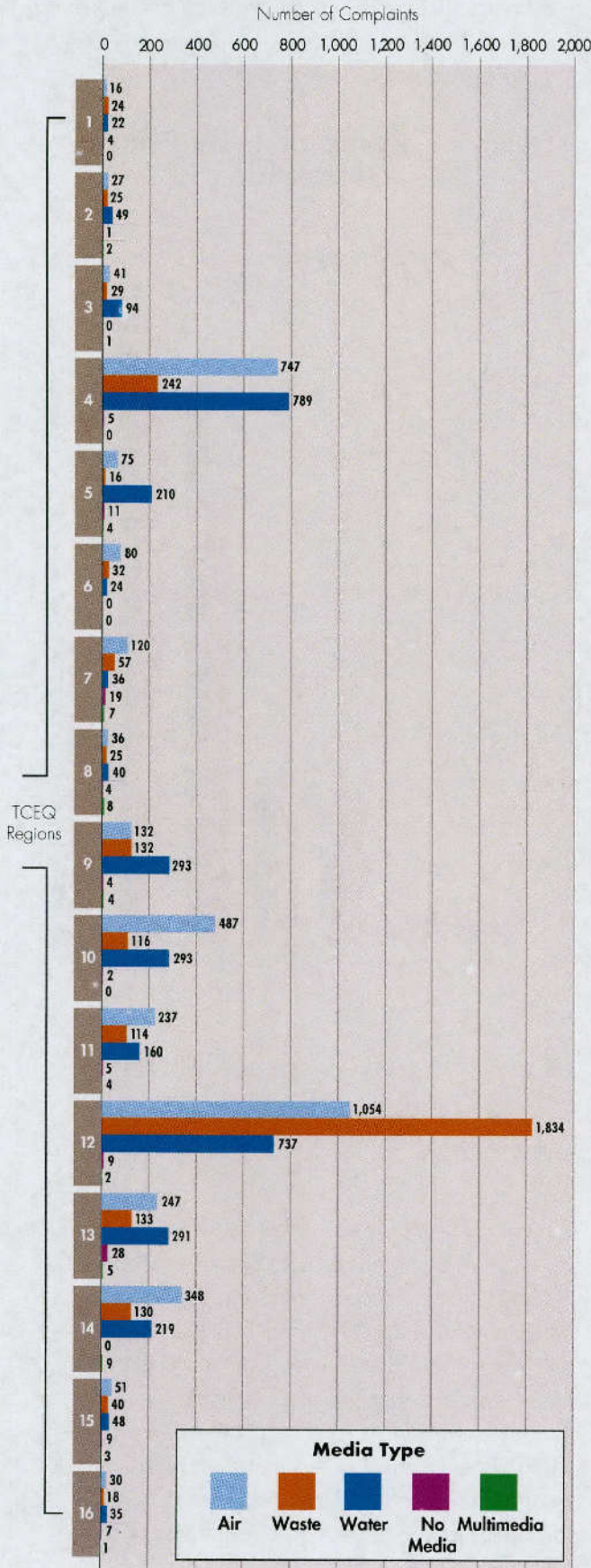
In fiscal 2017, the TCEQ continued to experience a high number of air complaints, primarily due to a large volume of complaints related to odors near residential ar-

reas in the Dallas-Fort Worth and Houston areas, increases in nuisance dust complaints in the Corpus Christi area, and a facility fire in the Beaumont region. In fiscal 2018 the TCEQ observed a decrease in air complaints, as the overall number returned to the historic trend.

In fiscal years 2017 and 2018, the TCEQ saw a significant increase in waste complaints, primarily due to large volumes of landfill odor complaints in the Houston region.

In fiscal 2018, the Dallas-Fort Worth, Houston, and San Antonio regions experienced a significant increase in water complaints. This is due in part to an increase in public water systems and wastewater treatment facilities in these areas. There has also been an increase in stormwater-related complaints due to continued growth in these areas.

Figure A-5. Complaints by Region & Media Type, FY 2017



Water complaints outnumbered air complaints in half of the regions in fiscal 2017 and more than half of the regions (11 out of 16) in fiscal 2018. In fiscal 2017 and 2018, waste complaints significantly outnumbered both water and air complaints in the Houston region which received the most complaints statewide.

Complaints Received by Priority Level

Complaints received in regional offices are prioritized in the following categories, based on the relative threat 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 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.

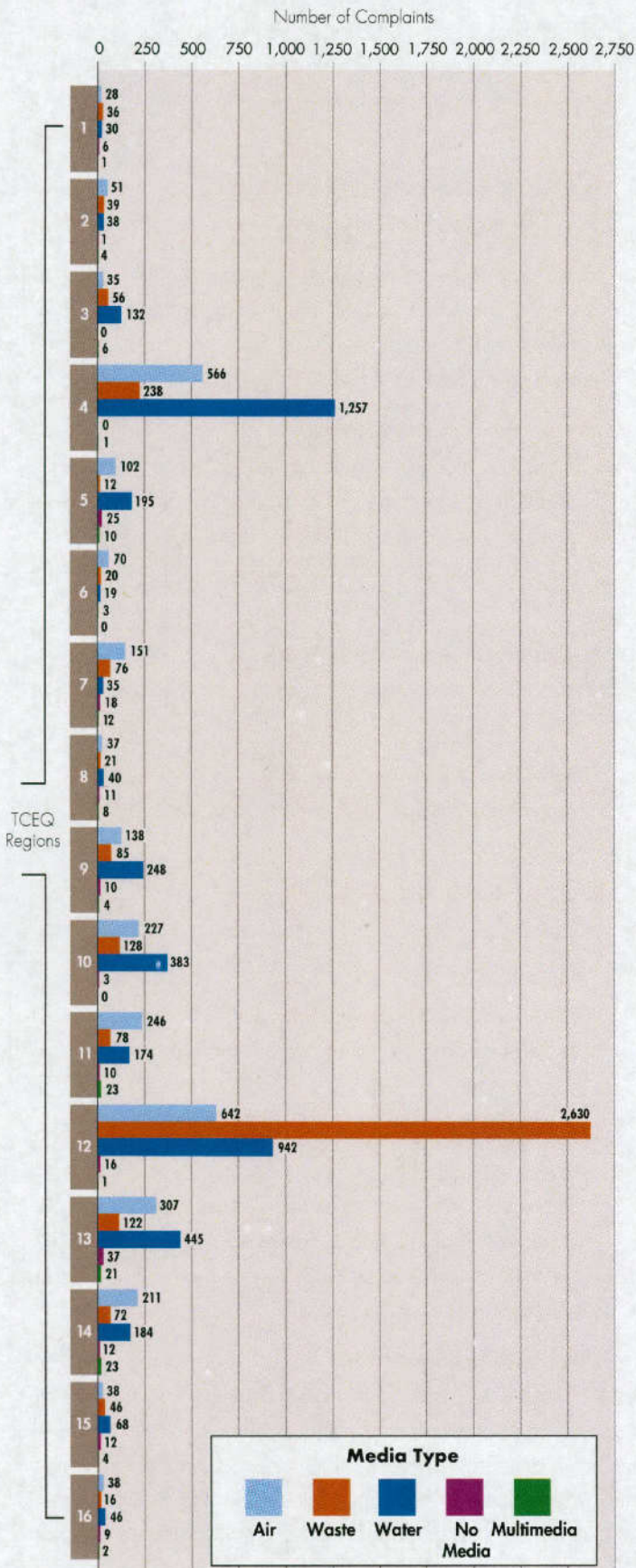
Refer or do not respond

This classification is for complaints that, due to jurisdictional issues, are referred to other authorities, 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

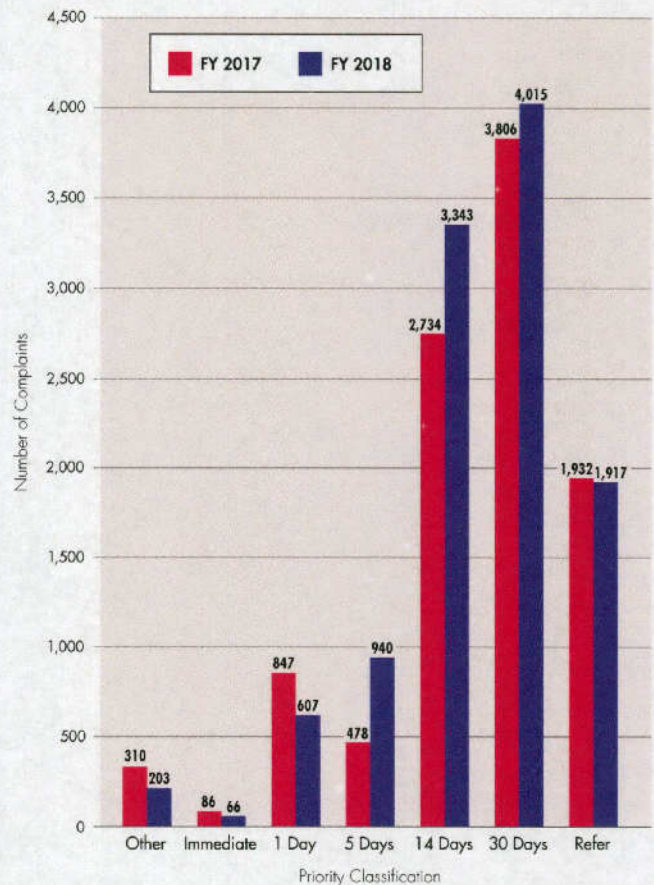
This classification is for special projects that occur as on-demand events and complaints in which the complainant or source is unavailable and region management has granted prior approval for extending an investigation. Response time is based on management's evaluation of the project and the overall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

Figure A-6. Complaints by Region & Media Type, FY 2018



The distribution of complaints is shown by priority classification statewide in Figure A-7. Approximately 80 percent of the complaints received during the last two years were classified as requiring an investigation in 30 calendar days or less.

Figure A-7. Complaints by Priority, Statewide

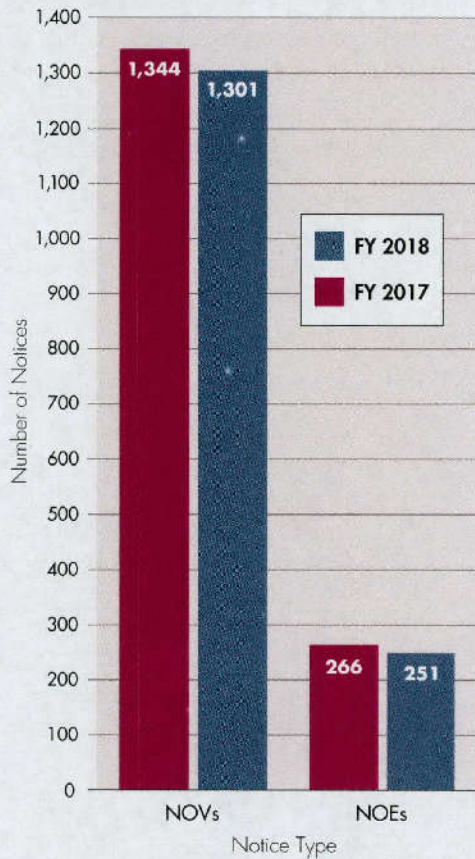


Complaint Investigations that Trigger Enforcement Action

All complaint investigations are conducted according to priority levels, as described above. Subsequent action depends on the outcome of the investigation. For approximately 85 percent of the complaints received during fiscal years 2017 and 2018, no specific violations were documented. For the remainder, the agency took enforcement action in the form of a notice of violation (NOV) or a notice of enforcement (NOE) per the TCEQ's enforcement initiation criteria.

Issuance of an NOV indicates that TCEQ rules, state statutes, or permit requirements have been violated, but the violation is not considered serious

Figure A-8. Complaints Resulting in NOV's & NOEs, Statewide



enough to require an enforcement order and the violation is expected to be resolved within a specified time frame.

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 2017, the agency issued 1,344 NOV's and 266 NOEs as a result of complaint investigations; in fiscal 2018, the totals were 1,301 NOV's and 251 NOEs.

Complaints Investigated by Program Type

Another analysis is by the program-type of investigations to address complaints. Waste and water media each have several subcategories of programs. Air complaints are not further subdivided. If an investigation involves more than one 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,
- 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.

Figure A-9 shows the number of complaint investigations that were conducted in each program type. In fiscal 2017, 4,924 investigations were conducted. In fiscal 2018, 4,540 investigations were conducted. One investigation may be conducted for multiple complaints for the same or similar incidents or conditions.

In fiscal 2017, air complaint investigations made up 37 percent of the total; water complaint investigations, 44 percent; waste investigations, 17 percent; and multi-program complaint investigations, 3 percent. In fiscal 2018, air investigations were 36 percent of the total; water investigations, 47 percent, waste investigations, 14 percent; and multi-program complaint investigations, 3 percent.

Conclusions

There continued to be an upward trend in overall complaints for fiscal years 2017 and 2018 when compared to previously reported fiscal years. The most significant increases were for waste between fiscal years 2016 and 2018 and for water between fiscal years 2017 and 2018.

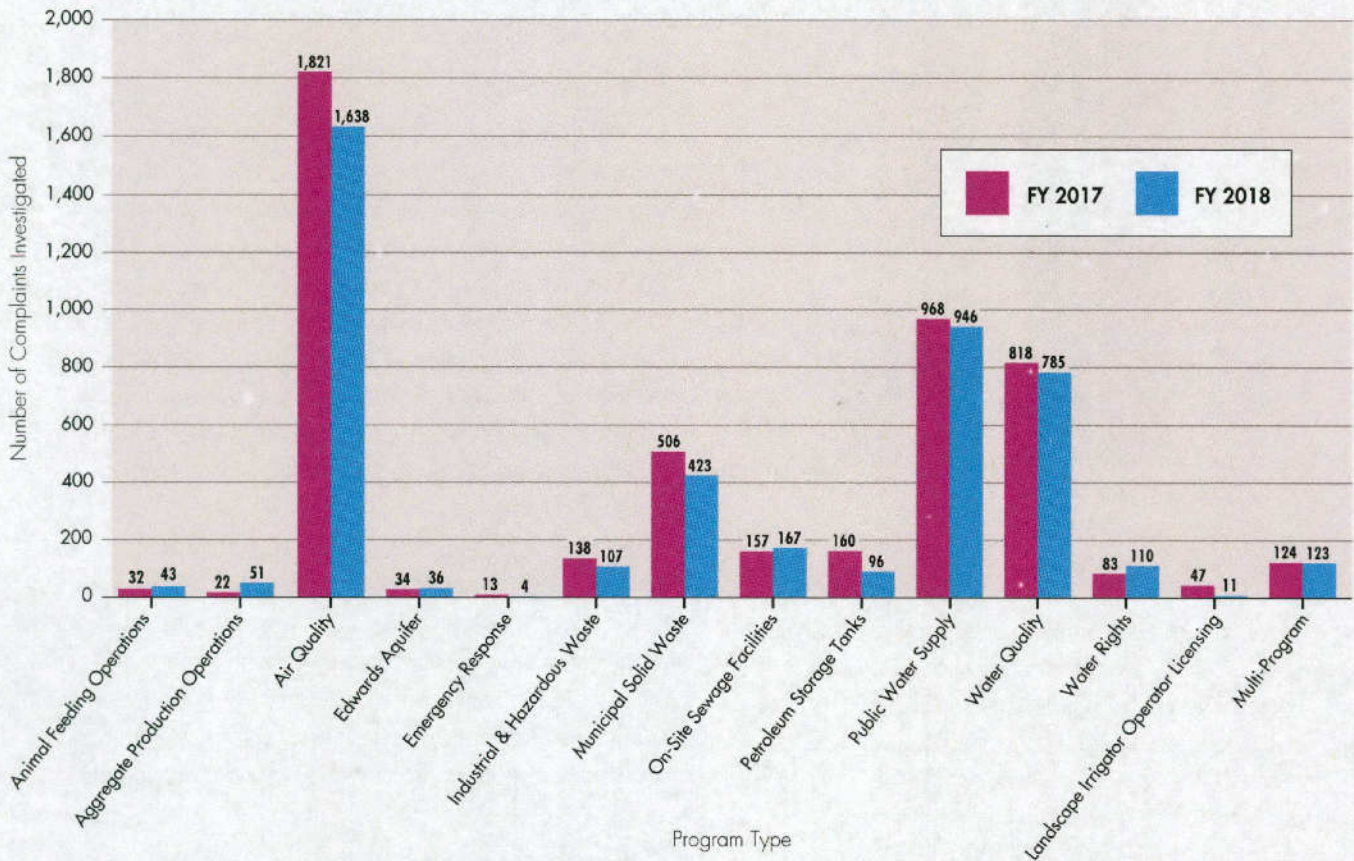
The large increase in water complaints in fiscal 2018 may be attributed to an increase in public water systems and wastewater treatment facilities and increased development in several areas of the state. The large increase in waste complaints in fiscal years 2017 and 2018 are related to large numbers of odor-related complaints near landfills primarily in the Houston area.

As water complaints increased, TCEQ staff also completed an increased amount of public water supply complaint-

investigations. Air complaint investigations also increased from fiscal 2016 to fiscal 2017. Many of the air complaint investigations are associated with the landfill odor complaints in the Houston area. When multiple complaints are related, they may be addressed collectively according to the agency's standard investigative procedures. Therefore, there is not always a direct correlation between the number of complaints received and the number of investigations.

Finally, the analysis of complaint investigations by program type reflects the fact that the TCEQ places a high priority on investigating complaints. All complaints 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 the jurisdiction of this agency, referred to the appropriate authority.

Figure A-9. Complaint Investigations by Program Type



A P P E N D I X

Permit Time-Frame Reduction and Tracking

The 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 applications 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 65 percent of all permit applications within the established time frames despite an increase in applications that are more complex and require more time to review and issue.

Water Quality Permitting met the goal to review 90 percent (within the 5 percent measure allocation) of all permit applications within established time frames while also focusing efforts on resolving long standing permit applications not subject to permit processing time frames (for example, resolution of long standing EPA objections).

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.

Waste Permits met the goal to review 90 percent of all applications within established timeframes.

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 below.

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 and has implemented requirements for obtaining authorizations electronically for the large categories of stormwater general permits unless waivers are obtained.

In 2015, the Air Permitting program added options that allow online submission of all permit-by-rule (PBR) applications and certain standard permit applications. In fiscal 2018, the Air Permitting program began requiring all PBR applications be submitted through the e-permitting system. Additionally, an "auto-issue" feature was added for other specific PBR authorizations, which results in an automatic registration letter after the application is completed appropriately.

The ePermits system has helped with Air Permitting's workload. With similar staffing, the number of completed projects submitted online significantly increased—4,314 in fiscal 2017-2018. Twenty-six percent of completed new source review (NSR) projects in FY18 were completed automatically through e-permitting with same-day response.

And for fee collection, during fiscal 2017 and 2018, the agency's e-Pay system processed over 82,000 fee payments and collected about \$33 million in fees.

Implement targeted initiatives within permitting and authorization programs.

Waste Permits:

- Holding pre-application meetings.
- Improvement of checklists, forms, and guidance documents to facilitate more consistent and complete applications.

- Consolidation of application review processes to improve turnaround times.

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.
- Developed new and revised Standard Operating Procedures and checklists for staff efficiency and consistency; also developed a list of program specific rules and regulations as a quick reference guide for staff.

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:

- Modifying policies and procedures to resolve longstanding EPA objections related to bacteria at industrial facilities without domestic sources, cooling water intake structures, municipal storm sewer systems, and dissolved solids at municipal facilities that had delayed permit issuance.
- The TCEQ initiated a special project to track and attempt resolution of the oldest 20 pending applications being delayed based on significant policy and technical issues. During the 2-year biennium, the TCEQ worked with the EPA on the resolution and issuance of 21 permit applications dating as far back to 2007, with an additional 23 dated applications being worked to be resolved and issued.
- The TCEQ and EPA Region 6 water quality program managers and staff held a Lean workshop between Dec. 5-7, 2017 for the Texas Pollutant Discharge Elimination System (TPDES) permitting program. Lean is a program established to evaluate and assess

work processes to gain efficiencies and reduce waste. The TCEQ and the EPA customized this program during the workshop to focus on cooperative relationships between both agencies and to reach agreements on how to reduce pending TPDES permit backlogs related to the EPA objecting to the TCEQ drafted TPDES water quality permits and develop procedures to reduce or eliminate future objections that delay timely permit issuance. At the beginning of the workshop in December 2017, a total of 48 objections on TPDES permits remained unresolved. Because of the cooperative efforts between both agencies, the backlog of pending unresolved EPA objections has been reduced to 16, a 67 percent reduction.

Water Supply:

- Holding pre-application meetings as needed.
- Checklists and forms to facilitate more consistent and complete applications.
- Guidance documents made available to regulated community.

Air Permits:

- Continuing to automate internal processes to shift resources to other areas of the division to help with project timeframes. The success of ePermits and automation has allowed for the shifting of nine staff members to more complex NSR permitting sections to help with case-by-case permit timeframes.
- Developing electronic guidance tools to improve application quality.
- Adding even more application and permit types into ePermits, some of which are same day responses. This includes expanding ePermits to case-by-case NSR permit applications.
- 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 email, which allows broader access and reduces paper.
- Adding a new ePermits module to automate Title V data entry to shift resources to other air permitting areas that will help with project timeframes.

- Developing additional readily available permits (RAPs) for specific types of facilities. The TCEQ currently has two RAPs available for simple cycle turbines and compressor stations.

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, 104 PBRs, and six general operating 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 Underground Injection Control program. The continued use of these authorizations has helped to reduce the time frames for processing permits.

Maintain an expedited permitting and authorization 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 2017 and 2018, the TCEQ tracked and issued 16 permits for major economic-development projects.

From Sept. 1, 2016 through Aug. 31, 2018, the TCEQ processed to a final decision 51 industrial and hazardous waste (IHW) and 40 municipal solid waste (MSW) authorizations. As shown in Figure B-2, the average processing time for these applications ranged from 109 days to 590 days. These average times were within their respective targets, except for MSW registered transfer stations and IHW renewals.

In addition to the targeted initiatives to streamline applications and reduce review times, the Office of Waste was also able to resolve minor issues and minor application deficiencies through phone calls and emails.

From Sept. 1, 2016 through Aug. 31, 2018, the TCEQ's Water Supply Authorization program completed reviews for 8,261 applications and authorizations. As shown in Table B-5, the average processing time for the applications and authorizations completed during fiscal 2017 and 2018 ranged from 51 to 239 days.

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

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
New Source Review (NSR) New Permits	292	287	46	11	1,509	283	285
New Source Review Amendments	820	894	232	7	2,268	395	315
NSR New Permits – Federal Timeline	12	8	0	324	498	411	365
NSR Amendments – Federal Timeline	26	11	6	226	1,259	527	365
Federal New Source Review (Prevention Significant Deterioration, Nonattainment, 112g) New & Major Modifications	59	83	20	190	1,328	669	365
Permits by Rule	8,829	8,962	17	1	1,541	30	45
Standard Permits (w/o public notice), Changes to Qualified facilities (SB1126) & relocations	2,971	3,018	3	1	1,410	25	45
Standard Permits (with public notice)	101	105	0	2	208	93	150
Standard Permits for Concrete Batch Plants (with public notice)	342	324	0	3	361	82	195
Priority 1 Totals	13,452	13,692	324				
Priority 2							
New Source Review Alterations & Other Changes	796	818	15	2	1,410	79	120
New Source Review Renewals	552	711	199	14	2,268	367	270
New Site Operating Permits (SOP)	54	91	24	70	3,168	478	365
Site Operating Permit Revisions	500	477	88	1	3,136	295	365
Site Operating Permit Renewals	270	321	96	22	2,215	479	365
New General Operating Permits (GOP)	93	77	5	4	756	154	120
General Operating Permit Revisions	150	152	5	1	1,217	254	330
General Operating Permit Renewals	113	145	2	5	840	177	210
Priority 2 Totals	2,528	2,792	434				
Overall Totals	15,980	16,484	758				

Figure B-2. Waste Permits (Uncontested) Processing Times

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
IHW New Permits	2	4	0	358	474	416	450
IHW Class 3 Modifications	11	20	0	140	638	384	450
IHW Major Amendments	0	1	0	N/A	N/A	N/A	450
MSW New Permits	16	18	0	30	430	201	360
MSW Major Amendments	18	17	0	32	321	109	360
MSW Registered Transfer Stations	8	4	0	168	357	247	230
MSW Registered Liquid Waste Processor	0	1	0	N/A	N/A	N/A	230
Priority 1 Totals	55	65	0				
Priority 2							
IHW Renewals	18	26	2	17	1,536	590	450
Priority 2 Totals	18	26	2				
Overall Totals	73	91	2				

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

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
New Permits (Major Facilities)	2	5	0	259	326	293	330
Major Amendments (Major Facilities)	63	66	6	140	2,289	438	330
New Permits (Minor Facilities)	173	127	11	149	631	291	330
Major Amendments (Minor Facilities)	136	119	9	180	1,138	315	300
Sludge Registrations	35	77	0	13	665	109	270
Priority 1 Totals	409	394	26				
Priority 2							
Renewal Major Facilities	276	244	18	193	2,496	321	330
Renewal Minor Facilities	867	910	9	105	1,002	254	300
Priority 2 Totals	1,143	1,154	27				
Overall Totals	1,552	1,548	53				

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

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Water Rights New Permits	53	93	46	11	2,699	871	300
Water Rights Amendments w/Notice	28	65	41	190	3,488	1,288	300
Water Rights Requiring Notice Review Pursuant to Work Session	29	68	24	157	2,116	878	300
Water Rights Amendments without Notice, Rio Grande Watermaster Area	46	57	4	76	1,398	284	180
Water Rights Amendments without Notice, Outside Rio Grande Watermaster Area	37	44	2	30	645	183	180
Priority 1 Totals	193	327	117				

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

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Water District Expedited Bond Applications	316	284	2	21	158	59	60
Water District Regular Bond Applications	235	273	9	12	359	157	180
Water District Expedited Escrow Releases & Surplus Fund Requests	140	116	0	2	134	51	60
Water District Regular Minor Applications	392	392	1	0	230	48	120
Water District Expedited Creation Applications	9	10	0	131	386	188	120
Water District Regular Creations & Conversions	17	15	3	160	414	239	180
Water Engineering Plan Reviews	4,676	4,701	0	1	209	54	60
Exceptions	2,138	2,314	1	0	266	73	100
Alternative Capacity Requirements	159	156	0	3	108	75	90
Priority 1 Totals	8,082	8,261	16				

Figure B-6. Radioactive Materials Permits (Uncontested) Processing Times

Application Type	Received in FY17 and FY18	Processed in FY17 and FY18	Exceeding Target as of 8/31/18	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Uranium Radioactive Material License Initial Issuance	0	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	3	1	0	178	178	178	390
Underground Injection Control General Permits	0	0	0	N/A	N/A	N/A	60
Underground Injection Control Permit Major Amendments	0	2	0	245	245	245	390
Underground Injection Control Class III Production Area Authorizations	0	0	0	N/A	N/A	N/A	90
Underground Injection Control Class I Pre-Injection Unit Registrations	0	3	3	523	722	596	390
Priority 1 Totals	3	6	3				
Priority 2							
Uranium Radioactive Material License Renewals	0	0	0	N/A	N/A	N/A	885
Uranium Radioactive Material License Major Amendments	1	0	0	N/A	N/A	N/A	885
Uranium Radioactive Material License Minor Amendments	1	1	1	290	290	290	230
Low-Level Radioactive Waste, Radioactive Material License Renewals	1	1	1	1,411	1,411	1,411	990
Low-Level Radioactive Waste, Radioactive Material License Major Amendments	0	0	0	N/A	N/A	N/A	990
Low-Level Radioactive Waste, Radioactive Material License Minor Amendments	1	1	1	345	345	345	230
Underground Injection Control Permit Renewals	9	20	19	407	886	674	390
Underground Injection Control Class V Authorizations	201	199	42	2	336	39	60
Priority 2 Totals	214	222	64				
Overall Totals	217	228	67				

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.

Severe drought conditions beginning in 2010, 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.

Growth and development in the state has led to the increase in expedited bond application reviews. The Water Supply Division created a district's stakeholder work group to identify efficiencies and streamline the districts bond application process. The Districts Advisory Workgroup provides an open forum to discuss the TCEQ's water district processes and procedures.

In addition to the targeted initiatives to help streamline applications and reduce review times, the Radioactive Materials Division maintained regular communication with applicants through meetings, phone calls, and email 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 emails.

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.



APPENDIX

Office of Public Interest Counsel's Annual Report to the TCEQ

FISCAL YEAR 2018

Introduction

Texas 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 Texas Water Code, Section 5.2725 for OPIC to make an Annual Report to the Commission containing:

1. 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 Texas Water Code, Section 5.273.

In even-numbered years the report must be submitted 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. Though there is no statutory deadline for the submission of the report in odd-numbered years, OPIC is committed to providing this information to the Commission near the end of each fiscal year for purposes of reporting consistency. Accordingly, OPIC respectfully submits this Annual Report to comply with the requirements of Texas Water Code, Section 5.2725.

OPIC Mission

OPIC was created in 1977 to ensure that the Commission promotes the public's interest. To fulfill the statutory directive of Texas Water Code, Section 5.271, OPIC participates in contested case hearings and other Commission pro-

ceedings 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.

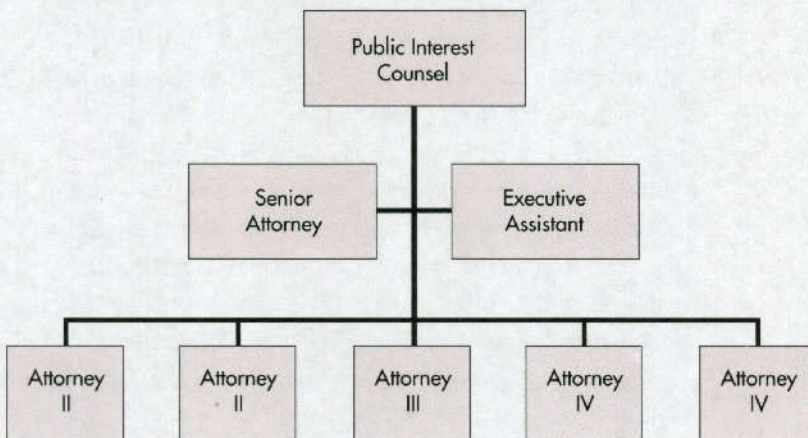
OPIC is committed to fulfilling its statutory duty to represent the public interest in Commission proceedings by hiring, developing, and retaining knowledgeable staff who are dedicated to OPIC's mission. To maintain high quality professional representation of the public interest, OPIC ensures that attorneys 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

Texas Water Code, Section 5.2725(a)(1) 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:

1. 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;
6. 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;
7. 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.

Figure C-1. Office of Public Interest Counsel



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, 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, watermaster 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, permit and licensing denials, suspensions, revocations, and emergency orders.

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 and Commission proceedings related to the consideration of proposed orders. For purposes of this report, enforcement proceedings do not include other agreed enforcement orders issued by the Executive Director.

OPIC's Performance Measures

As required by Texas Water Code, Section 5.2725(b), 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 the following information available through August 8, 2018: work assignments tracked by the Office during fiscal year 2018; SOAH quarterly reports; and matters considered by the Commission at its public meetings.

Fiscal Year 2018

In fiscal year 2018, OPIC participated in a total of 653 proceedings consisting of: 78 environmental proceedings; 7 district proceedings, 40 rulemaking proceedings; and 528 enforcement proceedings. OPIC's participation in 78 of 78 total environmental proceedings resulted in a participation percentage of 100%. OPIC's participation in 7 of 7 district proceedings resulted in a participation percentage of 100%. OPIC's participation in 40 of 40 rulemaking proceedings, including the review of all petitions, proposals, and adoptions considered by the Commission during fiscal year 2018, resulted in a participation percentage of 100%. OPIC's participation in 528 of 528 enforcement proceedings, including the review of enforcement matters considered at Commission agendas and the participation in or monitoring of docketed cases at SOAH during fiscal year 2018, 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 2018

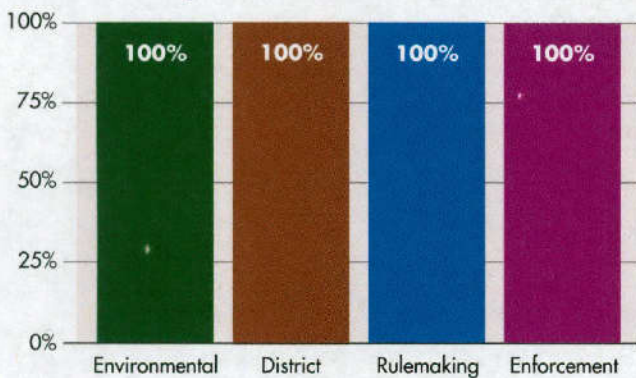


Figure C-3. Outcomes Table

Outcome	Projected FY 2018	Actual FY 2018
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

Texas Water Code, Section 5.2725(a)(2) 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 2018 totaled \$629,502.

Figure C-4. OPIC Budget, FY 2018

Budget Category	FY 2018 Budget
31 Salaries	\$612,502
37 Travel	\$7,100
39 Training	\$5,500
43 Consumables	\$500
46 Other Operating Expenses	\$1,600
54 Facilities, Furniture & Equipment	\$2,300
TOTAL	\$629,502

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, professional and temporary 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 the contested case hearing on the air permit application of Corpus Christi Liquefaction, LLC.

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. OPIC received a report evaluating the applicant's water conservation plan that facilitated OPIC's understanding of the 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 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. The parties settled this case prior to completion of the contested case hearing.

For fiscal years 2017 and 2018, OPIC's budget did not include funds that could be used for retaining technical expertise. Based on knowledge of contracting procedures gained in the matters discussed above, OPIC could retain technical expertise more expeditiously 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 with updates and revisions, are discussed below.

1. Proposal Concerning a Task Force Study to Address Increasing Interest in Concrete Manufacturing Facilities and Concrete and Rock Crushing Facilities

During the 85th legislative session, several bills were filed addressing public concern about potential health effects

and nuisance conditions caused by concrete manufacturing facilities and rock and concrete crushing facilities. These facilities may be authorized by the Commission through a variety of authorizations including new source review permits, standard permits for rock or concrete crushers, standard permits for concrete batch plants (CBPs), and standard permits for CBPs with enhanced controls.

Since the last legislative session, these facilities have continued to draw a high level of public concern in Harris County, where they are already highly concentrated, as well as in the Texas Hill Country and surrounding areas of Central Texas. Whether the authorizations were issued, withdrawn, or awaiting completion of applicable review and public participation procedures at the time of this report, the following are examples of more-recent TCEQ registrations or applications that have generated increasingly-escalated levels of community opposition:

Anderson Colombia Co., Inc. #146806L001 (rock crushing; Comal County);

Anderson Colombia Co., Inc. #74746L004 (rock crushing; Comal County);

Aurora Ready Mix Concrete, LLC #138224 (CBP; Harris County);

Asphalt, Inc. #148928 (rock crushing; Williamson County);

Asphalt, Inc. #148112 (rock crushing; Burnet County);

Boerne Ready Mix (Vulcan) #150104 (CBP; Kendall County);

CemTech Concrete Ready Mix, Inc. #138309 (CBP; Harris County);

Cherry Crushed Concrete, Inc. #139955 (concrete crushing; Harris County);

Collier Materials, Inc. #146397L001 (rock crushing; Burnet County);

Collier Materials, Inc. #152072L001 (rock crushing; Llano County);

Corvara West #147733 (CBP; Kendall County);

East First Recycling #146263 (rock crushing; Tarrant County);

Integrity Ready Mix Concrete, LLC #78606 (CBP; Harris County);

Soto Ready Mix, Inc. #149713 (CBP; Harris County);

Soto Ready Mix, Inc. #151715 (CBP; Harris County);

Texas Concrete Enterprise Ready Mix, Inc. #150603 (CBP; Harris County); and

Vulcan Construction Materials #147392L001 (rock crushing; Comal County).

Given the high level of expressed public interest in these types of facilities, OPIC supports creation of a task force broader in scope than the similar task force proposed in SB 2034 during the last legislative session. The purpose of such a task force would be to examine concerns that have been expressed by affected communities regarding concrete manufacturing facilities and rock and concrete crushers and to consider:

- (1) proposals for minimizing the effects of such operations on neighboring communities;
- (2) proposals for limiting operating hours;
- (3) proposals for routine audits or inspections to ensure compliance with permit terms and associated proposals for increased application fees to cover the cost of inspections;
- (4) proposals for standardized buffer zone or setback requirements across all authorizations under which these facilities may operate;
- (5) proposals for enhanced monitoring of particulate matter in geographic areas where these facilities are more concentrated; and
- (6) proposals for reviewing and standardizing, as appropriate, the various types of authorizations and public participation processes that apply to the permitting of such facilities.

The duties of the task force would include, without limitation, an evaluation of proposals from bills filed during the 85th legislative session including:

HB 838 (relating to the consideration of the cumulative effects of air contaminant emissions in the emissions permitting process);

HB 2086 (relating to plot plan requirements for an application for a standard permit for a concrete batch plant);

HB 2088 (relating to the operating hours of concrete plants in certain counties); and

SB 793 (relating to restrictions on the location and operation of concrete crushing facilities).

Among other representative stakeholders to consider for task force membership, appropriate participants may include representatives from local governments such as Burnet County, Comal County, Harris County, Kendall County, Kerr County, City of Boerne, City of Houston, City of New Braunfels, City of Marble Falls, as well as representatives of community groups active in these matters such as Air Alliance Houston, Public Citizen, Lone Star Legal Aid Equitable Development Initiative, Texas Environmental Protection Coalition, and Boerne to Bergheim Coalition for Clean Environment.

2. Proposal to Clarify the Deadline for Seeking Judicial Review of Agency Action on Matters Delegated to the Executive Director

In 2017, HB 3177 was passed to address a problem encountered by persons seeking judicial review of Commission actions on matters delegated to the Executive Director. Prior to the law, persons appealing many decisions delegated to the Executive Director were required to file two separate petitions for judicial review in district court. The first petition would be filed within 30 days of the effective date of the decision (as previously required by statute), while the person simultaneously exhausted administrative remedies through the motion to overturn process. A second petition would be filed after any motion to overturn had either been denied by the Commission or overruled by operation of law.

HB 3177 sought to remedy this confusing and duplicative set of circumstances by amending Texas Water Code, Section 5.351 to delay the requirement for petition filing until after the Commission had acted on any timely filed motion to overturn. The bill analysis explained that "stopping the 30-days-to-appeal clock while the motion to overturn is pending improves judicial efficiency, eliminates the possibility of multiple appeals, and addresses a potential procedural trap for those who do not routinely appear before the agency."

Although the bill sought to clarify and bring efficiency to the judicial appeal process, questions have arisen since the legislation took effect as to whether it applies to permitting matters under Chapters 361 and 382 of the Texas Health and Safety Code which contain separately-stated requirements about the timing of judicial appeals. Given the placement of Section 5.351 in Chapter 5 of the Texas Water Code that enumerates the general powers and duties of the Commission across all media under its jurisdiction, the plain wording of the statute, and the legislative intent discussed above, OPIC's position is that Texas Water Code, Section 5.351 in its current form controls any contrary provisions in media-specific statutory provisions. Nevertheless, to provide certainty about the deadlines for seeking judicial review, OPIC recommends the following change to Texas Water Code, Section 5.351, and changes to other provisions such as Texas Health and Safety Code, Sections 361.321 and 382.032 that may be helpful in harmonizing these timing requirements concerning the filing of an appeal in district court.

Amended Texas Water Code, Section 5.351(c) would read as follows:

Notwithstanding Subsection (b) or any other statutory provisions within the commission's jurisdiction authorizing the filing of a petition to review, set aside, modify, or suspend an act of the commission, a person affected by a ruling, order, or other law may, after exhausting any administrative remedies, file a petition to review, set aside, modify, or suspend the ruling, order, or decision not later than the 30th day after:

- (1) the effective date of the ruling, order, or decision; or
- (2) if the executive director's ruling, order, or decision is appealed to the commission as authorized by Section 5.122(b) or other law, the earlier of:
 - (A) the date the commission denies the appeal; or
 - (B) the date the appeal is overruled by operation of law in accordance with commission rules.

3. Proposal Concerning 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 and Safety Code, Section 382.05195. At present, Texas Health and 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

¹ 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 and 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.

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 and 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 and 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. 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 and 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.

4. 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 Code, 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.

5. 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. These low penalties result even when the Commission Penalty Policy's Environmental, Property, and 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 to \$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.

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.²

² Additional regulatory change proposals OPIC made in 2017 included proposals concerning:

Consideration of Site Compliance History Upon Change of Ownership; Improved Public Participation in Permitting Through Website Posting of Applications, Draft Permits, Technical Review Memoranda and Related Documents, and Contested Case Hearing Request Forms; Landowners to be Identified in Applications for Wastewater Discharge Permits; and Direct Referrals of Permitting Matters Subject to 30 TAC Chapter 55, Subchapter G. For a complete copy of the 2017 report, please contact OPIC at 512-239-6363.

1. Proposal to Clarify Commission Authority to Consider Characteristics, Functioning, Capacity, and Suitability of Discharge Routes in TPDES Permitting Decisions

Under the Texas Pollutant Discharge Elimination System (TPDES) permitting program, the TCEQ regulates water quality through the issuance of permits for the discharge of waste or pollutants into or adjacent to water in the state. Texas Water Code, Section 26.027. When reviewing applications for such permits, the Commission considers the suitability of the proposed site given its design features and operational functions. The purposes of 30 TAC Chapter 309, Subchapter B, Domestic Wastewater Effluent Limitation and Plant Siting requirements, include goals "to minimize the possibility of exposing the public to nuisance conditions" and "to prohibit issuance of a permit for a facility to be located in an area determined to be unsuitable or inappropriate, unless the design, construction, and operational features of the facility will mitigate the unsuitable site characteristics." 30 TAC Section 309.10(b).

Additionally, 30 TAC Section 309.12 provides that "the commission may not issue a permit for a new facility or for the substantial change of an existing facility unless it finds that the proposed site, when evaluated in light of the proposed design, construction or operational features, minimizes possible contamination of surface water and groundwater." OPIC asserts that proper functioning of the discharge route as modeled in the draft permit is relevant to assessing site suitability characteristics and the potential water quality and environmental impacts of proposed activities under TPDES permits. An unsuitable discharge route (such as an undefined route, a poorly defined route, or a route blocked with debris or obstructions) may fail to transport or channel properly the expected volume of effluent, may interfere with effluent mixing and the permittee's ability to meet effluent limitation parameters as modeled in the draft permit, and may cause nuisance conditions from standing water or the inundation of neighboring property with contaminants. Such conditions can render the siting of the facility unsuitable. Though such concerns may be combined in public comments or hearing requests along with interrelated comments about "flooding," these are not general flooding concerns, but rather site-specific issues about the suitability of the discharge route as an operational feature of the facility.

In OPIC's experience, however, when concerned citizens file correspondence with the TCEQ that both questions the characteristics, functioning, capacity, and suitability of a proposed discharge route and raises concerns about flooding, such issues are often lumped together and collectively viewed as "general concerns about flooding" that are not under the Commission's jurisdiction to address within the context of the TPDES permitting program. OPIC acknowledges that Chapter 26 of the Texas Water Code authorizes the TCEQ to regulate water quality and not general concerns about flooding. However, as discussed above, site-specific concerns as to whether a proposed discharge route can function properly and other Chapter 309 site suitability considerations do relate to water quality and the prevention of nuisance conditions and are properly within the Commission's jurisdiction. OPIC respectfully submits that these concerns should not be dismissed because they also happen to mention, in an interrelated fashion, concerns about flooding. OPIC proposes to clarify the Commission's authority to consider the suitability of the discharge route in permitting decisions.

Amended 30 TAC Section 309.12 would add a new subsection 5 and read as follows:

The commission may not issue a permit for a new facility or for the substantial change of an existing facility unless it finds that the proposed site, when evaluated in light of the proposed design, construction or operational features, minimizes possible contamination of surface water and groundwater. In making this determination, the commission may consider the following factors:

- (1) active geologic processes;
- (2) groundwater conditions such as groundwater flow rate, groundwater quality, length of flow path to points of discharge and aquifer recharge or discharge conditions;
- (3) soil conditions such as stratigraphic profile and complexity, hydraulic conductivity of strata, and separation distance from the facility to the aquifer and points of discharge to surface water;
- (4) climatological conditions; and
- (5) characteristics, functioning and capacity of the proposed discharge route, including the route's suitability to contain and channel the permitted volume of effluent, allow for mixing and water quality consistent with the permit's

modeling and effluent limitations, and avoid causing or contributing to conditions of standing water, nuisance, or the inundation of surrounding property with discharged effluent.

2. Proposal to Clarify that Storm Water Discharges Into or Adjacent to Water in the State Require a Permit

OPIC recommends a change to 30 TAC Section 281.25(a)(4) to clarify that storm water discharge permits are required prior to discharging storm water into or adjacent to water in the state.

In a recent enforcement action,³ there was disagreement as to whether 30 TAC Section 281.25(a)(4) applies to all water in the state or only to waters of the United States. This provision adopts by reference Title 40 of the Code of Federal Regulations (C.F.R.) Section 122.26, which requires permits for storm water discharges associated with various industrial activities, to waters of the United States, as defined by 40 C.F.R. Section 122.2.

The definition of "waters of the United States" is complex and does not include all water that may be classified as "water in the state." For instance, certain ditches, artificial lakes, and puddles are not waters of the United States, but are water in the state. "Water in the state" has been defined broadly by the Legislature to include many types of water bodies, and has been described as "includ[ing] all water found within the environment—whether impounded or free-flowing, above or beneath the surface of the ground, in or out of a watercourse, salt or fresh, or publicly or privately owned." *Watts v. State*, 140 S.W.3d 860, 866 (Tex. App.—Houston [14th Dist.] 2004, pet. ref'd). Although all such water is not subject to federal regulation, it can still be regulated by Texas law. However, 30 TAC Section 281.25(a)(4) does not include a reference to "water in the state."

The reach of Section 281.25(a)(4) could be clarified by reference to Chapter 26 of the Texas Water Code, which addresses discharges into or adjacent to water in the state. This revision would ensure that, in addition to waters of the United States, the regulation applies to all water in the state.

Amended 30 TAC Section 281.25(a)(4) would read as follows:

³ *Executive Director of the Texas Commission on Environmental Quality v. Texas Architectural Aggregate, Inc.*; SOAH Docket No. 582-17-0377; TCEQ Docket No. 2015-1825-WQE (2017).

- (a) The following regulations contained in 40 Code of Federal Regulations (CFR) Part 122, which are in effect as of the date of TPDES program authorization, as amended, are adopted by reference.
- (4) Part 122, Subpart B--Permit Applications and Special TPDES Program Requirements, §122.26, requiring permits for storm water discharges. Storm water discharges otherwise regulated under 40 CFR §122.26 require a TPDES permit regardless of whether the discharge is to waters of the United States or into or adjacent to water in the state as defined by Texas Water Code Chapter 26.

3. Proposal Concerning the Concurrent Filing of an Application for an Authorization for Re-Use of Domestic Reclaimed Water with an Application for a Wastewater Discharge permit

In public comment on TPDES permit applications for municipal wastewater treatment facilities, citizens frequently request applicants not to discharge effluent and, instead, apply for an authorization for re-use of domestic reclaimed water under the Commission's Chapter 210 rules [210 re-use authorization]. Currently, applicants proposing to obtain a TPDES permit for a municipal wastewater treatment facility and a 210 re-use authorization may do so only in consecutive processes. Applicants first apply for a TPDES permit pursuant to 30 TAC Section 305. After this permit is obtained, applicants then apply for a 210 re-use authorization. In other words, the 210 re-use authorization can only be sought after a TPDES permit is obtained. For this reason, at the time a wastewater discharge application is filed, an applicant may only offer assurances that a 210 re-use authorization will be sought in the future.

In at least one instance, a city seeking a TPDES permit passed a resolution to assure its citizens of its commitment to submit a 210 re-use authorization application upon receipt of its TPDES permit.⁴ The City of Wimberley applied to the Commission in 2014 for a major amendment to its TPDES permit. During the public comment period, TCEQ

staff learned that the local community was very concerned about the potential of any discharge of effluent into a tributary of the Blanco River in light of the area's recent history of devastating floods. The community sought to have a no-discharge permit.⁵ The City received its TPDES permit on June 14, 2016, but would not receive its 210 re-use authorization until October 17, 2016. The public's frustration with the inability to see a more tangible indicator of this municipal applicant's intent not to discharge at the time of its permit application filing exemplifies the public interest concern seen in many other proceedings.⁶ Also, the application for TPDES Permit No. WQ0014488003 by the City of Dripping Springs has been the subject of significant protest and public comment questioning whether the City plans to operate a no-discharge facility.

OPIC recommends that TPDES applicants operating municipal wastewater treatment facilities be allowed to file concurrently an application for a 210 re-use authorization at the time of their TPDES application. Through the filing of concurrent applications, such applicants can better demonstrate their good faith and commitment not to discharge. The application processing time for a TPDES permit and a 210 re-use authorization would be shortened. Allowing concurrent applications may reduce a potential regulatory burden for reclaimed water re-use and allow the applicant to re-use water sooner than the current rules allow. This proposal addresses citizens' frequently-expressed interest in alternatives to discharging by providing a mechanism for applicants to act expeditiously in demonstrating their intent to re-use treated effluent.

Amended 30 TAC Section 210.5(a) would read as follows to allow applicants operating municipal wastewater treatment facilities to apply for a 210 re-use authorization at the time of their TPDES application:

- (a) Prior to discharging any reclaimed water to the waters in the state, the provider or user shall obtain a permit from the commission**

⁵ Application by City of Wimberley for Major Amendment to Permit No. WQ0013321001; TCEQ Docket No. 2015-0482-MWD (permit issued June 14, 2016).

⁶ Additional examples include Application by 633-4S Ranch, Ltd. and Stahl Lane, Ltd. for major amendment to TPDES Permit No. WQ0015095001, TCEQ Docket No. 2016-1402-MWD; SOAH Docket No. 582-17-0899 (permit issued February 14, 2017); Application by Trio Residential Developers, Inc. for new TPDES Permit No. WQ0015219001, TCEQ Docket No. 2015-0841-MWD, SOAH Docket No. 582-16-0594 (application withdrawn June 30, 2016); Application by Lerin Hills Municipal Utility District for renewal of Permit No. WQ0014712001, TCEQ Docket No. 2014-1706-MWD (permit issued March 9, 2015); Application by City of Liberty Hill for major amendment and renewal of TPDES Permit No. WQ0014477001, TCEQ Docket No. 2014-1720-MWD, SOAH Docket No. 582-15-2936 (permit issued September 22, 2015).

⁴ City of Wimberley City Council, Minutes of Special Meeting of City Council (Sept. 29, 2014).

in accordance with the requirements of Chapter 305 of this title (relating to Consolidated Permits) except as provided for by §210.22(e) of this title (relating to General Requirements). For municipal reclaimed water producers, an application for authorization for re-use of domestic reclaimed water may be filed concurrently with a wastewater discharge permit application filed under Chapter 305 of this title.

4. Proposal Concerning Schedules in SOAH Cases where Requests for Party Status are Taken under Advisement or 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.

Another concern arises when some parties are designated at the preliminary hearing and other requests for party status are taken under advisement. In proceedings on the water use permit application of New Braunfels Utilities (TCEQ Docket Number 2016-0162-WR; SOAH Docket Number 582-16-6164), after one opposing party was admitted at the preliminary hearing and other requests were taken under advisement, the applicant and the one admitted opponent filed a motion to abate the proceedings for purposes of settlement discussions. Presumably, the intent of the motion was to dispose of the matter before other potential parties had the

opportunity to participate. Both the Executive Director and OPIC opposed the motion and the ALJ denied it. The proposal below includes provisions to clarify that such motions should not be considered until all parties are named.

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 80.105(a) and such other Chapter 80 rules deemed appropriate:

If the judge takes a request for party status under advisement or determines a preliminary hearing should be continued, the judge shall not abate the proceedings nor issue an order setting a procedural schedule until after all parties are named, either at the last day of the preliminary hearing or after the judge rules on all requests for party status. The judge shall issue the order setting a procedural schedule only after considering the positions of all parties, including parties admitted after their requests for party status were taken under advisement and 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.

5. 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,⁷ 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 (approximately 2 months) to prepare the PFD, leaving the parties with only 120 days (approximately 4 months) to conduct all discovery, 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 Section 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, §§ 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 commission. 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 TWC, §5.556, the order shall include a date for the issuance of the proposal for decision that is within the maximum expected duration set by the commission. For applications referred under TWC, §5.556 or §5.557, the date for issuance of the proposal for decision shall be 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;

⁷ 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.

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, §5.556 or §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) Judge's proposal for decision regarding an application filed on or after September 1, 2015 and referred under Texas Water Code, §5.556 or §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 date of the preliminary hearing, the date specified by the commission, or the date to which the deadline was extended pursuant to Texas Government Code, §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.

6. 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 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. (HB 801), Section 5 (codified at Texas Water Code, 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 TCEQ 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 TCEQ 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 TCEQ resources in a number of ways, including reducing the number of multiple mass mailings from multiple agency offices. This change would also conserve TCEQ'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:

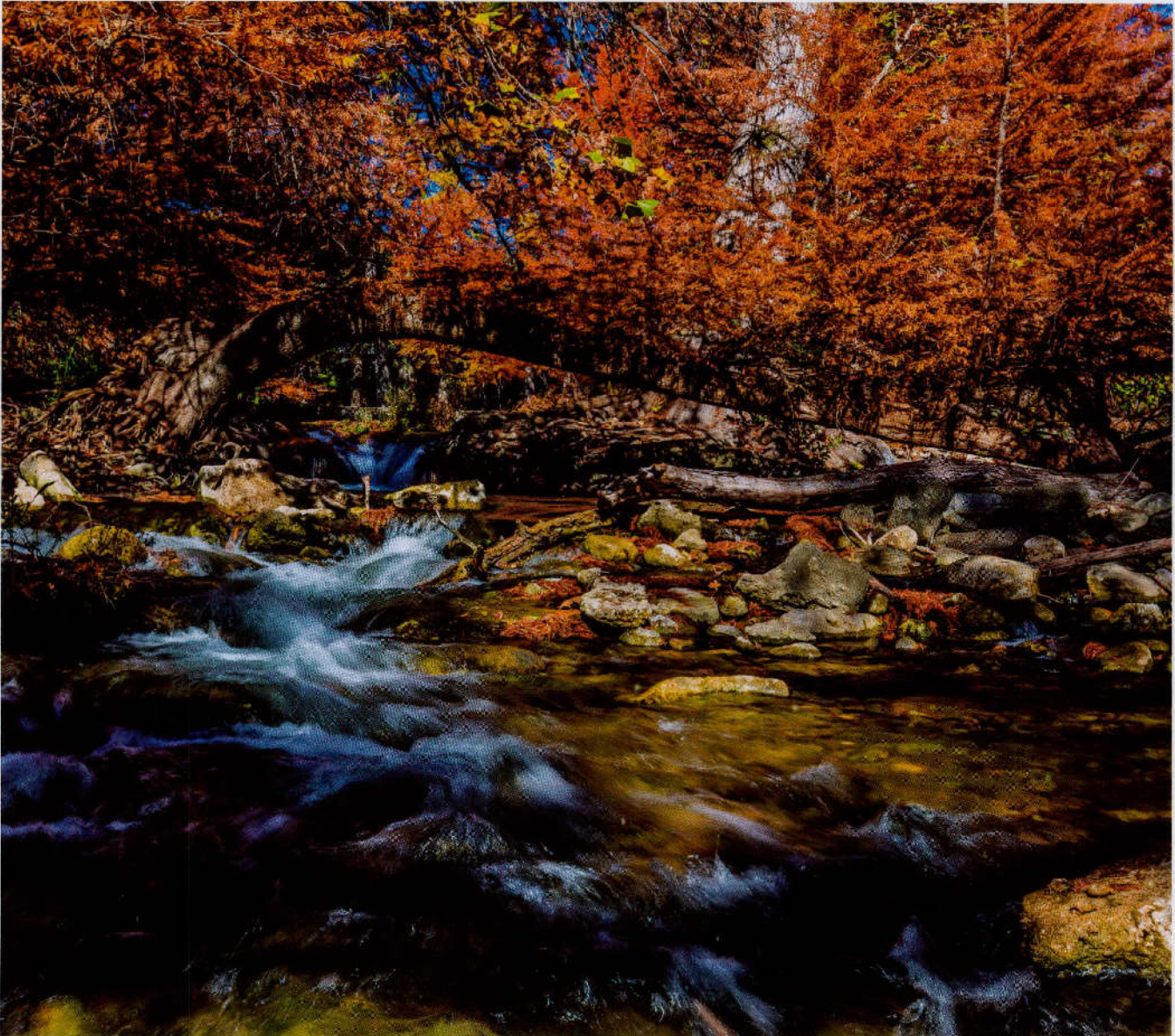
- (1) at least 100 timely hearing requests on the application have been filed with the chief clerk; and
- (2) for concrete batch plant authorizations subject to a right to request a contested case hearing, the executive director confirms that at least one of the timely hearing requests was filed by a 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.

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.



Evaluation of Water Basins in Texas without a Watermaster

Section 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 if one should be established. The statute required 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 Title 30, Texas Administrative Code, Chapters 295, 297, 303, and 304.

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 stream flows
 - investigating alleged violations of Chapter 11
 - mediating conflicts and disputes among water users
- TWC Chapter 11 sets forth the mechanisms for establishing a watermaster program:
- 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 that was signed that year 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 agency completed the first five-year cycle in Fiscal 2016. The second cycle began in Fiscal 2017 to evaluate the river basins below:

Fiscal 2017

Brazos River Basin (Upper)
Brazos–Colorado Coastal Basin
San Jacinto-Brazos Coastal Basin
Colorado River Basin
Colorado–Lavaca Coastal Basin

Fiscal 2018

Trinity River Basin
Neches–Trinity Coastal Basin
San Jacinto River Basin
Trinity–San Jacinto Coastal Basin

Fiscal 2019

Sabine River Basin
Neches River Basin

Fiscal 2020

Canadian River Basin
Red River Basin

Fiscal 2021

Sulphur River Basin
Cypress Creek Basin

Evaluation Activities in Fiscal 2017

For the **Upper Brazos River**, **San Jacinto-Brazos Coastal**, **Brazos-Colorado Coastal**, **Colorado River**, and **Colorado-Lavaca Coastal Basins**:

- Updated the webpage explaining the evaluation process, inviting stakeholders in these basins to participate and get automated updates by email. (See <www.tceq.texas.gov/permitting/water_rights/wmaster/evaluation>.)
- Mailed initial outreach letters on March 3, 2017 (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 initial comments by March 24, 2017. The comment period was open until July 31, 2017.
- Held nine stakeholder meetings in May and June. At each meeting, the manager of the Watermaster Section and a TCEQ regional office representative were present to deliver information and answer questions.

Comments

Upper Brazos River and **San Jacinto-Brazos Coastal**—Of the 16 stakeholder comments received related to these basins:

- 13 were opposed to establishing a watermaster program
- 3 were in favor
- 0 were neutral

Colorado River—Of the 107 stakeholder comments received related to this basin:

- 78 were opposed to establishing a watermaster program
- 28 were in favor
- 1 was neutral

Evaluation Findings

The TCEQ evaluated the basins based on the established criteria. The findings are highlighted below:

- There were no court orders to appoint a watermaster for any of the basins in this cycle.
- **Upper Brazos Basin:** There was a petition received on Jan. 7, 2013, requesting a watermaster. That matter was referred to the State Office of Administrative Hearings. After SOAH presented their proposal for decision, the commission issued an order partially granting the petition to create a watermaster in the Brazos River Basin downstream of and including Possum Kingdom Lake. There have been no additional petitions for a watermaster in either the Upper Brazos River Basin or the San Jacinto-Brazos Coastal Basin.
- **Colorado River Basin:** The agency had received three petitions for a watermaster in this basin, all related to the San Saba River. Two of the petitions were withdrawn and one did not move forward because it did not meet statutory criteria.

Threats to Senior Water Rights

In evaluating whether senior water rights have been threatened, staff considered if any priority calls were received and the history of complaints and investigations related to water rights management.

Upper Brazos Basin: Within the Upper Brazos Basin, we received no priority calls during the evaluation period. The TCEQ regional offices received and investigated a

total of 33 complaints and completed 66 investigations related to water rights management. A majority of these were completed with no violations or enforcement actions.

Colorado River Basin: Due to extreme drought conditions from 2012 through 2016, the executive director responded to eight priority calls in the upper Colorado River Basin. Seven of the calls came from among the 29-individual domestic and livestock users on the San Saba River. The eighth call was from a water right holder on the Colorado River. The executive director did not suspend water rights in response to that call.

The executive director also did not suspend water rights in response to six of the calls on the San Saba because:

- any theoretical additional water in the stream resulting from such curtailment would either not have reached the location of the users who made the calls in sufficient quantities to be beneficially used; or
- there was still sufficient water in the river to meet the needs of those making the priority calls.

The executive director did suspend water rights in the San Saba River in response to one call in August of 2013.

Over the five-year period, the TCEQ regional offices received and investigated a total of 157 complaints and completed 1,329 investigations related to water rights management in these basins. Most of these were within the San Saba Watershed: 88 of the 157 complaints and 1,142 of the 1,329 investigations. A majority of these resulted in no violations or enforcement actions.

Costs to the Agency

Estimated costs to conduct the investigation activities for Fiscal 2012 through 2016:

Upper Brazos River and **San Jacinto-Brazos Coastal Basins** were \$23,854.58 and \$3,941.62, respectively.

Colorado River, Brazos-Colorado and **Colorado-Lavaca Coastal Basins** were \$374,627.50. Of these total costs, \$329,754.51 were directly related to managing water rights in the San Saba watershed. The total estimated costs for managing priority calls in the San Saba were an additional \$107,947.47.

The cost of the required evaluations for these basins in 2017:

- Office of Water: \$163,774.13, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$277.44
- Office of Compliance and Enforcement: \$2,129.08, which included staff time, travel time, and equipment use

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

At the commission's agenda meeting on Nov. 1, 2017, TCEQ personnel gave a presentation and made recommendations related to the fiscal 2017 evaluation.

Evaluation Activities in Fiscal 2018

For the **Trinity River, San Jacinto River, Trinity-San Jacinto Coastal**, and **Neches-Trinity Coastal basins**:

- Updated the webpage explaining the evaluation process, inviting stakeholders in these basins to participate and get automated updates by email.
(See <www.tceq.texas.gov/permitting/water_rights/wmaster/evaluation>.)
- Mailed initial outreach letters on March 9, 2018 (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 29, 2018.
- Held five stakeholder meetings in May and June. 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 29, 2018.

Comments and Evaluation Findings

We received 26 comments from the stakeholders through June 29, 2018. Of those, all but one comment opposed establishing a watermaster program.

The TCEQ evaluated the basins based on the established criteria, and found:

- There were no court orders or active or approved petitions to appoint a watermaster.
- There was no history of threatened water rights or water shortages, other than certain cities being on watering restrictions because of their drought contingency plans.
- The TCEQ did note some complaints and investigations related to water rights from fiscal 2013 through 2017. A combined total of 62 complaints were investigated in these basins.

Costs to the Agency

Estimated costs to conduct these activities in fiscal years 2013 through 2017:

Trinity River Basin, \$49,109, **San Jacinto River Basin**, \$15,854, **Trinity-San Jacinto Coastal Basin**, \$1,346, and **Neches-Trinity Coastal Basin**, \$2,543.

The costs to conduct the required evaluations of these basins in 2018:

- Office of Water: \$149,989.71, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$104.04
- Office of Compliance and Enforcement: \$252.86, which included staff time, travel time, and equipment use
- Staff from the TCEQ's Intergovernmental Relations Division participated in the evaluation process, but incurred minimal costs.

At the commission's agenda meeting on Aug. 22, 2018, TCEQ personnel gave a presentation and made recommendations related to the fiscal 2018 evaluation.

Executive Director's Recommendation in Fiscal 2017 and 2018

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 2017 and fiscal 2018.

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.

Since stakeholders will be responsible for paying annual fees to support a new regulatory program, it is important to have their support in articulating the threat and the need to establish such a program.



Figure D-1. Outreach Letters to Stakeholders, FY2017

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 3, 2017

Re: Watermaster Evaluation for the Upper Brazos River, San Jacinto-Brazos Coastal, Brazos-Colorado Coastal, Colorado River, and the Colorado-Lavaca Coastal Basins

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating the Upper Brazos River, San Jacinto-Brazos Coastal, Brazos-Colorado Coastal, Colorado River, and the Colorado-Lavaca Coastal Basins to determine whether there is a need to establish a watermaster. A watermaster currently exists in the Brazos Basin downstream of, and including, Possum Kingdom Reservoir. The evaluation of the Brazos Basin is limited to the Upper Brazos Basin upstream of Possum Kingdom. 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 at least once every five years 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 plan to mail notifications of stakeholder meetings to all stakeholders within these five basins expected to be held in June. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for late summer.

As a stakeholder in these basins, 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?*

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Figure D-1. Outreach Letters to Stakeholders, FY2017 cont.

Re: Watermaster Evaluation

Page 2

March 3, 2017

- (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 from water right holders in the watermaster area. The enclosed fact sheet includes general information about the watermaster programs including the fees associated to a program. 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 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 24, 2017 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, Watermaster Section Manager
Water Availability Division
Texas Commission on Environmental Quality

Enclosures

Figure D-1. Outreach Letters to Stakeholders, FY2017 cont.

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

April 28, 2017

Re: Stakeholder Meetings: Watermaster Evaluation for the Upper Brazos River, San Jacinto-Brazos Coastal, Brazos-Colorado Coastal, Colorado River, and the Colorado-Lavaca Coastal Basins

Dear Stakeholder:

Under Texas Water Code §11.326(g) and (h), the Texas Commission on Environmental Quality (TCEQ) must evaluate river basins without watermasters every five years to determine whether a watermaster should be appointed. In 2017, the TCEQ is evaluating the Upper Brazos River, San Jacinto-Brazos Coastal, Brazos-Colorado Coastal, Colorado River, and the Colorado-Lavaca Coastal Basins. Stakeholder input is an important part of this process and the TCEQ will be taking public comment through **5:00 p.m. on June 30, 2017.**

Stakeholder Meetings

The purpose of this letter is to invite you to attend stakeholder meetings where the TCEQ will provide additional information about this process and take public comment.

6:00 p.m. - May 30, 2017
 West Central Texas Council of Governments
 Large Conference Room
 3702 Loop 322
 Abilene, Texas 79602

6:00 p.m. - May 31, 2017
 Mallet Event Center
 2320 S Hwy. 385
 Levelland, Texas 79336 (Lubbock area)

6:00 p.m. - June 1, 2017
 Dora Roberts Community Center
 Ballroom
 100 Whipkey Drive
 Big Spring, Texas 79720

6:00 p.m. - June 6, 2017
 Concho Valley Council of Governments
 Meeting Room
 2801 W. Loop 306, Suite A
 San Angelo, Texas 76904

6:00 p.m. - June 7, 2017
 San Saba High School Cafeteria
 104 South 8th Street
 San Saba, Texas 76877

6:00 p.m. - June 8, 2017
 City of Waco Operations Center
 Training Room
 1415 N. 4th Street
 Waco, Texas 76707

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Figure D-1. Outreach Letters to Stakeholders, FY2017 cont.

Stakeholder Meeting
Page 2
April 28, 2017

6:00 p.m. - June 13, 2017
Boling Community Center
Main Auditorium
6839 County Rd 162
Boling, Texas (lower Colorado basin)

6:00 p.m. - June 14
Brazos Crossing Administrative Building
Lamar CISD Board Room
3911 Ave I
Rosenberg Texas, 77471

6:00 p.m. - June 15, 2017
Hill Country University Center
HEB Community Events Room
2818 E. U.S. Highway 290
Fredericksburg, Texas

Information about the Process

The TCEQ mailed letters on March 3, 2017, to all water right holders, county judges, extension agents, and other interested parties providing information about the process. Information about the process is also available on the TCEQ's website: www.tceq.texas.gov/goto/watermaster.

If you have any questions about the process, you contact myself or staff as follows:

- Amy Settemeyer (512) 239-2588
- Brooke McGregor (512) 239-2025
- Stephen Kinal (512) 239-4010

Additionally, you can sign up to receive email updates at:
<https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new>.

Public Comment

The TCEQ will be taking public comment through **5:00 p.m. on June 30, 2017**. 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.

Stakeholder input is a very important part of the evaluation process and the TCEQ encourages your participation. 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-1. Outreach Letters to Stakeholders, FY2017 cont.

Watermaster Evaluation Fact Sheet - 2017

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 for every basin every five years. The TCEQ developed a schedule to consider several basins each year, resulting in the creation of a five-year cycle. The first cycle began in 2012 and was completed in 2016. In that five-year time, all basins that did not have a watermaster program were evaluated. The second cycle will begin this year in 2017, when the TCEQ will evaluate the Upper Brazos River Basin, San Jacinto-Brazos Coastal Basin, Brazos-Colorado Coastal Basin, Colorado River Basin, and the Colorado-Lavaca Coastal 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 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 Brazos Watermaster, covers Possum Kingdom reservoir and areas downstream of the reservoir in the Brazos River Basin.

Figure D-1. Outreach Letters to Stakeholders, FY2017 cont.

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 Upper Brazos River Basin, San Jacinto-Brazos Coastal Basin, Brazos-Colorado Coastal Basin, Colorado River Basin, or the Colorado-Lavaca Coastal 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 the Watermaster Program Liaison: Brooke McGregor at (512) 239-2025

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

Figure D-2. Outreach Letters to Stakeholders, FY2018

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 9, 2018

Re: Watermaster Evaluation for the Trinity River, San Jacinto River, Trinity-San Jacinto Coastal, and Neches-Trinity Coastal Basins

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating the Trinity River, San Jacinto River, Trinity-San Jacinto Coastal, and Neches-Trinity Coastal Basins to determine whether a watermaster should be appointed. 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 at least once every five years 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. As part of the evaluation, we plan to mail notifications of stakeholder meetings to all stakeholders within these five basins expected to be held in June. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for late summer.

As a stakeholder in these basins, 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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Figure D-2. Outreach Letters to Stakeholders, FY2018 cont.

Re: Watermaster Evaluation

Page 2

March 9, 2018

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 enclosed fact sheet includes general information about the watermaster programs including the fees associated to a program. 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:

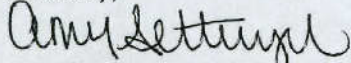
1. The river or waterbody you are discussing.
2. Your affiliation (for example, a water right holder with a water right permit (including number if known), a domestic and livestock user, an adjacent landowner, an interested party, or environmental organization).

This request for written input is your first opportunity to participate in this process. Comments will be accepted through the end of June. In order to help us plan for our June stakeholder meetings, please any send written comments you have at this time by April 6, 2018. Comments should be sent 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. You may also contact me directly at (512) 239-2588.

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, Watermaster Section Manager
Water Availability Division
Texas Commission on Environmental Quality

Enclosures

Figure D-2. Outreach Letters to Stakeholders, FY2018 cont.

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Stephanie Bergeron Perdue, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 7, 2018

Re: Stakeholder Meetings: Watermaster Evaluation for the Trinity River, San Jacinto River, Trinity-San Jacinto Coastal and the Neches-Trinity Coastal Basins

Dear Stakeholder:

Under Texas Water Code §11.326(g) and (h), the Texas Commission on Environmental Quality (TCEQ) must evaluate river basins without watermasters every five years to determine whether a watermaster should be appointed. In 2018, the TCEQ is evaluating the Trinity River, San Jacinto River, Trinity-San Jacinto Coastal and the Neches-Trinity Coastal Basins. Stakeholder input is an important part of this process and the TCEQ will be taking public comment through 5:00 p.m. on June 29, 2018.

Stakeholder Meetings

The purpose of this letter is to invite you to attend stakeholder meetings where the TCEQ will provide additional information about this process and take public comment.

6:00 p.m. - June 5, 2018
TCEQ Region 10 Office
3870 Eastex Fwy.
Beaumont, Texas 78710

6:00 p.m. - June 12, 2018
Corsicana Public Library
Nancy Roberts Meeting Room
100 North 12th St.
Corsicana, Texas 75110

6:00 p.m. - June 6, 2018
The Conroe Tower
Top of the Tower
300 West Davis St.
Conroe, Texas 77301

6:00 p.m. - June 13, 2018
TCEQ Region 4 Office
2309 Gravel Dr.
Fort Worth, Texas 76118

6:00 p.m. - June 7, 2018
Houston-Galveston Area Council
2nd Floor - Conference Room A
3555 Timmons Ln.
Houston, Texas 77027

Information about the Process

The TCEQ mailed letters on March 9, 2018, to all water right holders, county judges, extension agents, and other interested parties providing information about the process. Information about the process is also available on the TCEQ's website: www.tceq.texas.gov/goto/watermaster.

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Figure D-2. Outreach Letters to Stakeholders, FY2018 cont.

Stakeholder Meeting
Page 2
May 7, 2018

If you have any questions about the process, you contact myself or staff as follows:

- Amy Settemeyer (512) 239-2588
- Brooke McGregor (512) 239-2025
- Stephen Kinal (512) 239-4010

Additionally, you can sign up to receive email updates at:
<https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new>.

Public Comment

The TCEQ will be taking public comment through **5:00 p.m. on June 29, 2018**. 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. 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, FY2018 cont.

Watermaster Evaluation Fact Sheet - 2018

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 a watermaster should be appointed and is required at least once every five years for every basin. The TCEQ developed a schedule to consider several basins each year, resulting in the creation of a five-year cycle. The first cycle began in 2012 and was completed in 2016. In that five-year time, all basins that did not have a watermaster program were evaluated. The second cycle began in 2017. This year, the TCEQ will evaluate the Trinity River, San Jacinto River, Trinity-San Jacinto Coastal, and Neches-Trinity Coastal 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.
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- ❖ When streamflows diminish, the watermaster allocates available water among the water right holders according to each user's priority date.
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There are currently four watermaster programs in Texas:

- ❖ The Rio Grande Watermaster coordinates releases from the Amistad and Falcon reservoir system.
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- ❖ The Concho Watermaster, currently a division of the South Texas Watermaster, serves the Concho River segment of the Colorado River Basin.
- ❖ The Brazos Watermaster, covers Possum Kingdom reservoir and areas downstream of the reservoir in the Brazos River Basin.

Figure D-2. Outreach Letters to Stakeholders, FY2018 cont.

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.
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- ❖ 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 Trinity River, San Jacinto River, Trinity-San Jacinto Coastal, or Neches-Trinity Coastal Basins 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

