



BIENNIAL REPORT TO THE 84TH LEGISLATURE  
FY2013 - FY2014

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SFR-57/14







# **BIENNIAL REPORT**

TO THE 84TH LEGISLATURE

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TEXAS COMMISSION ON  
ENVIRONMENTAL QUALITY





**How to reach the TCEQ**

Phone: 512-239-1000

Mail:

Texas Commission on Environmental Quality  
PO Box 13087  
Austin TX 78711-3087  
Website: [www.tceq.texas.gov](http://www.tceq.texas.gov)

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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 84th Legislature also contains other information and reports that are required by statute:

- Description of cooperative research efforts, page 23 [Water Code 5.1193]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).
- Waste exchange information, page 39 [Texas Health and Safety Code Section 361.0219(c)]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).
- Revenue spending from solid waste disposal and transportation fees, page 49 [THSC 361.014(a) and (b)]. This information is published for the first time as part of the biennial report.
- Assessment of complaints received, page 51 [Water Code Section 5.1773]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).
- Permit time-frame reduction process, page 58 [Government Code, Section 2005.007]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).
- Office of Public Interest Counsel evaluation of performance measures, page 65 [Water Code Section 5.2725]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).
- Study on water basins without a watermaster, page 74 [Water Code Sections 11.326(g) and (h)]. This information was last published in December 2012 in the *Biennial Report to the 83rd Legislature* (SFR-57/12).

## Agency Mission and Philosophy

### Mission

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

### Philosophy

To accomplish our mission, we will:

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

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# From the Commission

## **K** *Keeping the Texas Miracle Alive*

It's no secret that Texas is the envy of people across the world.

Over 1,000 people move to Texas each day in hopes of finding their own piece of the American Dream.

We are blessed with one of the most successful economies of the 21st Century, and to keep the Texas Miracle alive, we must continue to be good stewards of our abundant natural resources in balance with the needs of our state's diverse population and thriving business climate.

Working in stride with the Legislature, the men and women of the Texas Commission on Environmental Quality have fostered a safe, healthy environment that will be a blueprint for our state's success story for the future.

Each Texan will play a role in building the framework for success. That's why the TCEQ redoubled its efforts with the Take Care of Texas campaign to highlight what Texans – big and small – can do to conserve.

With landmark innovations in technology, the growth of the energy sector shows no signs of slowing. The TCEQ will continue to play an integral role in ensuring that the air we breathe and water we drink are safe for our families, our children and grandchildren.

With far more air toxics monitors than any other state in America, Texas has built upon its success in improving air quality and holding bad actors accountable. From 2000 to 2012, NO<sub>x</sub> emissions dropped 63 percent, while ozone levels decreased 23 percent. In fiscal 2013, the TCEQ issued almost 2,200 administrative orders resulting in more than \$12.6 million in penalties and another \$2.7 million for Supplemental Environmental Projects.

In the shadow of this historic drought, the TCEQ worked proactively and responsibly to administer water rights, protect water quality, and collaborate with municipalities and water districts to develop contingency plans before it is too late.

The agency will also rely on sound scientific data and research to oppose any unnecessary overreach by the EPA. The EPA's new greenhouse gas rules will cause the shutdown of coal-fired plants and decimate their workforce, increase electric rates, and endanger the state's electric grid – without significant health benefit to the citizens of Texas.

Lastly, should a natural disaster or catastrophic event happen – the TCEQ will be ready.

Each employee of the TCEQ plays a part in the success that Texas has achieved in protecting our natural resources. From executive leadership to engineers, from hydrologists to administrative staff, from emergency teams to regional directors – the TCEQ will continue to protect our health and environment first and foremost because we are Texans too.

Texas is the greatest state in the greatest nation in the world. We will continue to serve her and ensure that the Lone Star State remains the best place to live, work, and raise a family.



**Toby Baker**  
Commissioner



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



**Zak Covar**  
Commissioner

# Agency Highlights

**A**s the state's leading environmental agency, the Texas Commission on Environmental Quality is engaged with every region of the state, from the heartland to the most remote areas. 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.

The fiscal years of 2013 and 2014 found the TCEQ dealing with familiar but important issues, such as the ongoing drought, but also with new challenges, such as rapidly escalating oil and gas production in South Texas. In addition, the agency experienced internal changes with some personnel shifts at top levels.

All of these activities occurred against a backdrop of the state's fast-growing population and booming economy, which add complexity to environmental protection. The TCEQ responded with initiatives adapted to the changing times and challenges, and a continued dedication to protecting public health and the state's natural resources.

## Leadership Changes

Chairman Carlos Rubinstein was named chairman of the Texas Water Development Board by Gov. Rick Perry. After his departure in the fall of 2013, the TCEQ saw a reshuffle of some top positions.

In January 2014, the governor chose Zak Covar to fill the remainder of Rubinstein's term, which expires in September 2015, thereby becoming one of three full-time commissioners.

Covar, who joined the agency in 2009, had most recently been the TCEQ's executive director, which put him in charge of the agency's day-to-day operations and policy implementation. As executive director starting in May 2012, Covar revamped the agency's Take Care of Texas program and put more emphasis on educational outreach.

In previous state service, Covar had been the environmental and natural resources policy adviser to the gover-

nor, chief committee clerk for the Texas House Environmental Regulation Committee, and chief of staff to State Rep. Dennis Bonnen.

On the commissioners' dais, Covar joined Chairman Bryan W. Shaw, Ph.D., P.E., for whom Covar was executive assistant when he first joined the agency, and Toby Baker. Shaw was appointed commissioner in November 2007, coming from Texas A&M University, where he taught courses on air-pollution engineering. Baker was appointed commissioner in April 2012 for a term to expire in 2017. He came from the Governor's Office, where he was a policy and budget adviser on energy, natural resources, and agriculture. He was also the governor's liaison with several state agencies.

With an empty seat at the agency helm, the commissioners named Richard A. Hyde, P.E., as the new executive director. Hyde had served as deputy executive director since 2012. He has been with the agency since 1992, having worked in managerial positions in the Office of Compliance and Enforcement, the Office of Permitting and Registration, and the Air Permits Division.

The position of deputy executive director was filled by Stephanie Bergeron Perdue.

## Challenges in the Eagle Ford Shale

In recent years, Texas has been a leader in jobs and economic growth, thanks in large part to the boom in oil and gas exploration and production. The expansion of this sector was stimulated mainly by hydraulic fracturing (fracking) and improved techniques for horizontal drilling. Much of this activity has been concentrated in the Eagle Ford Shale, an area that encompasses 24 counties and extends from the Mexican border between Laredo and Eagle Pass through counties east of Temple and Waco.

In Texas, the shale boom began in 2008 with the Barnett Shale formation, in North Texas, followed by the Eagle Ford Shale, in South Texas. This energy bonanza

has created more than 100,000 jobs and added billions to the economy. At the same time, questions arose about the consequences on the environment.

The TCEQ plays an important role in oil and gas fields by regulating emissions and ensuring air quality. This role has required the agency to be fully engaged in monitoring, investigations, and enforcement activities at Eagle Ford Shale. The methodology was an outgrowth of the experience first gained in the Barnett Shale.

Since 2008, the TCEQ has heavily monitored the oil and gas activities in the Barnett Shale, which covers more than 5,000 square miles in and around the Dallas–Fort Worth area. Initial environmental concerns were raised about operations in the Barnett Shale, but those later subsided as a network of 24-hour, near real-time automated gas chromatograph monitors came online and posted results on the TCEQ website. Monitoring millions of measurements each year, the TCEQ has found no cause for alarm.

Similarly, monitoring data at Eagle Ford has provided further evidence that overall shale-play activity does not significantly affect air quality or pose a threat to human health. This conclusion was based on several million air-monitoring data points for volatile organic compounds and other air pollutants that the TCEQ collected.

While improperly operated facilities can result in temporary, local, unauthorized emissions, there are no indications that these emissions are of sufficient concentration or duration to harm residents of Barnett or Eagle Ford shales.

In the Eagle Ford Shale, the TCEQ has two fixed VOC monitors, in Floresville and Laredo, neither of which has detected levels of concern for VOCs. (Update: The TCEQ plans to install a third monitor in Karnes County in fiscal 2015.) Additional fixed-site monitors measuring other air pollutants such as ozone, nitrogen oxides, and particulate matter are located in Laredo (Webb County), Eagle Pass (Maverick County), Cuero (DeWitt County), Victoria (Victoria County), and Fayetteville (Fayette County). Concentrations of these pollutants have remained below the national ambient air quality standards set by the Environmental Protection Agency (EPA). Also, the TCEQ has contracted with the University of Texas to conduct mobile monitoring upwind and downwind of the Eagle Ford Shale.

## Aerial Surveys

Using infrared imaging cameras mounted on aircraft, the TCEQ has conducted two extensive aerial surveys of the Eagle Ford Shale to spot VOC emissions. In mid-2013, the flyovers collected 286 aerial video images. More than

10,000 individual tanks were surveyed; of those, about 5 percent were found to have some degree of emissions, either authorized or unauthorized. Follow-up investigations were conducted at facilities with observed emissions to determine compliance with authorizations and regulations.

## Ground-Based Reconnaissance

Since 2011, staff has also conducted regular ground-based investigations throughout the Eagle Ford Shale, often using handheld infrared imaging cameras. These proactive measures identify problems and are used to follow up on complaint investigations.

From September 2012 to August 2014, the TCEQ conducted more than 1,000 investigations (including complaint, routine compliance, and reconnaissance investigations) related to oil and gas activities at the Eagle Ford Shale. As drilling activities increased, so did the issuance of formal notices of violation, which reached 174 in the same period. In addition, the agency issued 27 administrative orders. These orders assessed about \$349,000 in administrative penalties and required corrective actions related to the Eagle Ford Shale oil and gas activities.

## Complaint Response

From September 2012 to August 2014, the TCEQ conducted 152 investigations in response to 198 complaints received about various issues associated with oil and gas drilling in the Eagle Ford Shale. Of those, 96 were for odor or air issues. The remaining complaints were related to spills, dust (traffic or construction concerns), waste or water quality issues. About 17 percent of the complaints received by the TCEQ, including some of those related to odor and air issues, were referred to other, more appropriate state agencies or to local governmental entities that have jurisdiction over aspects of oil and gas activities.

## Other Concerns

The rapid acceleration of oil and gas activities in the Eagle Ford Shale has also generated concerns regarding traffic, road maintenance, housing for workers, water usage, and drilling waste. All of these issues are being addressed at various levels by industry and local, state, and federal governments.

Meanwhile, the TCEQ is working diligently to make sure that air emissions are monitored and controlled. Teaming up with the Railroad Commission and other state

agencies, the TCEQ has devoted significant resources to make sure its responsibilities are met.

## Focus on Air Emissions

Texas is known for pushing the envelope when it comes to using technology to protect the environment.

Since the TCEQ acquired its first GasFind infrared (IR) camera in 2005 to track down and monitor air emissions, these cameras have become an indispensable part of the agency's technological toolbox. Twelve of these cameras are now deployed.

The IR cameras are in demand because they make fieldwork much more efficient. That is because the high-tech cameras "see" infrared light that is invisible to the naked eye. A special filter allows the camera to visualize the absence of infrared energy at the wavelengths absorbed by hydrocarbon vapors. This spectrum includes VOCs, with which the TCEQ is largely concerned. The camera shows these emissions as a light or dark plume, depending on temperature settings.

During compliance investigations, the cameras can show whether flare pilot lights are lit, valves and flanges are leaking VOCs, or emission sources have gone undetected.

TCEQ regional offices use the cameras for many purposes. In Beaumont, for example, residents were complaining about odors in one area, but the source could not be located. With the IR camera, staff discovered a facility where the storage tanks had bad seals, and VOCs were being vented into the atmosphere. The facility repaired the tanks.

The IR cameras are often used in complaints and investigations of oil and gas facilities. With the cameras, staff can tell from a distance whether equipment is operating as expected. The cameras have also been mounted on helicopters for airborne surveys over large areas.

In the highly industrialized Houston region, investigators use the cameras almost every day, performing field reconnaissance and on-site investigations. From outside a fence line, camera operators scan the facilities for unreported or underreported VOC emissions. Facility operators are generally open to looking at what the cameras have found and acting on that information. Discovering a flare that is not combusting to maximum efficiency will prompt the facility operator to fine-tune the flare to obtain the highest combustion rate, which results in the lowest level of emissions.

Many refineries and other large plants in Texas have purchased IR cameras and use them to reduce emissions.

## Drought Fosters New Approaches

Since 2009, drought has persisted throughout much of Texas. Even when periodic rains arrive, residents in each region are aware how quickly conditions can turn critical again.

Drought results from lower-than-normal rainfall and higher-than-normal temperatures. Texans have seen firsthand how this combination of factors can punish landscapes and crops, and bring public water systems to the brink of crisis.

Some municipalities have seen long-term planning pay off, as they employed innovative ways to extend water supplies. In other areas, water shortfalls have been so rapid and severe that those systems have had to call for outside help to avoid critical water shortages.

In all cases, the TCEQ, other state agencies, and state officials are prepared to help public water systems meet the primary needs of their customers for safe drinking water and sanitation.

## Rio Grande Valley

Parts of South Texas have suffered from prolonged and extreme drought conditions, resulting in lower flows in certain segments of the Rio Grande. Irrigation districts in the Rio Grande Valley, in conjunction with the TCEQ's Rio Grande watermaster, manage a series of canals that deliver water to their customers, including municipalities and agricultural interests.

While these municipalities have adequate supplies to meet basic needs, more water is required to push these supplies down the canals for delivery. The lack of rain, along with inadequate releases from Mexico, has raised concerns about municipal deliveries.

In 2013, the TCEQ began hosting meetings to address these problems. Staff joined the EPA, the North American Development Bank, and the Texas Department of Emergency Management to confer with district and municipal operators, as well as local officials. The resulting forum saw a broad-range discussion on the ways irrigation districts can work together to implement a regional approach for avoiding shortages.

As for Mexico, that country's failure to consistently deliver water in accordance with the 1944 Water Treaty has had a significant impact on South Texas water users. See Chapter Three, "Rio Grande Compact Commission."

## Big Spring Facility

Water has always been a precious commodity in West Texas. When its reservoirs were reduced to mud patches in 2011, the Colorado River Municipal Water District (CRMWD) was already planning to increase supplies by drilling more groundwater wells, installing a pipeline, and constructing a new facility to enhance raw-water supplies in Big Spring.

The new raw-water production facility now captures treated municipal effluent from the City of Big Spring and conducts additional advanced treatment before blending it with raw surface water in the delivery system. It is then treated by conventional surface-water treatment plants. In 2013, the TCEQ approved the facility to add treated water to a raw-water pipeline that carries the blended water to five downstream conventional surface-water treatment plants. As treated water from the facility began to be added to the raw-water pipeline, according to the CRMWD, the initial output was an estimated 2 million gallons per day.

Because the blended water from the CRMWD Raw Water Production Facility is treated downstream at conventional surface-water treatment plants, the facility's treatment goals are to produce water with a quality equivalent to—or better than—the raw surface water with which it is blended.

Other water providers around the state have also explored the potential for similar direct-potable reuse projects.

## Conservation and Teamwork

With drought a near-constant companion, Texans have found that they need to think differently about water. Many communities have implemented water restrictions according to their drought contingency plans and urged customers to make wiser water-use choices. Individuals have taken actions to conserve water in homes and gardens. Businesses realize the need to plan for more efficient water use by reducing demand and recycling water, where possible.

The TCEQ encourages water conservation at all levels and delivers technical assistance to systems where water supplies may be depleted. It also relies on agency partners to help public water systems meet the needs for clean, safe, and reliable drinking water and sanitation. Other agencies, such as the Texas Department of Agriculture and the Texas Water Development Board, have made grants or low-interest loans available to communities needing to

fund projects such as drilling new wells, moving intakes, or connecting with other suppliers.

This coordinated effort makes better use of taxpayer dollars by reducing duplication, and opens doors for further collaboration in data sharing and collection.

While no one can predict with certainty what the weather will do, this state's fast-growing population makes water planning essential. The TCEQ has built relationships to find solutions in the years ahead, whatever the forecast.

## "Take Care of Texas" Hits the Airwaves

The TCEQ's Take Care of Texas program encourages Texans to adopt wise environmental practices to help keep the air and water clean, conserve water and energy,



**TakeCareOfTexas.org**

reduce waste, and save money. In 2013, the TCEQ expanded the program by adding a new team member. The agency tapped country recording artist Kevin Fowler to produce public-service announcements promoting the Take Care of Texas program and urging all Texans to conserve water and keep the air clean.

The first campaign included the Texas Parks and Wildlife Department (TPWD), which contributed the video production and filmed the television PSA at Guadalupe River State Park. The TV and subsequent radio PSAs featured an original jingle written and performed by Fowler, who donated his songwriting and performing talents.

The announcements, sponsored by both the TCEQ and the TPWD, urged everyone to get outdoors and enjoy Texas' clean air, rivers, lakes, and bays and to visit state parks. The PSAs also encouraged everyone to visit <TakeCareOfTexas.org> and pledge to conserve water and energy. Those who pledge receive a *Texas State Park Guide* and a Take Care of Texas bumper sticker.

From June 3 to Aug. 23, 2013, the radio and TV spots aired 17,302 times for a value of \$580,809, of which the TCEQ paid only \$105,010. TV and radio stations across the state donated the remaining \$475,799 of airtime to support the conservation cause.

In a second campaign in 2014, the TCEQ and Kevin Fowler produced a radio PSA using the same jingle and altering the message slightly to encourage Texans to do their part to keep the air clean. The PSA played on country-music stations from May 5 to July 20, with a total of 5,889 spots valued at a total of \$170,927. Of that, the TCEQ paid \$94,663; radio stations across the state donated the remaining \$76,264 of airtime.

In addition to the PSAs, the TCEQ produced “making of” videos about shooting the TV PSA and recording the second radio PSA. Links to both videos, as well as the PSAs, can be found on <TakeCareOfTexas.org> and the TCEQ’s YouTube page.

From June 2013 to May 2014, the Take Care of Texas website received almost 21,000 visits, resulting in 3,060 pledges from participants who want to do their part for a cleaner Texas. Much of this website traffic was credited to the PSA campaigns.

## Staying Connected

The TCEQ maintains an ongoing effort to improve its online presence and to prove that the Web is an effective way to educate the public while advancing government transparency. With a website that encompasses about 12,650 Web pages and 79,500 documents, the agency strives on a continuous basis to increase functionality and to smooth navigation.

In 2013, the TCEQ unveiled an updated Web design that supports online viewing on desktop, tablet, or mobile devices.

## Easier Access

The TCEQ continues to develop new online applications and Web pages for the regulated community and the general public. Any Web user can now apply for permits and registrations, renew licenses, submit regulatory reports, file documents, submit comments, and pay fees, penalties, and other assessments through the TCEQ’s e-Services at <www.tceq.texas.gov/e-services>.

All told, 23 online processes are currently available to the public and anyone doing business with the TCEQ. Being able to accept information electronically has provided multiple benefits to both the customers and the TCEQ, such as reduced paperwork and overall improved efficiencies and accuracy of the information processed. Quality-assurance data checks are performed prior to customer submissions.

While the TCEQ’s main duties are regulatory, providing information and education resources to the general public is also a major responsibility. To bolster transparency, the agency has enabled Web users to review air and water quality data, enforcement reports, and the status of permits and registrations. Users may also submit and review environmental complaints online. To view environmental data, including air and water quality, enforcement reports, and permit status, see <www.tceq.texas.gov/agency/data>.

Though text messaging, the agency has further expanded its online resources by offering automatic alerts to anyone wanting immediate updates from many TCEQ programs. At no charge, subscribers receive notifications



### TCEQ Web Presence: Snapshots from FY 2014

**Total website visits:** 2.2 million

**The 8 countries generating the most visits (in order):** USA, India, Canada, Philippines, United Kingdom, Mexico, Malaysia, Australia

**The 8 cities generating the most visits (in order):** Austin, Houston, San Antonio, Dallas, Fort Worth, Waco, College Station, Plano

**The 7 Web pages receiving the most visits (in order):** home page, licensing, jobs, water quality, business permitting requirements, forms search, air quality

**Reach:** Every country had at least one visitor to the TCEQ website, with the exception of Greenland and the Central African Republic

**Languages:** Of all visitors, 3,000 had their browser’s primary language set to Spanish, 3,000 to Chinese, 1,200 to French, 900 to Japanese, and 650 to Korean.

**Search ranking:** The TCEQ site ranked 20,049 out of more than 30 million website domains worldwide.

Sources: Google Analytics and SiteInSEO.com

by e-mail or text messaging for more than 160 topics. To sign up for e-mail or text alerts, go to <[www.tceq.texas.gov/goto/news-email](http://www.tceq.texas.gov/goto/news-email)>.

## Social Media

The TCEQ has joined an increasing number of state agencies that have expanded their online presence by using YouTube and other social-media sites, including Twitter and Facebook.

In 2013, the agency used these resources to promote its revamped Take Care of Texas program. After the rollout of public-service announcements and a catchy new jingle, the program saw an upsurge in participation. More than 1 million TCOT publications and materials were mailed to individuals wanting to do their part to conserve water and energy.

Through the YouTube channel TCEQNews, viewers can see informational videos on a wide range of subjects, including the tools used to monitor air quality, how to build a rain barrel, and the inspiring winners of the Texas Environmental Excellence Awards.

TCEQNews is also the name of the agency's official Twitter account, through which followers can learn about the latest news releases and follow posts from agency officials.

Using social media has allowed the agency to reach more people, including those who might not have been familiar with the scope of the agency and its responsibilities.

## The Important Role of Toxicology

Many chemicals exist in the environment, both man-made and naturally occurring. Chemical risk assessments evaluate the impact those chemicals could have on human health, focusing especially on the type and severity of health problems a chemical might cause.

The TCEQ relies on its Toxicology Division to help make scientifically sound decisions when developing environmental regulations and policy. On any given day, the agency's 16 toxicologists might assess whether the chemical emissions proposed in an air permit would be safe; evaluate whether the chemicals detected in the ambient air of a certain location might cause adverse health effects or a nuisance; determine whether the chemical contamination of a given industrial or residential site could cause adverse health effects; or help the agency's Remediation Division decide whether a site needs to be cleaned up, based on risk to human health.

Determining how any chemical reacts in a human body is a complex, case-by-case enterprise. What could poten-

tially harm a child may or may not affect a 300-pound man. There is variation in how any human being will absorb, metabolize, or excrete a harmful compound. Further, factors such as genetic makeup, lifestyle, and even the location of an individual's residence play a part in how any chemical travels through a human body.

In the last 20 years, techniques for evaluating the harmful effects of chemicals have become more advanced, particularly when it comes to the effects on human cells. The field of toxicology has come to understand more about the human body and how it responds to chemical exposures. The Toxicology Division has been reviewing the way risk assessments are conducted to better incorporate this new knowledge and to make risk assessments more realistic and predictive.

As Texas gains more people and businesses, toxicologists have begun to focus on how both can interact—without detriment to human health. In the case of expanded natural-gas drilling, the TCEQ took the lead by conducting air quality studies in Houston, Midlothian, Dallas-Fort Worth, Corpus Christi, and the Barnett and Eagle Ford shale areas. In spite of the increased well activity, studies have shown only slight increases in levels of air pollution and no indication of adverse health effects.

For its toxicology work, the agency has received national and international recognition. TCEQ studies on the risk to human health posed by nickel, 1,3-butadiene, arsenic, and chromium have been published in the journal *Regulatory Toxicology and Pharmacology*. In 2014, the TCEQ hosted the annual Alliance for Risk Assessment seminar, which drew toxicologists from the United States and Canada. This marked the third time the agency has hosted the workshops since 2010.

The TCEQ has also taken the lead in formulating scientifically sound, state-of-the-art guidelines for developing toxicity factors. Staff has worked to identify risk with methods that are predictive and useful. In this way, the agency plays a critical role in the changes being effected within the risk-assessment community. Doing risk assessment accurately is imperative in helping to decide where to place limited resources. For example, water quality and quantity are much more of a risk for Texas than air quality.

## Annual Trade Fair Remains an Attraction

For the 22nd consecutive year, the TCEQ's Trade Fair and Conference drew participants from around the state to attend classroom sessions and view exhibits on topics

related to air, water, and waste management. Attendance in May 2014 topped 4,000 and included CEOs, environmental compliance officers, and engineers, as well as representatives from cities and counties.

The Trade Fair is the state's premier environmental educational forum. The three-day event offers not only educational opportunities but also a chance to view the latest technology, get answers to regulatory questions, and network with colleagues in various environmental fields. The 2014 conference, held at the Austin Convention Center, featured more than 100 classroom sessions and a large hall packed with 365 exhibits offered by contractors, equipment vendors, engineering firms, laboratories, and suppliers.

More than one-fifth of attendees were engineers. They and other professionals were able to earn continuing-education credits to help fulfill their license requirements. Two of the presentations, for example, featured ethics training for engineers and geoscientists. TCEQ staff and other professionals led the classroom sessions. Many attendees said they appreciated that the conference is Texas-specific, targeting environmental issues that are both timely and close to home.

At a mid-day luncheon, attendees heard TCEQ commissioners discuss priority issues, such as demands related to the expanding oil and gas industry. An evening banquet featured an address by Gov. Perry and the presentation of the Texas Environmental Excellence Awards.

# Agency Activities

On an ongoing basis, the Texas Commission on Environmental Quality deals with serious environmental challenges. Most Texans are affected one way or another by the agency's major responsibilities—air quality, water quality, water supply, waste management, and pollution prevention. Public health is a leading concern for the 2,700 agency personnel.

Staff members perform compliance investigations, supervise air and water monitoring stations, evaluate permit applications, and oversee cleanup of contaminated properties. To encourage environmental stewardship, the agency conducts environmental education programs, provides technical assistance, and promotes recycling and conservation.

This chapter addresses how the TCEQ fulfills its major responsibilities through the many programs designed around environmental protection. All of these programs are ongoing and continue to build on experiences gleaned from previous years.

For the most part, this chapter examines activities that occurred during fiscal 2013 and 2014, a period starting September 1, 2012, and ending August 31, 2014.

## 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 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 4,000 complaints to assess compliance with environmental laws.

When environmental laws are violated, the agency has the authority in administrative cases to levy penalties up to the statutory maximum per day, per violation. The statutory maximum range is as high as \$25,000. Civil

judicial cases carry penalties up to \$25,000 per day, per violation, in some programs.

In fiscal 2013, the TCEQ issued 2,182 administrative orders, which required payments of \$12.7 million in penalties and about \$2.7 million for Supplemental Environmental Projects, or SEPs. The average number of days from initiation of an enforcement action to completion (order approved by the commission) was 235.

In fiscal 2014, the TCEQ issued 1,708 administrative orders, which required payments of \$10.1 million in penalties and \$2.6 million for SEPs. The average number of days from initiation of an enforcement action to completion (order approved by the commission) was 235 days.

The TCEQ can also refer cases to the state attorney general. In fiscal 2013, the AG's office obtained 43 judicial orders in cases referred by the TCEQ or in which the TCEQ was a party. These orders resulted in more than \$10.8 million in civil penalties and another \$138,750 for SEPs. In fiscal 2014, the AG's office obtained 23 judicial orders, which resulted in \$6.1 million in civil penalties. Since the beginning of fiscal 2014, the AG's office no longer approves SEPs.

Additional enforcement statistics can be found in the agency's annual enforcement report (<<http://www.tceq.texas.gov/enforcement/reports/AER/annenfreport.html>>).

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

### Supplemental Environmental Projects

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

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

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

A regulated entity that meets program requirements may propose its own custom SEP if the proposed project is environmentally beneficial and the party performing the SEP was not already obligated or planning to perform the SEP activity before the violation occurred. Additionally, the activity covered by a SEP must go beyond what is already required by state and federal environmental laws.

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

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

## TCEQ Enforcement Orders

	Number of Orders	Penalties Paid	Orders with SEPs	SEP Funds
FY2013	2,182	\$12.7 million	153	\$2.7 million
FY2014	1,708	\$10.1 million	135	\$2.6 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 more than 300,000 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,

## Compliance History Designations

Classifications	September 2013		September 2014	
	Number of Entities Subject to Compliance Rules	Percent	Number of Entities Subject to Compliance Rules	Percent
High	37,429	12.46	40,974	11.02
Satisfactory	9,794	3.26	10,552	2.84
Unsatisfactory	1,558	0.52	1,394	0.37
Unclassified	251,693	83.76	318,827	85.77
<b>Total</b>	<b>300,474</b>	<b>100</b>	<b>371,747</b>	<b>100.00</b>

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 matters regarding not only enforcement but also permit actions, the use of unannounced investigations, and participation in innovative programs.

Each September, regulated entities are classified or reclassified to reflect the previous five years. Ratings below 0.10 receive a classification of "high," which means those entities have an "above-satisfactory compliance record" with environmental regulations. Ratings from

0.10 to 55.00 merit “satisfactory” for having “generally complied.” Ratings greater than 55.00 result in an “unsatisfactory” classification because these entities “performed below minimal acceptable performance standards.”

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

## Critical Infrastructure

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

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

## Homeland Security

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

The Homeland Security Section is also responsible for compliance at the disposal site for low-level radioactive waste in Andrews County. The operator of the disposal site is Waste Control Specialists, Inc. (radioactive-material license R04100). The site’s compact waste facility was authorized to accept waste in April 2012.

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

- fiscal 2012: 35 shipments
- fiscal 2013: 121 shipments
- fiscal 2014: 124 shipments

## Dam Safety

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

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

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

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

As a result, the law permanently exempted 3,198 dams. In 2014, Texas had 3,989 state-regulated dams; of those 1,097 were high-hazard dams and 470 were significant-hazard dams. The remaining dams were classified as low hazard.

As of August 2014, 95.8 percent of all high- and significant-hazard dams had been inspected during the past five years. About half of the inspected dams are in either “fair” or “poor” condition. The majority of owners have begun making repairs, as funds are available.

In addition to inspections, the Dam Safety Program conducts workshops—primarily for dam owners and engineers—on emergency action plans and dam maintenance. Emergency management personnel also attend. Three workshops were conducted in fiscal 2013, followed by three more in fiscal 2014.

## Emergency Management Support

In a state the size of Texas with its geographic and economic diversity, natural disasters or emergencies caused by human activities occur almost daily. Disasters, by nature, can have a widespread impact, while significant emergencies might occur at the same time but in different areas.

In an emergency or disaster, the TCEQ is the lead state agency for hazardous materials and oil-spill response. As such, it supports several other state emergency-management functions.

The TCEQ's responsibilities in a disaster align with the agency's mission—to protect human health and the environment. Those responsibilities also apply to the critical infrastructure facilities regulated by the agency, such as public water systems, wastewater-treatment plants, dams, and chemical and refining facilities.

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

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

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

In addition, the EMST maintains enhanced disaster response equipment that can be deployed to any of the regions. This enables responders to conduct environmental monitoring, communicate with other responding jurisdictions or disciplines, and restore continuity of operations at any regional office hampered by a disaster.

For non-disaster emergencies, each region has an established rotation of personnel to respond to emergencies or, in some cases, dedicated emergency response teams.

## Accredited Laboratories

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

All laboratories accredited by the TCEQ are held to the same quality-control and quality-assurance standards. 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.

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 2014, the number of laboratories accredited by the TCEQ was 281.

## Houston Laboratory

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

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

The Houston 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 is produced using methods approved by the Environmental Protection Agency. The laboratory standards used for these methods are traceable to national standards, such as the National Institute of Standards and Technology and the American Type Culture Collection.

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

## Edwards Aquifer Protection Program

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

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

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

Each year, the TCEQ receives hundreds of plans to be reviewed by the Austin and San Antonio regional offices. Since 2012, the agency has experienced a dramatic increase in the number of plans submitted for review as a result of increased development in both regions. The TCEQ reviewed an estimated 630 plans in fiscal 2013 and 750 plans in fiscal 2014.

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 Criteria-Pollutant Standards

The federal Clean Air Act requires the EPA to review the standard for each criteria pollutant every five years to ensure that it provides 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.

Over the years, attaining the ozone standard has been the biggest air quality challenge in Texas.

As Texas develops proposals—region by region—to address air quality issues, the revisions are submitted to the EPA in the State Implementation Plan.

### Ozone Compliance Status

Ground-level ozone, a component of smog, is not emitted directly into the air but forms through a reaction of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) in the presence of sunlight. The major sources of NO<sub>x</sub> and VOC emissions are industrial facilities, electric utilities, car and truck exhaust, and chemical solvents. Identifying control measures that are reasonable—as well as technologically and economically feasible—has presented a challenge for the TCEQ, considering the magnitude of emission reductions already achieved under the 1990 one-hour and the 1997 eight-hour ozone standards.

In 2010, the EPA proposed a reconsideration of the 2008 eight-hour ozone standard of 0.075 parts per million to lower the proposed ozone standard within a range of 0.060–0.070 ppm. The following year, President Obama announced he had requested that the EPA withdraw the proposed reconsidered ozone standard. In a subsequent memo, the EPA announced it would proceed with initial area designations under the 2008 eight-hour ozone standard, starting with the recommendations states made in 2009 and updating them with the most current, certified air quality data (2008 through 2010).

### 2008 Eight-Hour Ozone Standard

In 2012, the EPA published final designations and classifications for the 2008 eight-hour ozone standard. The consequences for Texas were as follows:

- The Dallas–Fort Worth area was designated a nonattainment area with a “moderate” classification.

### Types of Sources

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

**Point sources:** industrial facilities such as refineries and cement kilns

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

**On-road mobile sources:** cars and trucks

**Nonroad mobile sources:** construction equipment and engines, such as locomotives

- The Houston-Galveston-Brazoria area was designated a nonattainment area with a “marginal” classification.
- Matagorda and Hood counties were designated “attainment/unclassifiable.”
- Wise County was designated nonattainment with a “moderate” classification; the county then became part of the Dallas-Fort Worth nonattainment area.

The attainment demonstration and reasonable further progress SIP revisions for the Dallas-Fort Worth 2008 eight-hour ozone nonattainment area are scheduled to be proposed for public comment on December 10, 2014, and adopted in June 2015. Both SIP revisions are due to the EPA on July 20, 2015. The Dallas-Fort Worth area is required to attain the 2008 eight-hour ozone standard by December 31, 2018. The Houston-Galveston-Brazoria area is required to attain the 2008 eight-hour ozone standard by December 31, 2015. An attainment demonstration and “reasonable further progress” SIP revisions are not required for the Houston-Galveston-Brazoria area because of its “marginal” classification. The commission is litigating the matter of including Wise County in the Dallas-Fort Worth 2008 ozone nonattainment area.

In the summer of 2014, the EPA was reviewing the 2008 ozone standard. By the end of 2014, the federal agency is expected to propose an eight-hour ozone standard between 0.060 and 0.070 ppm.

November 15, 2007. Although the EPA had revoked the one-hour standard in 2005, states must continue to meet the one-hour ozone anti-backsliding requirements when triggered by a finding of “failure to attain” by the attainment date. The requirements are contingency measures that are already being met, in addition to the federal Clean Air Act’s penalty-fee program. However, ambient air monitoring data for 2011, 2012, and 2013 indicated that the Houston-Galveston-Brazoria area was meeting the one-hour ozone standard. In May 2013, the commission adopted rules to implement the penalty fee provision.

In June 2013, the EPA published proposed rulemaking to implement the 2008 ozone standard. Included in the proposed rulemaking is a mechanism for lifting anti-backsliding obligations under a revoked one-hour ozone standard. According to the EPA’s proposal, a state can provide a showing, termed a “redesignation substitute,” based on the Clean Air Act redesignation criteria to demonstrate that an area qualifies for lifting anti-backsliding obligations under a revoked standard. The EPA’s approval of the showing would have the same effect on the area’s nonattainment anti-backsliding obligations as a redesignation to attainment for the revoked standard.

To recognize the improvement in the Houston-Galveston-Brazoria area one-hour ozone levels and to ensure timely termination of the penalty-fee requirement, the TCEQ

### Ozone Compliance Status

Area of Texas	Attainment Status			
	1997 Eight-Hour Ozone	Attainment Deadline	2008 Eight-Hour Ozone	Attainment Deadline
Houston-Galveston-Brazoria	Severe	6/15/2019	Marginal	12/31/2015
Dallas-Fort Worth	Serious	6/15/2013	Moderate	12/31/2018
Beaumont-Port Arthur, El Paso, Austin, Corpus Christi, Victoria, San Antonio, East Texas, Waco	Attainment	n/a	Attainment	n/a

*Note: The Houston-Galveston-Brazoria area includes the counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The Dallas-Fort Worth area includes the counties of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant; also Wise for the 2008 eight-hour ozone standard.*

### One-Hour Ozone Standard in the Houston-Galveston-Brazoria Area

In 2012, the EPA published its final rule to determine that the Houston-Galveston-Brazoria area did not attain the one-hour ozone standard by the attainment date of

moved on two fronts. First, in accordance with the EPA’s proposed rulemaking to implement the 2008 ozone standard, the TCEQ in July 2014 submitted a report that meets the substance of the Clean Air Act redesignation criteria.

The TCEQ plans to follow this submission to the EPA with a SIP revision, which contains the same elements

included in the report, but also includes the most current emissions-inventory data, based on the EPA's updated mobile source emissions-inventory model. The SIP revision was scheduled to be proposed in November 2014 and adopted in July 2015.

## 2010 Sulfur Dioxide Standard

The EPA strengthened the sulfur dioxide (SO<sub>2</sub>) primary NAAQS in 2010 with a new one-hour standard, met when the 99th percentile daily maximum one-hour SO<sub>2</sub> concentration, averaged over three years, does not exceed 75 parts per billion. The rule was challenged in federal court by Texas and other states, and dismissed in 2012 by the U.S. Court of Appeals for the District of Columbia Circuit.

In February 2013, the EPA issued a new strategy paper indicating its intention to afford flexibility for each air agency to determine the appropriate approach for characterizing air quality in its jurisdiction—through monitoring, modeling, or a mix of both. The EPA plans to set emissions thresholds for states' use in determining where further monitoring or modeling are needed to assess compliance with the NAAQS. The EPA published proposed details of this strategy in its Data Requirements Rule in May 2014. Under the proposal, states must either deploy source-oriented ambient air monitors by January 1, 2017, or submit air-quality-modeling results for each source by January 13, 2017. The remaining area designations will be made in 2017 or 2020, based on states' decisions about modeling and monitoring SO<sub>2</sub> sources.

No areas in Texas are designated nonattainment for SO<sub>2</sub>. Areas that states identify as exceeding the NAAQS based on modeling are expected to be designated nonattainment by the EPA in 2017. Attainment demonstration SIP revisions for these areas are expected to be due to the EPA in 2019.

In May 2014, the EPA filed a proposed consent decree with environmental groups related to litigation over the agency's failure to designate all areas of the country for the 2010 SO<sub>2</sub> standard by the Clean Air Act deadline. A stay in the litigation was granted until August 1, 2014, to allow the EPA to receive public comment on the consent decree.

The proposed consent decree requires the EPA to propose designations within 16 months for undesignated areas that monitored violations of the standard based on three full years of monitored data, or contain sources that emitted greater than 16,000 tons in 2012 or 2,600

tons with an emission rate of 0.45 lbs/mmBtu or higher in 2012. The proposed consent decree also requires that, by December 1, 2017, the EPA must propose designations for undesignated areas that did not install and begin operating SO<sub>2</sub> monitors by the January 1, 2017, deployment deadline. In addition, by December 1, 2020, the EPA must propose designations for all other undesignated areas.

## 2010 Nitrogen Dioxide Standard

In 2010, the EPA published the final rule to strengthen the primary standard for nitrogen dioxide (NO<sub>2</sub>) by establishing a new one-hour standard at 100 ppb. The new standard focuses on short-term exposures to NO<sub>2</sub>, which are generally greater on and near major roads. No area in Texas has monitored above the 100 ppb standard. The EPA retained the current annual average NO<sub>2</sub> standard of 53 ppb, but changed the monitoring-network requirements to capture both peak NO<sub>2</sub> concentrations that occur near roadways and community-wide NO<sub>2</sub> concentrations.

In 2012, the EPA also published the initial designations identifying all areas in the United States as unclassifiable or in attainment. The EPA's latest monitoring-placement schedule addresses delays due to funding limitations. Near-road NO<sub>2</sub> monitors are operating in the San Antonio, Austin–Round Rock, Dallas–Fort Worth, and Houston–Galveston–Brazoria areas. Second near-road monitors in the Dallas–Fort Worth and Houston–Galveston–Brazoria areas are scheduled to be operational by January 1, 2015. Near-road monitors in El Paso and Edinburg–Mission–McAllen are due to be working by January 1, 2017. Once the expanded network of NO<sub>2</sub> monitors is fully deployed and has collected three years of air quality data, the EPA intends to redesignate areas, based on data from the near-road monitoring network.

## 2008 Lead Standard

In 2008, the EPA revised the primary standard for lead from 1.5 to 0.15 micrograms per cubic meter (µg/m<sup>3</sup>), measured in total suspended particulate matter. Effective in late 2010, a portion of Collin County—surrounding the Exide Technologies facility for recycling lead-acid batteries in Frisco—was designated “nonattainment” for the 2008 lead standard.

After the commission adopted the Collin County Attainment Demonstration SIP Revision and Exide's agreed order, Exide elected to permanently close operations at its Frisco

Battery Recycling Center. Most structures at the site have been demolished.

Based on recommendations from the Clean Air Scientific Advisory Committee, the EPA was expected to propose no change to the 2008 lead NAAQS in 2014.

## Particulate-Matter Standards

The federal standard for particulate matter was revised in late 2012. For PM with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ( $PM_{2.5}$ ), the EPA strengthened the annual primary  $PM_{2.5}$  standard to  $12 \mu\text{g}/\text{m}^3$  and retained the current 24-hour primary  $PM_{2.5}$  standard of  $35 \mu\text{g}/\text{m}^3$  using a three-year annual average. No Texas counties are designated in nonattainment for  $PM_{2.5}$  standards.

Texas' designation recommendation stated there are no counties monitoring nonattainment of the  $PM_{2.5}$  standard, based on 2010–12 monitoring data. Texas recommended that all counties in the state with applicable  $PM_{2.5}$  monitoring data be designated as attainment, and all other counties be designated as unclassifiable or in attainment. In an August 2014 letter, the EPA notified the governor of its intent to modify the recommendation by designating all areas of the state as unclassifiable/attainment.

The EPA's final designations are expected by December 12, 2014. The designations will be based on 2011–13 monitoring data or the latest certified data available. SIP revisions demonstrating attainment of the PM standard are due to the EPA three years after designations, or about 2018. A recent court ruling, however, is expected to force the EPA to implement the 2012  $PM_{2.5}$  standard under Subchapter I, Part D, Subpart 4 of the Clean Air Act, rather than under Subchapter I, Part D, Subpart 1, as originally planned. Implementation of the standard under Subpart 4 would mean that attainment-demonstration SIP revisions would be due 18 months from final designations by the EPA, or about mid-June 2016.

There are also new federal requirements for near-road monitors for  $PM_{2.5}$ . Data from the new near-road monitors will not be available in time for use in making initial attainment and nonattainment designations for the revised primary annual  $PM_{2.5}$  standard. Near-road monitors are expected to be operational in the Dallas–Fort Worth and Houston–Galveston–Brazoria areas on January 1, 2015; monitors in the Austin–Round Rock and San Antonio areas are due to be working on January 1, 2017.

The EPA retained the current standard for particles with an aerodynamic diameter less than or equal to a nominal

10 micrometers ( $PM_{10}$ ). The El Paso area is classified as moderately in nonattainment of the  $PM_{10}$  standard. In 2012, the commission adopted a SIP revision to incorporate a revised memorandum of agreement between the TCEQ and the City of El Paso to reflect a concurrent rulemaking to amend the PM-control measures.

## Evaluating Health Effects

The TCEQ relies on health- and welfare-protective values developed by its toxicologists to ensure that airborne concentrations of pollutants stay below levels of concern (see Chapter One, “The Important Role of Toxicology”).

In 2012, after two rounds of public comment and an external scientific peer review by experts in assessing human-health risk, the TCEQ finalized the updated state-of-the-science guidelines for developing safe levels of chemicals in air.

Draft development-support documents outlining the scientific procedures used to develop chemical-specific effects screening levels and air-monitoring comparison values are subject to a 90-day public comment period before becoming final. In addition, some development-support documents have undergone a technical review or independent external peer review by subject experts. Updated toxicity assessments were completed for 20 chemicals using this process in fiscal 2013–14, and proposed development-support documents for three chemicals were opened for public comment in fiscal 2014.

For its toxicity assessments, Texas has received compliments from the Agency for Toxic Substances and Disease Registry, the Center for Advancing Risk Assessment Science and Policy, the National Fisheries Institute, and the National Center for Environmental Assessment.

After the EPA recommended review of Texas' guideline levels, Georgia, Louisiana, Michigan, North Carolina, Wisconsin, and Minnesota are closely following Texas' values. In addition, some countries now use Texas' values, including Australia, Canada (Ontario, British Columbia, Calgary), Israel, Taiwan, China, Austria, Belgium, Mexico, and the Netherlands.

## Air Pollutant Watch List

Air toxics are pollutants known or suspected to cause cancer or other serious health effects. 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 air-monitoring

comparison values (AMCVs) or state standards. The TCEQ evaluates areas for inclusion on the Air Pollutant Watch List where monitored concentrations of air toxics are persistently measured above AMCVs or state standards.

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

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

Eight areas of the state are on the watch list at <[www.tceq.texas.gov/goto/airwatch](http://www.tceq.texas.gov/goto/airwatch)>.

In 2014, the TCEQ removed the Port Arthur and Lynchburg Ferry areas from the watch list. The agency was also in the process of delisting the Texas City area and is evaluating two additional areas (Galena Park and Dallas) to determine whether the improvements in air quality are expected to be maintained, so the areas can be delisted. No new areas have been added to the watch list since 2007.

## 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 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 emissions data collection from oil and gas production areas.

As discussed in Chapter One, “Challenges in the Eagle Ford Shale,” the TCEQ conducts in-depth measurements at all shale formations to evaluate the potential effects. Since August 2009, the TCEQ has surveyed more than 3,500 oil and gas sites using infrared camera technology and other monitoring instruments.

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 infrared imaging, targeted mobile monitoring, and investigations (routine and complaint-driven).

**A** 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.”

One vital aspect in responding to shale-play activities is the need for abundant and timely communications with all interested parties. The TCEQ has relied on community open houses, meetings with county judges and other elected officials, workshops for local governments and industry, town hall meetings, legislative briefings, and guidance documents. The agency also maintains a multimedia website (see <[www.TexasOilandGasHelp.org](http://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 air quality monitoring network and, when needed, will expand those operations. Fifteen automatic gas chromatograph (Auto GC) monitors operate in the Barnett Shale area, along with numerous other instruments that monitor for criteria pollutants. In addition, 16 VOC canister samplers (taking samples every sixth day) are located throughout TCEQ Region 3 (Abilene) and Region 4 (Dallas–Fort Worth).

In South Texas, the agency has established a precursor ozone monitoring station in Floresville (Wilson County), which is north of the Eagle Ford Shale. Data from this new station will help determine whether the shale oil and gas play is contributing to ozone formation in the San Antonio area.

To further address the ozone question, the TCEQ contracted with the University of Texas at Austin for mobile monitoring. UT has monitored both upwind and downwind of the Eagle Ford Shale area to test for significant increases in ozone precursors downwind of the shale play. This data will also be used to evaluate whether the existing Wilson County monitor provides data representative of a large area downwind of the Eagle Ford Shale play, or whether additional monitors are needed.

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.

## Infrastructure and Transport and the SIP

The federal Clean Air Act requires that each state develop and submit an infrastructure SIP revision demonstrating how the state provides for the implementation, maintenance, and enforcement of a new or revised NAAQS within three years following promulgation of the standards. One of the key infrastructure provisions requires that a state's SIP include adequate provisions to prohibit emissions within the state from contributing significantly to nonattainment in any other state or interfering with maintenance in any other state.

The EPA promulgated a cap-and-trade program in 2005 called the Clean Air Interstate Rule. In accordance with the Clean Air Act transport requirements, CAIR was designed to aid nonattainment areas in downwind states in complying with the 1997 24-hour and annual  $PM_{2.5}$  standards and 1997 eight-hour ozone standard. Twenty-eight eastern states and the District of Columbia are subject to CAIR for contributing to downwind  $PM_{2.5}$  or ozone. CAIR applies specific budgets to subject states for annual  $SO_2$ , annual  $NO_x$ , and ozone-season  $NO_x$ , depending on the determination of a state's downwind contribution.

Texas was found to contribute to downwind  $PM_{2.5}$  nonattainment in Illinois and was required by a federal implementation plan to comply with annual  $NO_x$  and  $SO_2$  budgets. CAIR was subsequently challenged in federal court, and in 2008 the rule was remanded to the EPA by the D.C. Circuit Court of Appeals for reconsideration. In 2011, the EPA finalized the Cross-State Air Pollution Rule as the replacement for CAIR.

In 2012, the D.C. Circuit Court vacated the CSAPR and ordered the EPA to continue to administer CAIR while it works on a replacement transport rule. The EPA and various environmental groups petitioned the U.S. Supreme Court to review the D.C. Circuit Court's decision. In April 2014, the Supreme Court issued a ruling in favor of the EPA, reversing the D.C. Circuit Court's decision on the CSAPR. However, the Supreme Court remanded the case to the D.C. Circuit Court for further proceedings, so the stay of CSAPR remains in effect. The EPA has asked the D.C. Circuit Court to lift the stay, and briefs have been filed with the court. But with no decision issued, the dispo-

sition of the CSAPR is pending. As a result, CAIR remains in place until a replacement is implemented.

The TCEQ has submitted infrastructure and transport SIP revisions to the EPA for these standards: 1997 ozone, 1997  $PM_{2.5}$ , 2006  $PM_{2.5}$ , 2008 ozone, 2008 lead, 2010  $NO_2$ , and 2010  $SO_2$ . An infrastructure-and-transport SIP revision for the 2012  $PM_{2.5}$  standard is due to the EPA in December 2015.

## Regional Haze

Guadalupe and Big Bend national parks are Class I areas of Texas identified by the federal government as needing visibility protection, along with 154 other national parks and wilderness areas within the country. The regional haze program is a long-term air quality program that requires states to establish goals and strategies to reduce visibility-impacting pollutants in the Class I areas and to meet a national visibility goal by 2064.

In Texas, the pollutants potentially influencing visibility are primarily  $NO_x$ ,  $SO_2$ , and PM. Requirements of the regional haze program include reports due to the EPA in 2014, and every five years thereafter, demonstrating progress toward the visibility goal. Another regional-haze SIP revision will be due in 2018 and every 10 years thereafter to 2064.

The initial Texas regional haze SIP revision was adopted by the commission and submitted to the EPA in 2009. This visibility improvement plan relied primarily on CAIR emission reductions that the EPA previously determined sufficient to satisfy best available retrofit technology requirements for electric generating units. The regional haze SIP revision projects that Texas Class I areas will not meet the 2064 federal goal for visibility due to emissions from the Ohio River Valley and international sources. Big Bend National Park will meet the federal visibility goal in 2155 (91 years after 2064) and the Guadalupe National Park will meet the federal visibility goal in 2081 (17 years after 2064).

In February 2014, the commission adopted the 2014 Five-Year Regional Haze SIP Revision. This SIP revision is a required progress report that contains a summary of the following:

- emissions reduced
- an assessment of visibility conditions and changes for each Class I area in Texas and other Class I areas that Texas may affect
- an analysis of emissions reductions by pollutant

- a review of Texas' visibility monitoring strategy and any necessary modifications

The EPA's final action on the 2009 regional haze SIP is expected in September 2015.

## Major Incentive Programs

The TCEQ has three incentive programs aimed at reducing emissions in various ways: the Texas Emissions Reduction Plan, Drive a Clean Machine, and the Texas Clean School Bus Program.

### Texas Emissions Reduction Plan

The Texas Emissions Reduction Plan gives financial incentives to owners and operators of heavy-duty vehicles and equipment for projects that will lower NO<sub>x</sub> emissions. Because NO<sub>x</sub> is a leading contributor to the formation of ground-level ozone, reducing these emissions is key to achieving compliance with the federal ozone standard.

Recently added incentive programs also support the increase in the use of alternative fuels for transportation in Texas.

- The **Diesel Emissions Reduction Incentive Program** has been the primary incentive program since the TERP was established in 2001. The DERI incentives have been focused largely on the ozone nonattainment areas of Dallas-Fort Worth and Houston-Galveston-Brazoria. Funding has also been awarded to projects in the Tyler-Longview-Marshall, San Antonio, Beaumont-Port Arthur, Austin, Corpus Christi, El Paso, and Victoria areas. From 2001 through August 2014, the DERI program awarded more than \$905 million for the upgrade or replacement of 15,623 heavy-duty vehicles, locomotives, marine vessels, and pieces of equipment. Over the life of these projects, 160,836 tons of NO<sub>x</sub> are projected to be reduced, which in 2014 equated to 53.8 tons per day. The next grant-application period was scheduled to open after September 2014 for total available funding of \$68 million.
- The **Texas Clean Fleet Program** provides funding for replacement of diesel vehicles with alternative-fuel or hybrid vehicles. From 2009 through August 2014, 12 grants were funded to replace 305 vehicles for a total of \$23.6 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 more than 314 tons of NO<sub>x</sub> over the life of the projects. The most recent grant-application period opened in July 2014 for a funding amount of almost \$7.8 million, with grant awards planned for fall of 2014.
- The **Texas Natural Gas Vehicle Grants Program** provides grants for the replacement or repower of heavy-duty or medium-duty diesel- or gasoline-powered vehicles with natural gas-powered vehicles and engines. Eligible vehicles must be operated in the counties designated under the Clean Transportation Triangle Program. From 2009 through August 2014, the program funded 57 grants to replace 714 vehicles for a total of \$32.1 million. These projects are projected to reduce more than 1,137 tons of NO<sub>x</sub> over the life of the projects. The program has an additional \$12.4 million available for fiscal 2015 grants. All available funding is expected to be awarded, based on the applications received.
- The **Clean Transportation Triangle Program** provides grants to support the development of a network of natural gas vehicle-fueling stations. The program was originally aimed at fueling stations along the interstate highways connecting the Houston, Dallas, Fort Worth, and San Antonio areas. The eligible areas were expanded by the Legislature in 2013 to include counties within the triangle formed by those interstate highways, as well as other areas also eligible under the DERI program. From 2012 through August 2013, the CTP funded 18 grants for a total of \$3.9 million. Grant selections for 2014 were made in June 2014 to fund an additional 19 projects for \$7.76 million. The final award of these grants was pending negotiations of the grant contracts with the selected recipients.
- The **Alternative Fueling Facilities Program** provides grants for the construction, reconstruction, or acquisition of facilities to store, compress, or dispense alternative fuels in areas of Texas designated as "nonattainment." From 2012 through August 2013, the program funded four grants for a total of \$1.8 million. Grant selections were made in June 2014 to fund an additional 21 projects for \$7.76 million. The final award of the grants was pending negotiations of the grant contracts with the selected recipients.

- The **New Technology Implementation Grant Program** funds incremental costs of reducing emissions of regulated pollutants from facilities and other stationary sources in Texas. Two grants were awarded in 2011 for a total of almost \$6.2 million. However, one of those two projects was subsequently canceled by the grant recipient. The remaining project involves a system to capture and store energy from wind-powered generation sources. The latest grant-application period closed June 2014. The grant selections for a funding amount of \$4.6 million were expected to be completed by early fiscal 2015.

In addition, two additional TERP incentive programs were established by the Legislature in 2013.

- The **Light-Duty Purchase or Lease Incentive Program** provides an incentive up to \$2,500 for the purchase of a light-duty vehicle operating on natural gas, liquefied petroleum gas, or plug-in electric drive. The program is allocated \$7.8 million through fiscal 2015 when its authority expires. As of August 2014, 317 grants had been awarded for a total of \$675,625. An additional \$7.07 million will be available to award in fiscal 2015.
- The **Drayage Truck Incentive Program** was established to provide incentive funding to replace drayage trucks operating at seaports and railyards in Texas nonattainment areas with newer, less-polluting drayage trucks. The program rules were adopted in April 2014, followed by adoption of program guidelines in August. The first grant application period was expected to open in September 2014 with total funding of \$3.1 million.

TERP grants and activities are further detailed in a separate report, *TERP Biennial Report to the Texas Legislature* (TCEQ publication SFR-079/14).

### Drive a Clean Machine

The Drive a Clean Machine program (see <[www.driveacleanmachine.org](http://www.driveacleanmachine.org)>) was established in 2007 as part of the Low Income Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) to remove older, polluting cars and trucks and replace them with newer, cleaner-running vehicles.

The Drive a Clean Machine program is available in the areas of Houston-Galveston-Brazoria, Dallas-Fort Worth, and Austin-Round Rock. The counties in these areas conduct annual inspections of vehicle emissions.

From the program's debut in December 2007 through May 2014, more than \$177 million was provided to qualifying vehicle owners. This funding helped replace a total of 53,196 vehicles and repair an additional 33,545 vehicles.

In 2014, Collin County requested to no longer collect the \$6 per emissions test that supports the program and to discontinue participation in LIRAP. Fulfilling this request will require action on the agency's part. The TCEQ has begun working on rule amendments to allow this option for any participating county.

### Texas Clean School Bus Program

The Texas Clean School Bus Program provides grants for technologies that reduce diesel-exhaust emissions inside the cabin of a school bus. In addition to grant funding, the program offers educational materials to school districts on other ways to reduce emissions, such as idling reduction.

From 2008 to August 2014, the Texas Clean School Bus Program used state and federal funds to reimburse approximately \$25.9 million in grants to 188 public school districts or charter schools to retrofit about 7,100 school buses in Texas. In just the last two fiscal years, the program used state and federal funds to reimburse approximately \$5.6 million in grants to nine public school districts or charter schools to retrofit 291 buses in Texas.

## Environmental Research and Development

The TCEQ supports cutting-edge scientific research into the causes of air pollution in Texas. Most recently, the agency's Air Quality Research Program (AQRP) has been engaged in a range of projects, which built upon the air quality scientific research studies from the previous biennium.

One recent research activity was the field study called DISCOVER-AQ (Deriving Information on Surface Conditions from Column and Vertically Resolved Observations Relevant to Air Quality).

During the summer of 2013, NASA aircraft conducted a series of flights with scientific instruments on board to measure gaseous and particulate pollution in the Houston area. NASA strives to improve the use of satellites to monitor air quality for public health and environmental benefit.

To complement the NASA flight-based measurements and to lever the extensive measurements being funded by NASA to better understand factors that control air quality in Texas, ground-based air quality measurements were made simultaneously by researchers from collaborating

organizations. Multiple ground sites were expanded or established to accommodate the instrumentation brought to Houston by research collaborators. This project centralized and coordinated the site infrastructure preparation for the ground sites identified for expansion to support DISCOVER-AQ Houston 2013. The data and information collected during the study will be analyzed through AQRP participants and TCEQ staff, and are expected to provide additional insights into the complex air quality concerns in the Houston area.

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

- chamber studies to improve mechanisms to model ozone formation from highly reactive VOCs
- investigations of regional background ozone and transport
- investigations of SO<sub>2</sub> measurements in the Houston Ship Channel area using previously collected data
- deployment of ozone sonde equipment to better understand the recirculation of ozone over Galveston and Trinity bays
- investigations of the effects of fire emissions estimates and transport, and their impacts on ozone and particulate matter
- a study to improve the state-of-the-art meteorological models used in SIP development

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

- A study to obtain important baseline measurements of VOC species that result from oil and gas activity in the Eagle Ford Shale area.
- Continued sampling and analysis of particulate-matter chemical speciation that is used to support documentation of exceptional impact at the Clinton Drive monitor in Houston.
- A review and analysis of wildfires and the potential impacts on air quality in Texas to support exceptional-event technical demonstrations.
- A special monitoring project to help identify sources contributing to high SO<sub>2</sub> concentrations in the Corpus Christi area.
- Aerial surveys using forward-looking infrared-camera technology to evaluate specific areas or types of emissions.

- Investigations of tools for ozone-forecast modeling.
- A joint project by the TCEQ and University of Texas at Austin to create Web-based training modules for supplemental flare operations. These modules are intended to supplement plant-specific training by informing plant personnel about variables affecting flare performance from the 2010 TCEQ Flare Study and more recently completed flare projects. This free online training became available to the public in 2013.

The latest findings from these research projects should help the state to understand and appropriately address some of the persistent air quality issues faced by Texans. Challenges remain, however, as the revised air quality standards proposed by the EPA will be difficult to meet.

## 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 providing 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 such as temperature, pH, dissolved oxygen, salts, bacterial indicators for recreational suitability, and a number of toxic substances.

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

- Addition of Primary Contact Recreation 2 as a category of contact recreational use to more appropriately assign site-specific contact recreation uses and criteria.
- Addition of industrial cooling areas and revisions to mixing zone provisions to aid implementation of thermal water quality standards in wastewater permitting.
- Revisions to toxicity criteria to incorporate new data on toxicity effects and local water quality characteristics that affect toxicity.

- Numerous revisions and additions to the uses and criteria of individual water bodies to incorporate new data and the results of recent use-attainability analyses.

The revised standards must be approved by the EPA before being applied to activities related to the Clean Water Act. The EPA acted on most of the 2010 revisions by July 2013. Although portions of the 2010 standards have yet to finish federal review, the TCEQ proceeded with its triennial review of the Texas Surface Water Quality Standards. None of the 2014 revisions had been acted upon by the EPA as of August 2014.

### Use-Attainability Analyses

The Surface Water Quality Standards Program also coordinates and conducts use-attainability analyses (UAAs) to develop site-specific uses for aquatic life and recreation. The UAA assessment is often used to reevaluate designated or presumed uses when the existing standards might be inappropriate for water bodies. As a result of aquatic-life UAAs, site-specific aquatic life uses or dissolved-oxygen criteria were adopted in the 2014 revision of water quality standards for more than 16 individual water bodies.

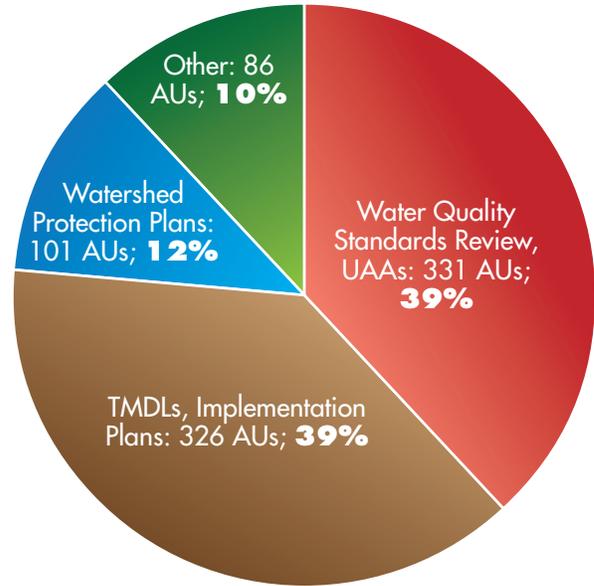
**A** use-attainability analysis (UAA) is a scientific assessment of the physical, chemical, biological, or recreational characteristics of a water body.

In 2009, the TCEQ developed recreational UAA procedures to evaluate and more accurately assign levels of protection for water recreation activities such as swimming and fishing. Since then, the agency has initiated more than 100 recreational UAAs to evaluate recreational uses of water bodies that have not attained their existing criteria.

Using results from recreation UAAs, the TCEQ adopted site-specific contact recreation criteria for 11 individual water bodies in the 2014 Texas Surface Water Quality Standards revision. Additional site-specific contact-recreation criteria will be included in future revisions to the standards.

## 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: 844

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

Source: 2010 Texas Integrated Report

## Clean Rivers Program

The Texas Clean Rivers Program is a unique state-fee-funded water quality monitoring, assessment, and public outreach program. Fifteen regional water agencies (primarily river authorities) perform monitoring, assessment, and outreach. The program affords the opportunity to approach water quality issues within a watershed or river basin at the local and regional levels through coordinated efforts among diverse organizations.

Accomplishments include doubling the water quality data available for TCEQ decision making and increasing public awareness of water quality issues at the local level.

## Water Quality Monitoring

Surface water quality is monitored across the state in relation to human-health concerns, ecological conditions, and

designated uses. The resulting data form a basis for policies that promote the protection and restoration of surface water in Texas.

### Coordinated Routine Monitoring

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

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

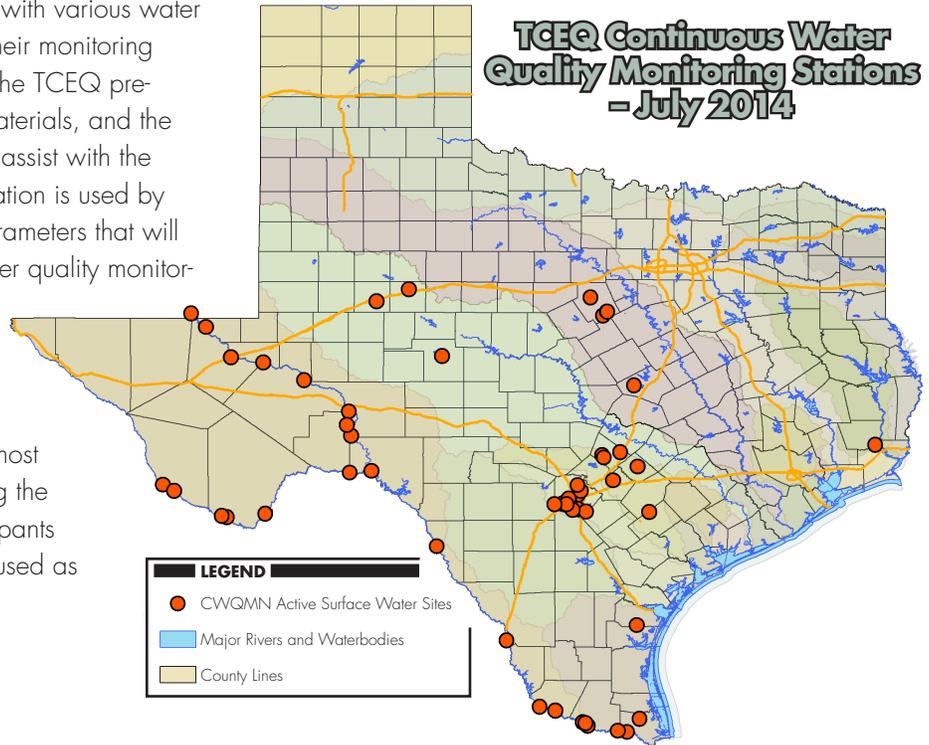
### Continuous Water Quality Monitoring

The TCEQ has developed—and continues to refine—a network of continuous water quality monitoring sites on priority water bodies. The agency maintains 50 to 60 sites in its Continuous Water Quality Monitoring Network. 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 water-resource management decisions, 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](http://www.texaswaterdata.org)>.

The CWQMN is used daily to guide decisions on how to better protect certain segments of rivers or lakes. For example, from 2004 to 2014 the TCEQ developed a network of 14 CWQMN sites on the Rio Grande and the Pecos Rivers. The primary purpose of these CWQMN sites is to monitor levels of dissolved salts to protect the water supply in the Amistad Reservoir. The Pecos River CWQMN stations also supply information on the effectiveness of the Pecos River Watershed Protection Plan. These stations are

operated and maintained by the U.S. Geological Survey through cooperative agreements with the TCEQ and the Texas State Soil and Water Conservation Board. Other uses of such data include developing of water quality models.



*In the summer of 2014, the TCEQ had 52 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.*



### 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 biological communities.

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/waterquality/assessment/12twqi/twqi12](http://www.tceq.texas.gov/waterquality/assessment/waterquality/assessment/12twqi/twqi12)>).

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

Because of its large number of river miles, Texas can assess only a portion of its surface water bodies. The most important river segments and those considered at highest risk for pollution are assessed regularly. The *2012 Integrated Report* was approved by the EPA in May 2013. In developing the report, water quality data was evaluated from 5,518 sites on 1,360 water bodies. The draft *2014 Integrated Report* is under development and expected to be completed by spring 2015.

## Restoring Water Quality

### Watershed Action Planning

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

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

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

### Total Maximum Daily Load Program

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

surface waters. A TMDL is like a budget for pollution in that the TMDL determines the extent to which pollutant concentrations must be reduced to meet quality standards. A scientifically rigorous 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 568 impairments listed for surface water segments in Texas, about half are for bacterial impairments to recreational water uses.

In the last two years, the TCEQ adopted 13 TMDLs for bacteria, and 35 more are under way. Stakeholders developed implementation plans, called I-Plans, for 159 contact recreation impairments, which the commission approved. The TCEQ is coordinating with stakeholders on development of I-Plans for an additional 43 recreation impairments. The timeframes for completing I-Plans are affected by stakeholder resources and reaching consensus. These additional I-Plans are expected to be completed by the end of 2016.

The TMDL Program has developed an effective strategy for developing TMDLs that protects recreational safety. The strategy, which relies on the engagement and consensus of the communities in the affected watersheds, has been initiated for 25 water bodies in three different river basins. 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 I-Plan, which identifies the steps necessary to improve water quality. I-Plans outline a three- to five-year plan of activities indicating who

will carry out the activities, when they will be done, and how improvement will be gauged. Each plan contains a commitment by the stakeholders to meet periodically to review progress. Then they revise the plan to adjust to changing conditions.

## Community Engagement

An example of successful community engagement is the Bacteria Implementation Group for the Houston-Galveston area. The BIG has 31 members and alternates who represent government, private industry, agricultural interests, conservation organizations, watershed groups, and the public. The BIG convened in 2009 to develop a single implementation plan for 72 bacterial impairments in the Houston-Galveston area. The commission approved the BIG I-Plan in 2013. The watersheds covered by the plan cover 2,200 square miles, including all or part of 10 counties and more than 55 municipalities. The BIG is still engaged in improving water quality throughout the area and will remain active during implementation of the plan. The BIG is also collaborating with other regional groups to bring implementation of similar bacteria TMDLs under the umbrella of BIG's strategy.

## 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 239 TMDLs for 151 water bodies in the state.

Based on the *2012 Integrated Report*, the TMDL Program has restored water quality to attain standards for 28 impairments to surface waters. These actions have:

- restored fishing uses, conditions for aquatic life, and proper salinity in assessment units corresponding to 558 stream miles;
- made water suitable as a source of drinking water for 3,004 acres of reservoir; and
- restored conditions for aquatic life in 11 square miles of estuary.

From August 2012 to August 2014, the commission adopted one TMDL report (13 impairments) for the Lower West Fork Trinity River Watershed in the Dallas area, where bacteria had impaired the contact-recreation use. During that time, the commission also approved four I-Plans (159 impairments): three for the Houston-Galveston area and one for the Dallas-Fort Worth area.

## Nonpoint Source Program

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

The TCEQ, with the Texas State Soil and Water Conservation Board, manages NPS grants to implement the goals identified in the Texas NPS Management Program, which must be approved by the TCEQ, the TSSWCB, the governor, and the EPA. The governor submitted an updated NPS Management Program to the EPA in June 2012, and approval was granted in August. The NPS Program annual report documents progress in meeting the long- and short-term goals of the management program.

The NPS Program annually applies for funding from the EPA. The award is split between the following: the TCEQ to address urban and non-agricultural NPS pollution, and the TSSWCB to address agricultural and silvicultural NPS pollution. The TCEQ receives \$3 million to \$4 million annually, with approximately \$1 million dedicated to the TCEQ performance partnership grant. About 60 percent of overall project costs are federally reimbursable; the remaining 40 percent comes from state or local match. In fiscal 2014, \$3.5 million was matched with \$2.3 million, for a total of \$5.8 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. Nine projects were selected in fiscal 2013, and 11 in fiscal 2014. Half of the federal funds awarded must be used for the implementation of watershed-based plans.

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 planning purposes. In fiscal 2013, the program received \$666,919 in funding from the EPA; in fiscal 2014, \$616,000.

## Bay and Estuary Programs

The estuary programs are non-regulatory, community-based programs focused on conserving the sustainable use of bays and estuaries in the Houston-Galveston and Coastal Bend Bays regions through implementation of locally developed comprehensive conservation management

plans. Plans for Galveston Bay and the Coastal Bend bays were established in the 1990s by a broad-based group of stakeholders and bay user groups. These plans strive to balance the economic and human needs of the regions.

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

Additional coastal activities at the TCEQ include:

- Participating in the Gulf of Mexico Alliance, a partnership linking Alabama, Florida, Louisiana, Mississippi, and Texas. The TCEQ contributes staff time to implement the Governors' Action Plan, focusing on several water quality concerns (pathogens, nutrients, and mercury, and improved comparability of data collection among the states), as well as education and outreach.
- 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 2013 and 2014, the GBEP worked to preserve wetlands and important coastal habitats that will protect the long-term health and productivity of Galveston Bay. To inform resources managers, the program provided 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 also continued to develop the Back to the Bay campaign, which strives to increase public awareness and stakeholder involvement and to reinforce the priorities of the Galveston Bay Plan.

In fiscal 2013 and 2014, about 2,878 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 24,268 acres of important coastal habitats.

Through collaborative partnerships established by the program, \$7.26 in private, local, and federal contributions was leveraged for every \$1 the program dedicated to these projects.

### *Coastal Bend Bays and Estuaries Program*

During fiscal 2013 and 2014, the CBBEP implemented 65 projects, including habitat restoration and protection in areas totaling 6,675 acres. Based in the Corpus Christi area, the CBBEP is a voluntary partnership that works with industry, environmental groups, bay users, local governments, and resource managers to improve the health of the bay system. In addition to receiving program funds from local governments, private industry, the TCEQ, and the EPA, the CBBEP seeks funding from private grants and other governmental agencies. In the last two years, the CBBEP secured more than \$8.5 million in additional funds to leverage TCEQ funding.

CBBEP priority issues focus on human uses, 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. CBBEP's goal is to address 303(d) listed segments so they meet state water quality standards.

Other areas of focus:

- Restoring the Nueces River Delta for the benefit of fisheries and wildlife habitat.
- Environmental education and awareness for more than 8,000 students and teachers annually at the CBBEP Nueces Delta Preserve, delivering educational experiences and learning through discovery, as well as scientific activities.

- Enhancement of colonial-waterbird rookery islands by implementing predator control, habitat management, and other actions to help stem the declining populations of nesting coastal birds.
- The San Antonio Bay Partnership in which CBBEP assists local stakeholders to better characterize the San Antonio Bay system and develop plans to protect and restore wetlands and wildlife habitats.

## Drinking Water Standards

Of the 6,729 public water systems in Texas, about 4,640 are community water systems, mostly operated by cities. These systems serve about 96 percent of Texans. The rest are non-community water 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 (<http://dww.tceq.texas.gov/DWW/>) provides analytical results from the compliance sampling of public water systems. In addition, the Source Water Assessment Viewer ([www.tceq.texas.gov/gis/swaview](http://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 public water systems are required to monitor the levels of contaminants present in treated water and to verify that each contaminant does not exceed its maximum contaminant level, action level, or maximum residual disinfection level—the highest level at which a contaminant is considered acceptable in drinking water for the protection of public health.

In all, the EPA has set standards for 102 contaminants in the major categories of microorganisms, disinfection 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 47,000 water samples are analyzed each year just for chemical compliance. Most of the chemical samples are collected by contractors and then submitted to a certified laboratory. The analytical results are sent to the TCEQ and the public water systems.

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

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

## Violations of Drinking-Water Regulations

	FY2013	FY2014
Enforcement Orders	250	391
Assessed Penalties	\$498,503	\$527,148
Offsets by SEPs	\$12,838	\$6,601

*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 the Enforcement Targeting Tool to identify public water systems with the most serious health-based or repeated violations and those that show a history of violations across 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 95 percent of the state’s population is served by public water systems producing water that meets or exceeds the National Primary Drinking Water Standards.

## Engineering Plan and Specification Reviews

Public water systems are required to submit engineering plans and specifications for new water systems or for improvements to existing systems. The plans must be reviewed by the TCEQ before construction can begin. In fiscal 2013, the TCEQ completed compliance reviews of 2,003 engineering plans for public water systems. In fiscal 2014, the agency performed 1,696 such reviews.

Investor-owned utilities and water supply corporations are required to obtain certificates of convenience and necessity (CCNs) before providing service. A CCN is a state-issued TCEQ authorization that allows a retail public utility to furnish retail water or sewer utility service to a

specified geographic area. Investor-owned utilities must also have an approved tariff that includes a rate schedule, service rules, an extension policy, and a drought contingency plan.

Until August 31, 2014, the TCEQ had original jurisdiction over the rates and services of investor-owned utilities; had appellate jurisdiction over the rates of water-supply corporations, water districts, and out-of-city customers of municipally owned retail public utilities; and had jurisdiction to issue, amend, or cancel a CCN.

On September 1, 2014, the TCEQ transferred responsibility for the water utility rate; the sale, transfer, and merger program; and the CCN programs to the Public Utility Commission of Texas. This transfer was required by the PUC's 2013 Sunset legislation (House Bill 1600, as summarized in Chapter Three). Rulemaking at the TCEQ will be required to delete most of Title 30, Texas Administrative Code, Chapter 291, with most of the water and wastewater utility jurisdiction being transferred to the PUC.

After the transfer, the TCEQ's remaining utility regulation is limited primarily to temporary management and receiverships of public water systems and water-availability determinations.

In fiscal 2013, the agency completed 162 CCN-related application reviews and 98 rate-related application reviews. In fiscal 2014, it completed 186 CCN-related application reviews and 181 rate-related application reviews.

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 570 assignments for assistance to utilities were made through this contract in fiscal 2013, as were 591 assignments in fiscal 2014.

In addition to contractor assistance, the TCEQ certifies utilities as regional providers. With this certification, utilities are eligible for tax-exempt status for system construction and improvements. More than 400 utilities had been certified as regional providers, as of August 2014.

After September 1, 2014, the TCEQ retained its jurisdiction over the creation of, and bond reviews for, water districts such as municipal utility districts, water control and improvement districts, and freshwater supply districts.

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 2013, the agency reviewed 417 water-district applications; in fiscal 2014, 415 water-district applications.

## Stormwater Permitting

The Texas Pollutant Discharge Elimination System (TPDES) was created in 1998 when the EPA transferred authority of the National Pollutant Discharge Elimination System for water quality permits in the state to Texas. This included stormwater permits.

As the permitting authority, the TCEQ has renewed the federal permits as they expired and developed new stormwater permits to conform to updated federal and state requirements. A permittee can obtain authorization for stormwater discharges through an individual or general permit.

The TCEQ receives thousands of applications a year for coverage under TPDES stormwater general permits. To handle the growing workload, the agency has incrementally introduced online applications for some of these permitting and reporting functions. The agency has also outsourced the management of incoming paper notices of intent (NOIs), notices of termination (NOTs), and no-exposure certifications (NECs) for some of these general permits.

Stormwater permits are issued under the categories of industrial, construction, and municipal.

### Industry

The multi-sector general permit regulates stormwater discharges from industrial facilities. The permit groups similar industrial activities into sectors, with requirements specific to each of 29 sectors.

Facilities 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 permit also contains limitations for certain discharges—specific pollutants and concentrations that cannot be exceeded. The TCEQ receives about 160 NOIs, NECs, and NOTs a month for industrial facilities. This general permit was renewed and amended in August 2011.

### Construction

The construction general permit was developed for stormwater runoff associated with construction activities, which includes clearing, grading, or excavating land at building projects such as homes, schools, roads, and businesses. The size of a construction project determines the level of regulation. Construction disturbing five or more acres is labeled a "large" activity, while construction disturbing one to five acres is termed "small."

Smaller projects are also regulated if they are a part of a larger common plan of development or sale covering more than one acre. Construction operators at large sites are required to apply for coverage under the general permit by filing an NOI. Operators at small sites must meet permit requirements, but are not required to submit an NOI. The TCEQ receives about 864 NOIs and 300 NOTs a month for large construction activities. This general permit was reissued in March 2013. After reissuance, the TCEQ received about 4,300 NOIs for renewal and 3,200 NOIs for new authorizations.

permit requires a regulated MS<sub>4</sub> operator to develop and implement a stormwater management plan that includes minimum requirements for public education, outreach and involvement; minimum control measures for illicit-discharge detection and elimination; control of construction stormwater runoff; post-construction stormwater management; and pollution prevention and good housekeeping. In addition, MS<sub>4</sub>s serving a population of more than 100,000 need to address industrial sources. After reissuance of the permit, about 680 NOIs (new authorizations and renewals) and 60 applications for waivers were received.

### Stormwater Permits

	Number Affected (issued)		Applications Received (mo. ave.)		Applications Received (total)	
	Fiscal 2013	Fiscal 2014	Fiscal 2013	Fiscal 2014	Fiscal 2013	Fiscal 2014
Industrial (facilities) <sup>a</sup>	1,637	1,323	134	110	1,611	1,318
Construction (large sites) <sup>b</sup>	12,272	7,577	1,012	636	12,144	7,635
MS <sub>4</sub> s (public entities) <sup>c</sup>	0	1	0	43	0	516

<sup>a</sup> Includes No Exposure Certifications (NECs).

<sup>b</sup> The Construction General Permit numbers reflect the permit renewal that was conducted in fiscal 2013.

<sup>c</sup> The Phase II Municipal Separate Storm Sewer System (MS<sub>4</sub>) General Permit was renewed in December 2013. The renewal period ended on June 11, 2014. Applications received from January–August 2014 and will be issued in fiscal 2015. This includes waivers that were submitted.

### Municipal

The TCEQ also regulates discharges from municipal separate storm-sewer systems (MS<sub>4</sub>s). This category applies to a citywide system of ditches, curbs, gutters, and storm sewers that collect runoff. It also includes other publicly owned systems, such as controls for drainage from state roadways.

The TCEQ is responsible for renewing previously issued individual federal permits for discharges from medium and large MS<sub>4</sub>s. These systems are operated by cities and other public authorities, such as the Texas Department of Transportation, in areas in which the 1990 U.S. Census showed a count of 100,000 people or more. Thirty-three municipalities and other public authorities fall into this category. The TCEQ has issued 26 individual MS<sub>4</sub> permits to medium and large MS<sub>4</sub>s. Some of these entities are permitted together under one permit.

The general permit regulating small MS<sub>4</sub>s located in urbanized areas was reissued in December 2013. The

### Water Availability

#### Drought Persists

Texas has experienced a historical drought in recent years, with the drought of 2011 being a record breaker. By mid-2014, almost 45 percent of the state remained in severe, extreme, or exceptional drought.

As the state agency charged with managing surface water rights, the TCEQ carries out this responsibility primarily through issuing and enforcing water-right permits. Among permitted water-right holders, the permit holders that got their authorization first (senior water rights) are entitled to receive their water before water-right holders that got their authorization later (junior water rights). Water-right holders not getting their entitled water can call on the TCEQ to enforce the priority doctrine—a priority call.

In recent years, the TCEQ has received multiple priority calls on surface water from municipal, industrial, irrigation,

and domestic and livestock users in the Brazos, Guadalupe, Colorado, Sabine, and Neches river basins. These priority calls have resulted in the suspension or curtailment of more than 1,000 water rights. When drought conditions abated, these priority calls were rescinded and suspensions lifted, allowing junior water-right holders the opportunity to use and store water.

During times of drought, TCEQ field personnel enforce curtailments through ground-level and aerial investigations. They also conduct streamflow monitoring to aid agency decisions regarding curtailments and management of priority calls.

### Agency Response

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

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

The TCEQ has conducted a number of outreach and assistance activities—specifically targeting public water systems—to help prevent systems from running out of water. The agency also contacted public water suppliers to urge implementation of drought contingency plans. Personnel offered assistance to any public water systems experiencing critical conditions (see Chapter One, “Drought Fosters New Approaches”).

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

Since 2011, the TCEQ has given technical assistance to more than 100 public water systems by expediting reviews for plans and specifications for drilling additional wells, moving surface water intakes to deeper waters, and finding interconnections with adjacent water systems without compromising the drinking-water quality and capacity

needs for other systems. Technical assistance is prioritized for at-risk drought-affected public water systems seeking alternative water sources and regional water planning through interconnections with other systems.

In addition, since 2011 the TCEQ has performed an estimated 250 drought-related emergency reviews for plans and specifications and exceptions to TCEQ rules.

As of August 2014, 788 public water systems in Texas had activated mandatory water restrictions, while another 391 relied on voluntary measures to cut back on water use. For the complete list, see <[www.tceq.texas.gov/goto/pws-restrictions](http://www.tceq.texas.gov/goto/pws-restrictions)>.

### Alternative Treatment

As drought conditions around the state persisted into the spring and summer of 2014, public water systems reported to the TCEQ when their mandatory water restrictions were implemented.

In the search to find alternate water sources, desalination has been gaining attention as some communities seek to treat saline groundwater to make it potable. In response, the TCEQ took action to streamline the approval process for these facilities. In 2013, the agency implemented a process that allows the use of computer modeling as an alternative to on-site pilot studies for the approval of groundwater desalination systems.

The agency also initiated rulemaking to streamline construction approval for public water systems asking to conduct brackish-water desalination.

In addition, the TCEQ began reviewing a number of innovative water-supply projects. Ongoing drought conditions have required some public water systems to explore one strategy not previously considered—using raw water sources. One alternative involves not just reclaiming effluent from municipal wastewater treatment plants for non-potable uses such as irrigation and industry, but also additional treatment to remove chemical and microbiological contaminants found in effluent. With this process, the treated water becomes safe for human consumption.

### Water Rights

Water flowing in Texas creeks, rivers, lakes, and bays is state water. The right to use water may be acquired through appropriation via the permitting processes established in state law. Permit applications for new water are reviewed by the TCEQ for administrative and technical requirements related to conservation, water availability, and the environment.

In fiscal 2013 and 2014, the agency processed a total of 702 water-rights actions, including new permits and amendments, water-supply contracts, and ownership transfers. In addition, the TCEQ engaged in extensive outreach efforts to help water-right holders remain in compliance with water-use reporting requirements mandated by statute.

Because of limited water availability, some cities, governments, businesses, and individuals have begun turning to indirect reuse or groundwater as a source of supply. With indirect reuse or groundwater, an authority or individual may discharge effluent or groundwater into a stream, subsequently divert the effluent or groundwater, and use (or reuse) it for irrigation or some other purpose. These types of projects require a bed-and-banks permit. A total of eight indirect reuse authorizations were issued in fiscal 2013 and 2014.

### *Environmental Flows*

In 2007, the Legislature passed two landmark measures relating to the development, management, and preservation of water resources, including the protection of in-stream flows and freshwater inflows. House Bill 3 and Senate Bill 3 changed the process by which the state would decide the flow that needs to be preserved in the watercourse for the environment, requiring the consideration of both environmental and other public interests. This change required the TCEQ to adopt rules for environmental-flow standards for Texas' rivers and bays.

Adoption of the third and final 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.

### *Texas Instream Flow Program*

The Texas Instream Flow Program, established in 2001, is a cooperative effort by the TCEQ, Texas Water Development Board, and Texas Parks and Wildlife Department to perform scientific studies to determine flow conditions necessary for supporting a sound ecological environment in river basins.

Texas Instream Flow Program studies are ongoing in the San Antonio, Brazos, Trinity, and Guadalupe river basins, and are scheduled to be completed by the end of 2016.

## **Groundwater Management**

The TCEQ is responsible for delineating and designating priority groundwater management areas and creating groundwater conservation districts in response to landowner petitions or through the PGMA creation process.

In 2015, the TCEQ and the Texas Water Development Board will submit a joint legislative report that details fiscal 2013–14 activities relating to priority groundwater management areas and the creation and operation of groundwater conservation districts.

Groundwater conservation districts are the state's preferred method of groundwater management. Each district is governed by a locally selected board of directors. Under the Texas Water Code, GCDs are authorized and required to permit water wells, develop a management plan, and adopt rules to implement the management plan.

By quantifying and evaluating the groundwater resource on an ongoing basis, GCDs help groundwater users understand the aquifer located in their area, the combined demands on the aquifer, and the need for conservation of the aquifer. A GCD uses aquifer data and public input to develop a plan to manage and conserve groundwater resources. A locally developed management plan outlines goals to conserve and protect the groundwater resources within the aquifers. A GCD implements rules and programs to achieve the plan's goals through monitoring, registration and permitting, and educational outreach.

A GCD management plan and the "desired future conditions" for a groundwater management area must be readopted and approved at least once every five years. The state's GCDs have completed the first round of groundwater management area planning in order to adopt desired future conditions for their groundwater. The TWDB has sent the estimates of "modeled available groundwater" to the GCDs for their next management plans and to the regional water planning groups for their 2016 plans.

The TCEQ actively monitors and ensures GCD compliance to meet management-plan adoption and readoption requirements. The agency also takes action in the following instances:

- when the State Auditor's Office determines that a GCD is not operational in achieving the objectives of its management plan, or
- in response to a petition from an affected party requesting an inquiry into the management-plan implementation actions of a GCD.

## 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 staff is directed to report its 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. Several basins are to be evaluated each calendar year and findings presented to the commission. The first year of evaluation, conducted in 2012, included the Brazos and Colorado River basins, along with the Brazos-Colorado and Colorado-Lavaca coastal basins.

In 2013, evaluations were conducted for the Trinity and San Jacinto river basins and the Trinity–San Jacinto and San Jacinto–Brazos coastal basins. For 2014, the third evaluation year, the TCEQ evaluated the Sabine and Neches river basins and the Neches-Trinity coastal basin.

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

## Brazos Watermaster

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

The petitioner's request was referred to the State Office of Administrative Hearings, and the final order establishing the watermaster position was approved. After hosting a series of public meetings and setting up an advisory committee, the agency expects the Brazos River Watermaster program to be fully established by early fiscal 2016.

## 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 language 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 that were crafted to ensure that sufficient water was provided to the Rio Grande Project.

### 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 by 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 in New Mexico and El Paso County Water Improvement District No. 1 in Texas. The latter supplies the city of El Paso with about half of its water.

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

But significant compliance issues continue regarding New Mexico's water use associated with the Rio Grande Compact. In 2011, New Mexico took action in federal district court to invalidate the 2008 operating agreement. In response to the lawsuit and in coordination with the Legislative Budget Board and the Attorney General's Office, the TCEQ 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 factual information to support its position, evidence grows that New Mexico's actions have significantly affected, and will continue to affect, water deliveries to Texas. As of August 2014, all parties were awaiting further procedural rulings from the Supreme Court.

(Update: On Nov. 3, 2014, the Supreme Court appointed a special master in this case with authority to fix the time and conditions for the filing of additional pleadings, to direct subsequent proceedings, to summon witnesses, to issue subpoenas, and to take such evidence as may be introduced. The special master was also directed to submit Reports to the Supreme Court as he may deem appropriate.

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

### *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 Rio Grande basin below Fort Quitman.

Mexico continues to under-deliver water to the United States under the 1944 Treaty. Mexico does not treat the United States as a water user and only relies on significant rainfalls to make deliveries of water to north of the border. This stands in contrast to the manner in which the United States treats Mexico in regards to the Colorado River. In fact, the United States has always provided 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.

## **Waste Management**

### **Disposal of Low-Level Radioactive Waste**

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

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

After the TCEQ authorized commencement of operations at the Compact Waste Disposal Facility portion of the disposal site, the facility received its first waste shipment for disposal in April 2012. The TCEQ then authorized operations to begin at the Federal Waste Disposal Facility portion of the site, and the facility received its first waste shipment for disposal in June 2013. Since operations began at both sites, more than 104,000 cubic feet of waste had been safely disposed of, and \$16.4 million

in disposal and processing fees had been collected as revenue for the state through fiscal 2014.

Texas' LLRW is produced predominantly by nuclear utilities, academic and medical research institutions, hospitals, industry, and the military. LLRW typically consists of radioactively contaminated trash, such as paper, rags, plastic, glassware, syringes, protective clothing (gloves, coveralls), cardboard, packaging material, organic material, spent pharmaceuticals, used (decayed) sealed radioactive sources, and water-treatment residues. Nuclear power plants contribute the largest portion of LLRW in the form of contaminated ion-exchange resins and filters, tools, clothing, and irradiated metals and other hardware. LLRW does not include waste from nuclear-weapons manufacturing or from U.S. Navy nuclear propulsion systems.

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

### Disposal of Radioactive By-Product Material

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

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

## Underground Injection Control of Mining Wastes

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

Each uranium mining site has one or more permitted Class I UIC wells for disposal of excess water produced from *in situ* mining and uranium recovery, as well as groundwater produced in restoration of mined aquifers.

Texas has seven uranium mining projects and two uranium processing facilities with on-site permitted Class I UIC wells. All are in South Texas.

### Uranium Production

Most uranium is produced in Texas through the *in situ* leach process. Uranium is leached directly out of a

uranium-bearing formation underground and pumped in solution to the surface for processing. The conventional method for uranium production, used in the past, created leftover by-product waste disposal impoundments.

In the last two years, the TCEQ has successfully confirmed the cleanup and closure of five individual uranium production areas and released them for unrestricted use, with the concurrence of the U.S. Nuclear Regulatory Commission.

## 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 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 dealing with contaminated sites. The TCEQ uses state funds for cleanup operations at sites on 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 extent and nature 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.

Projects entering the Superfund program are prioritized by risk. Locating the responsible parties and resolving legal matters, such as access to the site, consumes time and resources. It can take several years for sites to be fully investigated and cleaned up, though the TCEQ will expedite its response when necessary.

In fiscal 2013, Texas had a total of 112 sites in the state and federal Superfund programs. Remedial action was completed at one National Priorities List site, which was located in Bowie County.

In fiscal 2014, one new site in Brazoria County was proposed for the Texas Superfund Registry, for a total of

113 sites. Remedial actions were completed at three Texas Superfund Registry sites, located in Brazoria, Nueces, and Tom Green counties.

## 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 26,932 leaking PST sites—primarily at gasoline stations.

By the end of fiscal 2014, cleanup had been completed at 25,332 sites, and corrective action was under way at 1,600 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 2,506 applicants and has issued 1,942 certificates of completion for residential, commercial, and industrial properties.

In the last two years, the program received 157 applications and issued 169 certificates. Recipients of the certificates report that the release of liability helps with property sales, including land transactions that would not have otherwise occurred due to concerns about environmental liability. As a result, many underused or unused properties may be restored to economically beneficial or community use.

Recent sites successfully addressed under the Texas VCP range from city-owned properties being developed into beneficial community use, such as the downtown Austin public library now under construction, to mixed-use residential and commercial developments, such as the 136-acre redevelopment of a former manufacturing facility in Houston.

The key benefit 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 95 certificates.

## Dry Cleaners

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

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

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

In fiscal 2013, there was a total of 3,171 dry cleaner registrations and more than \$3.3 million in invoiced fees; in fiscal 2014, a total of 3,144 registrations and almost \$3.26 million in invoiced fees.

## Industrial and Hazardous Waste Management

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

The TCEQ reviews and approves plans, evaluates complex analytical data, and writes new and modified Industrial and Hazardous Waste (I&HW) permits. Texas has 192 permitted industrial and hazardous waste treatment, storage, and disposal facilities.

During fiscal 2013 and 2014, the TCEQ issued 35 I&HW permit renewals and performed approximately 1,100 industrial waste stream audits.

## Municipal Solid-Waste Management

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

In fiscal 2013 (the most recent data available), the total disposal in the state’s 197 active municipal solid-waste landfills was about 30.6 million tons, representing a reduction of 6.1 percent from fiscal 2011. Per capita, the rate of landfill disposal was about 6.3 pounds per day in fiscal 2013.

By the end of fiscal 2013, overall municipal solid-waste capacity stood at about 1.9 billion tons, representing about 62 years of disposal capacity. That was a net increase of about 50 million tons, or roughly 150 million cubic yards, compared with fiscal 2011 capacity. More populous areas have seen a trend toward regional landfills serving larger areas, while less populous areas in West Texas continue to be served by small arid exempt landfills (accepting less than 40 tons per day), which are operated by municipalities.

To assist regional and local solid-waste planning initiatives, such as addressing adequate landfill capacity, the TCEQ provides solid waste planning grants to each

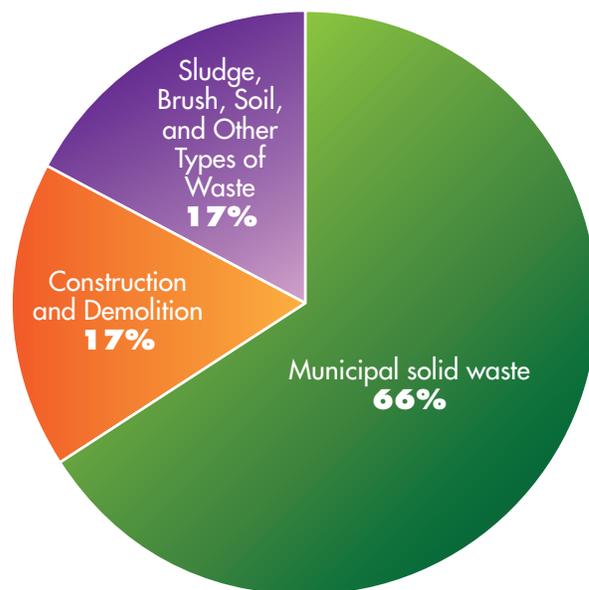
of the 24 regional councils of governments (COGs). The planning initiatives are based on goals specified in each COG’s regional solid-waste management plan.

For the 2012–13 grant period, the COGs received about \$10.9 million. Pass-through projects included collection stations in underserved areas, illegal-dumpsite clean-ups, and education and outreach projects.

The *Regional Councils of Governments and the Municipal Solid Waste Grant Program, FY 2012–2013: Report to the Texas Legislature* details the regional solid waste grant activities from that two-year period (<[www.txregionalcouncil.org/documents/impacts&results.pdf](http://www.txregionalcouncil.org/documents/impacts&results.pdf)>). The report, published by the Texas Association of Regional Councils, includes data collected by the TCEQ from the 24 COGs.

### Municipal Solid Waste

Texas had 197 active municipal solid-waste landfills in fiscal 2013. Municipal solid waste reached about 30.6 million tons.



Note: After the TCEQ’s Biennial Report for fiscal 2009–10, the categories of “residential” and “commercial” were merged into the category of “municipal.”

## Environmental Assistance

### Voluntary Programs

The TCEQ uses technical assistance, education, and pollution prevention programs to encourage environmental

improvements. The Environmental Assistance Division steers many of these programs in a direction that better focuses on agency priorities and aligns more closely with agency regulatory systems.

The renamed EAD was known as the Small Business and Environmental Assistance Division until the end of fiscal 2014.

In fiscal 2013 and 2014, the division responded to a total of 10,652 requests for assistance from small businesses and local governments. Of those, 479 received one-on-one assistance at their business site or facility.

Also, more than 340 small businesses and local governments took advantage of the Compliance Commitment Program. This program allows participants to undergo a site visit, during which a consultant contracted by the TCEQ uses a checklist to identify environmental compliance problems. After the visit, the businesses and facilities receive recommended actions they can take to resolve those problems. They must correct deficiencies within six months to be eligible for a compliance-commitment certificate.

Thirty-six percent of Compliance Commitment Program participants achieved full environmental compliance with the applicable industry checklist. Upon successful completion of the program, businesses receive a certificate and an exemption of up to two years from routine investigations by the agency and partners, such as the EPA and local environmental-enforcement authorities.

Moreover, the program allows small businesses and local governments to achieve compliance voluntarily and confidentially—without fear of enforcement. Site visits do not lead to an investigation or citation, unless there is an imminent threat to human health or the environment. Many times, participants find they save money by improving the efficiency of their processes and reducing paperwork.

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

Workshops on making the best use the guide were held in five cities, educating representatives from more than 100 water systems. Workshop locations included Amarillo, Conroe, Nacogdoches, New Braunfels, and Tyler. Additional workshops were planned along Texas' southern border in the fall of 2014.

The TCEQ also offers educational opportunities and technical assistance through coordinated workshops, seminars, and education events, including the annual Trade Fair and Conference held in downtown Austin. During the last two years, the agency sponsored 16 seminars to provide technical information to almost 13,000 attendees.

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

All together, these efforts resulted in reductions of hazardous waste by more than 683,000 tons and toxic chemicals by about 84,000 tons during fiscal 2013–14.

## 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.

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](http://www.renewtx.org)>, these participants can list and promote information on opportunities for exchanging at national and regional levels.

In fiscal 2013 and 2014, 106 users signed up to use RENEW, and 261 new listings were posted.

# Legislation from the 83rd Session

**D**uring the regular legislative session in 2013, state lawmakers considered 774 bills that had the potential to affect the programs and activities of the Texas Commission on Environmental Quality.

Of those, about 114 bills were passed and became law. These measures required the agency to make rules, revise guidance documents, change operations or procedures, or take administrative actions.

In contrast to gaining new legislative duties, the TCEQ actually had to shed a few programs related to water utilities. Those programs and staff personnel shifted to the Public Utility Commission of Texas.

This chapter summarizes some of the key legislation resulting from the 83rd Legislature.

## **SB 1727** **Revisions to the Texas Emissions Reduction Plan**

Since its creation in 2001, the Texas Emissions Reduction Plan has distributed financial incentives to reduce emissions of on-road and nonroad vehicles and equipment. TERP has also provided grants for developing new emissions control technology and for other research and development.

Senate Bill 1727 revised some of the criteria for existing incentive programs and established new programs under TERP. The law also revised some funding-allocation formulas.

TERP grant applications are accepted at different times throughout the year, depending on available funds. For an overview of the various programs, see "Major Incentive Programs" in Chapter Two.

*Existing TERP programs:*

- **Diesel Emissions Reduction Incentive Program**

The DERI Program provides grants for replacement or upgrades of on-road and nonroad heavy-duty vehicles, equipment, and engines to reduce emissions of nitrogen oxides in areas designated as

nonattainment for federal air quality standards, as well as in other designated counties where air quality is a concern. SB 1727 removed the statutory limit on the maximum amount of grant funds that may be awarded per ton of NO<sub>x</sub> reduced by a grant-funded project. The TCEQ may establish cost-effectiveness requirements for each grant round, as determined appropriate to best meet the program goals. Also the TCEQ may now fund projects to convert on-road and nonroad diesel engines to a dual-fuel configuration using diesel and natural gas.

- **Texas Clean Fleet Program**

The TCFP issues grants for replacement of larger fleets of medium-duty and heavy-duty diesel vehicles with vehicles powered by alternative fuels and hybrid vehicles. Changes to this program simplified the requirements on the percentage of costs that may be covered by a grant. Also the TCEQ may allow trucks (used in the transport of raw agricultural products) that are replaced under this program to operate a lesser percentage of annual mileage in designated counties than is required for other projects.

- **Texas Natural Gas Vehicle Grant Program**

The TNGVGP provides grants for the replacement or repower of heavy-duty vehicles with vehicles powered by compressed or liquefied natural gas. The areas of the state eligible for operation of vehicles funded under the TNGVGP were expanded as a result of revisions to the areas designated as part of the Clean Transportation Triangle. Under these changes, the TCEQ may allow trucks (used in the transport of raw agricultural products) that are replaced under this program to operate a lesser percentage of annual mileage in designated counties than is required for other projects.

- **Clean Transportation Triangle Program**

The CTT Program issues grants for infrastructure to support natural gas fueling in designated areas.

SB 1727 expanded the areas eligible under the CTT. The original areas included nonattainment areas and counties along the Interstate highways connecting Houston, Dallas, Fort Worth, and San Antonio. The expanded areas include other counties designated as affected counties under the DERI Program and the counties located within the triangular area formed by the previously designated Interstate highways. The maximum grant amount was raised to \$600,000.

- **Alternative Fueling Facilities Program**

The AFFP issues grants in nonattainment areas for infrastructure to support the use of a range of alternative fuels, including natural gas, liquefied petroleum gas, biodiesel, hydrogen, methanol (85 percent by volume), and electricity. The maximum grant amount was raised to \$600,000.

*New TERP programs:*

- **Light-Duty Motor Vehicle Purchase or Lease Incentive (LDPLI) Program**

The LDPLI was established in 2001 to provide rebates for the purchase or lease of a light-duty vehicle that met certain low-emission standards. However, funding was not fully established, so the program was never implemented. SB 1727 transferred implementation of LDPLI from the Comptroller of Public Accounts to the TCEQ. The law changed program criteria to provide grants up to \$2,500 for the purchase or lease of light-duty vehicles powered by compressed natural gas, liquefied petroleum gas, or electricity (including plug-in hybrid-electric vehicles). LDPLI is available statewide, and applications are being accepted on a first-come, first-served basis until June 26, 2015 (on purchases made on or after May 13, 2014).

- **Drayage Truck Incentive Program**

The DTIP was created to provide grants for replacement of drayage trucks operating at seaports and rail yards located in nonattainment areas. The vehicle being replaced must have an engine with a model year before 2007; the new vehicle must have an engine with a model year of 2010 or later.

In fiscal 2014, the commission adopted new and revised rules to implement all of these changes. Information on the various programs, as well as maps of the eligible areas, is available at <[www.terpgrants.org](http://www.terpgrants.org)>.

## **HB 788** **Permitting Greenhouse Gases**

The Legislature granted the TCEQ the authority to formulate rules authorizing major sources of emissions of greenhouse gases, in accordance with federal law. House Bill 788 also authorized the agency to impose fees for such emissions to cover the costs of including emissions of greenhouse gases in existing permitting programs.

Greenhouse gases, as described in HB 788, include carbon dioxide, methane, nitrous oxide, and certain other chemicals. The Environmental Protection Agency began regulating greenhouse gases in 2010.

The TCEQ conducted rulemaking to include emissions of greenhouse gases in the Federal Operating Permits program (also known as Title V) and the Prevention of Significant Deterioration (PSD) portion of the New Source Review permitting program. The rules took effect in April 2014. That same month, the agency submitted revisions to the State Implementation Plan to the EPA.

In June 2014, the U.S. Supreme Court issued an opinion that affected federal greenhouse gas permitting authority. Soon after, the TCEQ began evaluating the opinion rendered in *Utility Air Regulatory Group v. Environmental Protection Agency*.

HB 788 directs the TCEQ to repeal rules regulating greenhouse gases if authorization were to no longer be required under federal law. Once the full effect of the Supreme Court opinion has been determined, the TCEQ will conduct the appropriate rulemaking.

Updates on greenhouse gas permitting can be found at <[www.tceq.texas.gov/goto/ghg](http://www.tceq.texas.gov/goto/ghg)>.

## **HB 1600** **Transfer of Water and Wastewater Utility Regulation to the PUC**

When the Legislature approved the sunset bill for the Public Utility Commission, extending the agency for another 10 years, it also assigned the PUC some new responsibilities.

On September 1, 2014, the TCEQ transferred its programs for regulating water and wastewater rates and certificates of convenience and necessity to the PUC. With those programs, the TCEQ also sent 20 full-time employee positions and authorized a cash transfer of approximately \$1.6 million to the PUC, mostly to support costs associated with those positions in fiscal 2015.

Meanwhile, the TCEQ continues to regulate public drinking-water systems, wastewater systems, and water districts to ensure safe drinking water and environmental protection.

The PUC inherited the powers, duties, functions, programs, and activities relating to the utility regulation of water and sewer service, including the issuance and transfer of certificates of convenience and necessity, the determination of rates, and the administration of hearings and proceedings involving those matters. Rulemaking will be required by the TCEQ to delete most of Title 30, Texas Administrative Code, Chapter 291, which applies to the now-transferred jurisdiction of water and wastewater utilities. For its part, the PUC adopted rules to enable the migration of substantive rules regulating water and sewer utilities from the TCEQ. All related pending applications, orders, and other matters were transferred to the PUC.

Additionally, all pending cases at the State Office of Administrative Hearings that related to the transfer were moved to the PUC. Likewise, all pending lawsuits against the TCEQ involving appeals of TCEQ decisions affected by the transfer became the PUC's responsibility. The TCEQ agreed to cooperate with the PUC and the Attorney General in working on appeals of TCEQ decisions.

## Inter-Agency Work Group

House Bill 1600 required the TCEQ and the PUC to enter into a memorandum of understanding to identify in detail the powers and duties to be transferred and to establish a plan to execute the transfer.

Cooperation between the two state agencies involved sharing relevant information and supporting each agency's functions under these areas:

- meeting federal drinking water standards
- maintaining adequate supplies of water
- meeting established design criteria for wastewater-treatment plants
- demonstrating the economic feasibility of regionalization
- serving the needs of economically distressed areas

In preparation for the transfer, TCEQ personnel documented extensive business and information-technology processes and other processes affected by the move of the utilities and rates programs, including functions related to public water systems, water quality, and districts that remain with the TCEQ but are affected by the transfer. The TCEQ gave the PUC an inventory, including volume

and media type, of records associated with transferred programs in the TCEQ's Central File Room and archived at the State Library. All records associated with the transferred programs became records of the PUC. All other TCEQ records remain with the TCEQ.

The TCEQ and PUC each updated agency Web pages to supply information about the program changes, and coordinated comments and appearances at meetings and conferences attended by the regulated community and members of the public potentially affected by the transfer.

While the TCEQ had no contracts solely related to the programs transferred to the PUC, the agency does have a contract to assess and assist both public drinking water and wastewater systems in Texas to improve their financial, managerial, and technical capabilities (FMT). Contracting with skilled professionals, the TCEQ offers free FMT assistance to help public water and wastewater systems comply with regulations. The TCEQ and PUC entered into an inter-agency agreement regarding the wastewater and utility assessment and assistance portion of the current FMT contract. The PUC will provide FMT referrals to the TCEQ regarding wastewater and utility activities and will reimburse those activities and the TCEQ's proportional expenses for contract administration. The TCEQ will continue to directly manage the FMT contract and provide the contractor reports to the PUC. The inter-agency contract lasts for six months after the transfer effective date.

## Utilities and Persons Affected by the Transfer

- investor-owned utilities
- water supply corporations
- city- and county-owned utilities
- wastewater utilities
- anyone interested in the policies, rates, and operations of a public or private water utility in Texas

## Applications Affected by the Transfer

- applications for rate and tariff changes
- applications related to certificates of convenience and necessity

## **HB 2615** **Higher Penalties for Failing to Report Use of Surface Water**

When the TCEQ issues a water-right permit, the permit holder is required to submit an annual report on water use. The agency uses this information to help manage the state's water resources, which is especially critical during a drought.

House Bill 2615 applies to any water-right permit holder who fails to submit the required annual report by March 1 of each year or fails to comply with the TCEQ's request for data on water use after the deadline.

The executive director is authorized to establish deadlines for submitting monthly water-use data.

HB 2615 established a penalty of up to \$100 per day if a person holds a water-right permit of 5,000 acre feet or less per year, or \$500 per day if a person holds a water right for more than 5,000 acre feet per year.

The law also specifies instances in which water-right holders could seek exemptions to permit cancellation based on nonuse, including cases where adjustments or suspensions are made by the executive director and are due to drought conditions.

After the legislation became effective September 1, 2013, the TCEQ:

- Revised the agency website with HB 2615 requirements and penalty descriptions, including:
  - ◆ updated forms and instructions for reporting annual water use, and
  - ◆ an electronic reporting process capable of receiving e-mailed water-use data.
- Incorporated the revised penalty structure into its penalty policy.

## **General Appropriations Act, Rider 28** **Rio Grande Compact Commission**

In the legislative session, state lawmakers appropriated \$5 million for legal costs in the water dispute between Texas and New Mexico. The two states are involved in litigation over the equitable distribution of water from the Rio Grande Basin. The terms for dividing the water are contained in the Rio Grande Compact, signed in 1939 by Texas, New Mexico, and Colorado, and subsequently approved by Congress (see Chapter Two, "Rio Grande Compact").

**H**istorically, water apportioned under the Rio Grande Compact resulted in 57 percent of the water supply below the Elephant Butte Reservoir being delivered to New Mexico, and 43 percent being delivered across the New Mexico–Texas state line for Texas.

In January 2014, Texas asked the U.S. Supreme Court to enforce the interstate compact and require New Mexico to abide by the obligations set forth in the agreement to share water from the Rio Grande. Texas maintains New Mexico has breached its delivery obligation, saying the illegal diversions of water in New Mexico have ongoing harmful effects on the amount of water available for Texas. Moreover, the City of El Paso relies on the allocation for about half of its water supply.

The Supreme Court accepted the lawsuit, and New Mexico has filed a motion to dismiss. Texas filed a response to the motion and is awaiting a decision.

Legal and technical experts have been retained to ensure the protection of Texas' water supplies. The state expects to spend the \$5 million appropriation during the 2014–15 biennium.

## **SB 347** **Low-Level Radioactive Waste**

The TCEQ shares authority over most of the radioactive material in the state with the Department of State Health Services (DSHS). Before 2013, both agencies deposited certain fees collected from licensees into the Perpetual Care Account. The proceeds were to be used to mitigate abandoned radioactive materials or similar risks to public health.

Senate Bill 347 directed that the fees collected by the TCEQ go into a newly created Environmental Radiation and Perpetual Care Account. This fund will be used to support the Texas Low-Level Radioactive Waste Disposal Compact Commission, which was created in 2011. The fund is also intended to mitigate immediate radiation risks

to public health and safety and the environment. The cap on both accounts was raised to \$100 million.

The law also required the TCEQ and the DSHS to update their memorandum of understanding in regard to each agency's role in the regulation and oversight of radioactive materials. SB 347 also imposed some requirements on the disposal in Texas of certain low-level radioactive waste from states outside of the Texas Compact.

In response, the TCEQ proposed rulemaking to memorialize the updated memorandum, which the DSHS ad-

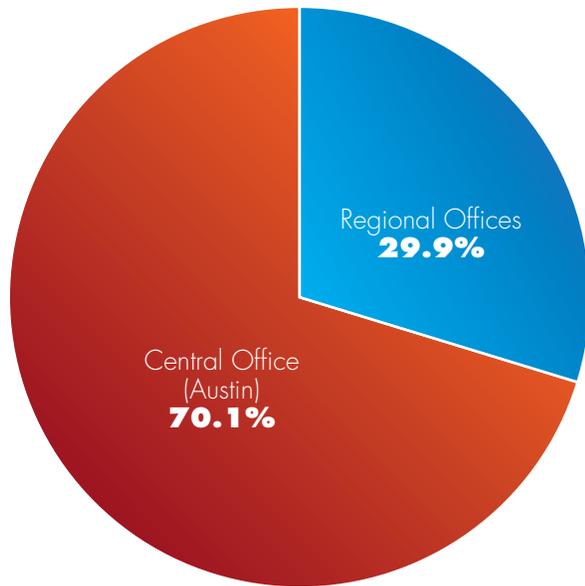
opted earlier in 2014. The rulemaking would also update references in agency rules to reflect the new Environmental Radiation and Perpetual Care Account, and it would implement new requirements on imported waste from non-party states accepted for disposal at the Texas Compact disposal site in Andrews County. The rulemaking should be concluded by summer of 2015.

For more information on low-level radioactive waste disposal in Texas, see "Waste Management" in Chapter Two.

# Agency Resources

The Texas Commission on Environmental Quality 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 three special-project offices.

**Locations of TCEQ Employees  
FY 2014**



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 \$349.1 million in fiscal 2013 and \$379.1 million in fiscal 2014. Most of the budget is supported from revenues collected from fees.

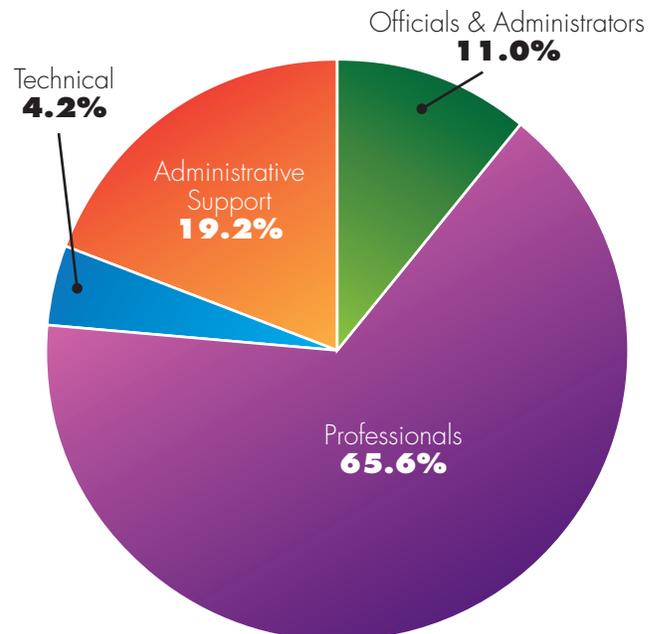
The TCEQ posts its quarterly expenditures online. The data is reported in broad categories, such as salaries, travel, utilities, and maintenance. The Web page also links to an expenditure database, called "Where the Money Goes," at the state comptroller's website. These online postings are in response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

## Workforce

### Size and Job Categories

The overall size of the TCEQ workforce remains fairly consistent. In fiscal 2013, the agency was authorized to have 2,761.2 full-time-equivalent (FTE) positions, and the

**Job Categories of TCEQ Workforce  
FY 2014**



average number of FTEs utilized was 2,613.61. In fiscal 2014, the authorized FTEs were 2,767.2; the TCEQ averaged 2,654.63 during that time.

The TCEQ staff is composed largely of professionals trained in science, technology, engineering, computer science, and related fields. In fiscal 2014, professionals represented 65.6 percent of the workforce; technical and administrative support staff made up 23.4 percent; and officials and administrators (managers) filled 11 percent of positions. This reflects almost no change in the distribution of job categories within the agency from fiscal 2012, with professionals up only 0.3 percent, technical and administrative support staff down 0.2 percent, and officials and administrators (managers) down 0.1 percent.

## Equal Employment

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

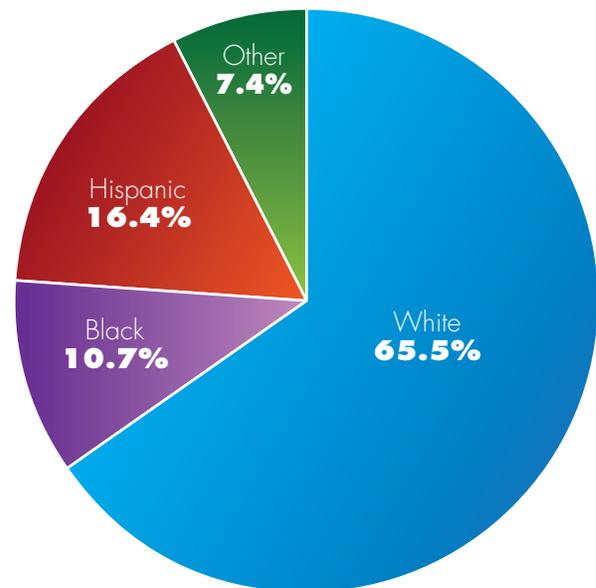
The agency is committed to recruiting, selecting, and retaining a multitalented, culturally diverse workforce that is representative of the state's available labor force. In accordance with the Texas Labor Code, Chapter 21, all employees are trained on equal-employment practices to make them aware of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

With regard to race and ethnicity, the agency's workforce composition in fiscal 2014 was 65.5 percent white, 10.7 percent black, 16.4 percent Hispanic, and 7.4 percent other (including Asian, Pacific Islander, American Indian, and Alaskan Native). With regard to gender, women continue to be in the majority at the TCEQ: female employees represented 52.1 percent; males, 47.9 percent.

## Ethnicity and Gender

Since 1999, the Legislature has required each state agency to analyze its workforce by ethnicity and gender. The TCEQ compares its workforce to the state civilian workforce using data provided by the Civil Rights Division of the Texas Workforce Commission. The TWC's report on equal-employment-opportunity hiring practices, which is published at the start of each legislative session, uses data sets based on the percentage of blacks, Hispanics, and females—by job category—within the civilian labor force in Texas.

## Ethnicities of TCEQ Workforce FY 2014



In fiscal 2014, the TCEQ exceeded the percentage of the available black labor force in the job category of administrative support by 7.7 percent. The agency's female workforce exceeded the available female labor force in top management (officials and administrators/managers) by 1.9 percent, as well as in administrative support, by 18.9 percent.

## Recruitment and Retention

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

In the coming years, TCEQ officials anticipate several challenges as the agency strives to fulfill its mission and goals. In fiscal 2014, staff turnover was 12.2 percent, a slight decrease (0.25 percent) from fiscal 2013. The

agency's turnover continues to fall below the overall average for full- and part-time classified employees at state agencies. The TCEQ will continue its efforts to attract and retain a qualified and diverse workforce.

## Finances

In fiscal 2013, the agency's approved operating budget was \$342.3 million. Of that, \$286.5 million was appropriated from general revenue-dedicated (GRD) fee revenue, \$42.2 million from federal funds, and \$5.7 million from general revenue. Other sources provided the remaining \$7.9 million.

In fiscal 2014, the approved operating budget totaled \$379.1 million. Of that, \$317 million was appropriated from dedicated fee revenue, \$41.3 million from federal funds, and \$11.5 million from general revenue. Other sources supplied the remaining \$9.3 million.

Pass-through funds accounted for 36 percent of the agency's operating budget in fiscal 2013 and 38 percent in fiscal 2014. Pass-through funds primarily support grants, remediation, and reimbursements for other agency programs, such as the Texas Emissions Reduction Plan (TERP), the Clean Rivers Program, Petroleum Storage Tank cleanups,

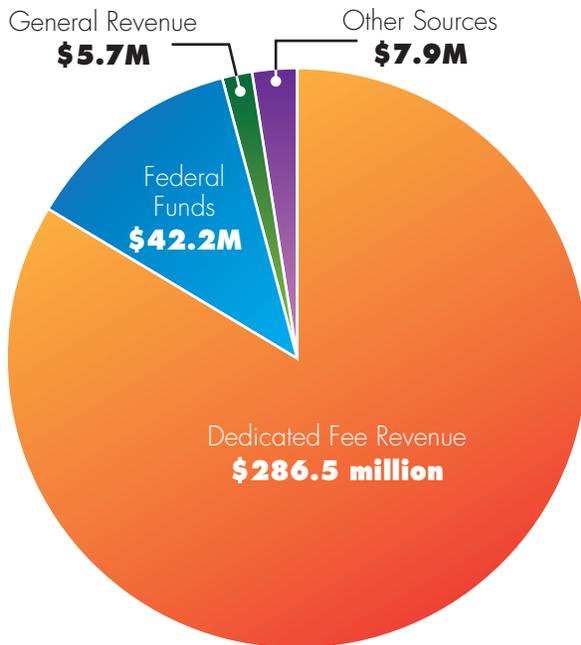
Superfund cleanups, and Municipal Solid Waste. The water and air programs also pass dollars on to local and regional units of government, but the amounts are not as significant.

Funds other than those passed through are devoted to day-to-day agency operations. Salaries accounted for 47 percent in fiscal 2013 and 43 percent in fiscal 2014. The remaining operating funds support professional services, supplies, utilities, rent, travel, training, and capital.

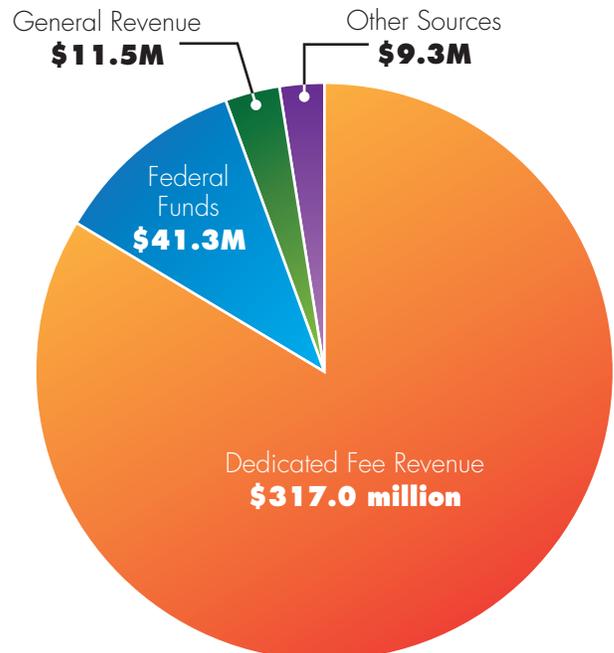
HB 1600 and SB 567 transferred the responsibility for regulating water and wastewater rates, services, and certificates of convenience and necessity from the TCEQ to the Public Utility Commission (PUC), effective Sept. 1, 2014. The bills appropriated the funding for the PUC's new responsibilities out of the Water Resource Management Account (0153). SB 567 allocated additional FTEs to the PUC to manage the water-rates program.

These bills increased the obligations of Account 0153, but did not increase revenue deposited to the account. Moreover, unlike other GRD accounts managed by the agency, this account does not have a strong fund balance. The revenue source used to fund the water-rates program is the Regulatory Assessment Fee, whose rate is set in Section 5.701(n) of the Texas Water Code. Any funding

**Fiscal Year 2013**



**Fiscal Year 2014**



shortfalls associated with the transfer to the PUC will have to be covered by other water fees.

## Fees

The TCEQ collects more than 100 separate fees. The fees listed below each generated revenue in excess of \$22 million a year:

- **Texas Emissions Reduction Plan** (\$203.2 million in fiscal 2013, \$217.5 million in fiscal 2014). Fees are assessed on the sale, registration, and inspection of vehicles. The TERP Account (5071) draws from five separate fees and surcharges, and a monthly transfer from the Texas Mobility Fund. Revenue sources for this account are collected by the Texas Department of Public Safety (DPS), the Texas Department of Motor Vehicles (TxDMV), and the Texas Comptroller of Public Accounts (CPA) on behalf of the TCEQ. In 2008, the TCEQ became the authorized manager of the account and has since handled the management and transfer of funds from the account. The programs supported by TERP funding are vital to implementing the State Implementation Plan.
- **Petroleum-product delivery fee** (\$22.4 million in fiscal 2013, \$24.2 million in fiscal 2014). The fee is assessed on the bulk delivery of petroleum products. The CPA collects and deposits to the Petroleum Storage Tank Remediation Account (0655) on behalf of the TCEQ.
- **Air emissions fee** (\$38.5 million in fiscal 2013, \$38.2 million in fiscal 2014). The fee is authorized to recover the costs of developing and administering the Title V Operating Permit Program. The fee revenue is deposited to the Operating Permit Fees Account (5094).
- **Solid-waste disposal fee** (\$35.5 million in fiscal 2013, \$29.4 million in fiscal 2014). The fee is assessed on the operators of municipal solid-waste facilities for the disposal of solid waste. The fee revenue was deposited 50-50 between the Waste Management Account (0549) and the Solid Waste Disposal Account (5000) until June 2013. In accordance with the fee change authorized in HB 7 of the 83rd legislative session, the fee revenue is now deposited 66.7 percent to Account 0549 and 33.3 percent to Account 5000.

Fee revenue deposited to Account 0549 is used to fund the TCEQ's municipal solid waste permitting,

enforcement, and site remediation programs. In fiscal 2013 and 2014, the agency reviewed 431 applications for new, modified, or amended municipal solid waste storage, treatment, and processing permits and registrations for recycling and disposal facilities. These reviews are conducted to ensure that proposed facilities meet design and operational requirements and are protective of human health and the environment.

In fiscal 2013 and 2014, the agency conducted over 2,700 municipal solid waste investigations and issued 68 municipal solid waste administrative orders. A pilot site remediation project, initiated in fiscal 2014, aimed to clean up an unauthorized solid-waste dump in a residential area of Bee County. An estimated 4,500 tires were collected and properly disposed of during the first phase of the project.

The agency also conducted other waste-related activities, including technical compliance assistance, educational outreach, and the implementation of product take-back programs. In fiscal 2013 and 2014, the agency responded to 617 requests for technical assistance. The agency provided educational outreach at conferences and meetings across the state, and has developed over 20 publications for all ages that promote the message of waste reduction, recycling, and the conservation of natural resources.

To date, the agency's electronics recycling programs combined have resulted in the recycling or reuse of over 100 million pounds of electronics. These programs, funded in part by solid waste fee revenue, are key components of the agency's strategy to enhance the state's solid waste management program. The fee revenue deposited to Account 5000 is used to administer a municipal solid waste planning grant program. The planning grants are provided to councils of governments around the state, which administer the program.

- **Auto-emission inspection, on-board diagnostic fee** (\$43.3 million in fiscal 2013, \$42.8 million in fiscal 2014). The fee provides funding for the Low-Income Repair Assistance Program (LIRAP) for counties that have opted into the program. The fee is currently collected by the DPS and deposited to the Clean Air Account (0151). Beginning March 1, 2015, the state will convert to a single sticker for both inspection and registration. The collection of the fee will be transferred from the DPS to the TxDMV.

- **Motor-vehicle safety-inspection fee** (\$35.9 million in fiscal 2013, \$38.9 million in fiscal 2014). The fee is assessed per vehicle on the sale of state safety-inspection stickers at inspection stations, auto dealers, and other service providers. The fee is collected by the DPS and deposited to the Clean Air Account (0151). Beginning March 1, 2015, the state will transfer to a single sticker for both inspection and registration. The collection of the fee will be transferred from the DPS to the TxDMV. The combined sticker fee will be due upon registering the vehicle.
- **Consolidated water quality fee** (\$22.6 million in fiscal 2013, \$25.1 million in fiscal 2014). The fee is assessed against each permit authorizing the treatment and/or discharge of wastewater issued under the Texas Water Code, Chapter 26. The fee is calculated based on several factors, including flow volume and type, traditional pollutants, toxicity, and facility designation as major or minor.

## Fee Revisions

As a result of state legislation passed in 2013, a number of changes were made to the TCEQ's fees and funding structure, including the following:

- HB 7 required any interest earned from deposits in the state treasury that were authorized for certification to be allocated for general governmental purposes. This provision affected the Clean Air, TERP, and Hazardous and Solid Waste Remediation accounts. The bill also reduced the solid-waste disposal fee by 25 percent. It requires the agency to deposit 66.7 percent of the collected revenue to support the agency's solid-waste permitting and enforcement programs. The remaining 33.3 percent is dedicated to local regional solid-waste programs. Although the fee was reduced, the agency is able to completely fund the solid-waste permitting program.
- HB 2305 eliminates the current system of separate inspection and registration stickers, and replaces it with a single sticker for both inspection and registration. It also transfers the collection of inspection fee revenue from the DPS to the TxDMV. This revenue is used to fund the Drive a Clean Machine program and other air programs.
- SB 347 required the fee assessed to support the Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDCC) to be deposited to the Low-Level Radioactive Waste Account (0088). It also required the TCEQ to transfer the full appropriation amount to the TLLRWDCC at the beginning of the fiscal year. The bill increased the curie capacity for non-party waste, increasing revenue collections from the 20 percent surcharge on non-party waste. The bill also required the TCEQ and the Texas Department of State Health Services to collect a 5 percent fee on licensees and deposit the fees into their respective perpetual care accounts. Further, the bill repealed the \$500,000 cap on the fee and sets a new cap of \$100 million for the combined Radiation and Perpetual Care and Environmental Radiation and Perpetual Care accounts. Once the cap is reached, the fee is suspended and not collected until the balance is \$50 million or less.
- SB 1756 authorized the TCEQ to establish a surcharge on the standard air permit application fee for an expedited review process. The surcharge should cover all expenses related to expediting the permit review process, including overtime, contract labor, and other associated costs.

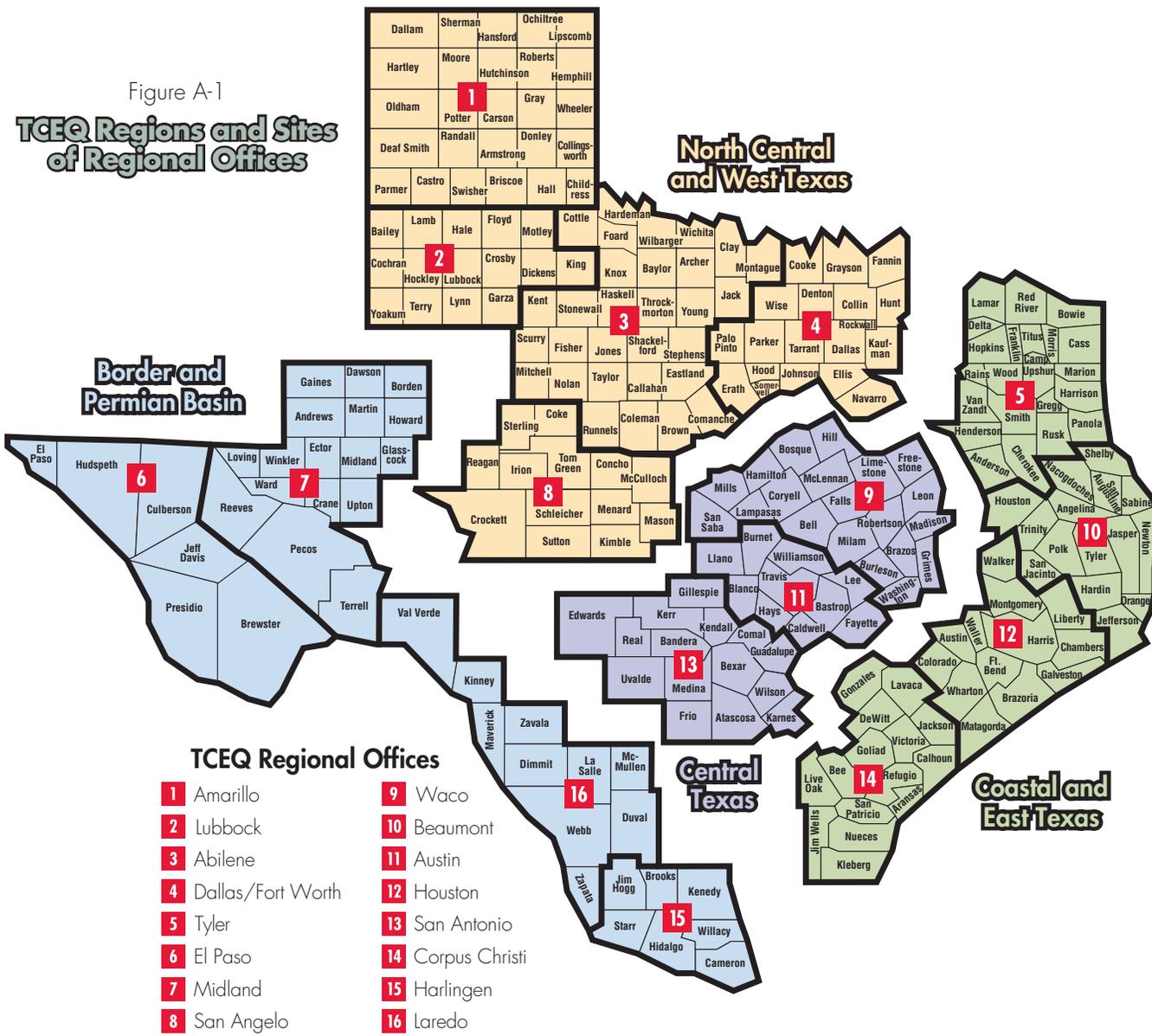
A P P E N D I X A

# 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, e-mail, or letter, and then forwarded to one of its 16 regional offices for response. The agency maintains a 24-hour toll-free hotline (888-777-3186) for receiving such calls.

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 an environmental complaint is received by the Office of Compliance and Enforcement, the data related to the initial complaint is recorded in the Consolidated Compliance and Enforcement Data System (CCEDS). If an investigation

is warranted, regional managers assign the complaint to an investigator, who is responsible for investigating the complaint and entering all resulting data into the CCEDS. Management reviews, approves, and closes the investigation and a record is entered directly into the data system.

All of the data summarized in this chapter was extracted from the CCEDS. This report reflects activity that occurred in the agency’s 16 regions and at the Central Office during fiscal 2013 (Sept. 1, 2012, through Aug. 31, 2013) and fiscal 2014 (Sept. 1, 2013, through Aug. 31, 2014). The data is presented in a series of charts (figures A-2 to A-9).

## Complaints by Region

In fiscal 2013, the TCEQ regions received a total of 6,088 complaints; in fiscal 2014, the total was 6,887. Figures A-2 and A-3 show the complaints received annually.

The data show that the number of complaints received varies generally according to regional population. For example, 41 percent of all the complaints were received from the two largest metropolitan areas, Dallas–Fort Worth and Houston (23 percent and 18 percent, respectively).

Figure A-2

### Complaints by Region, FY 2013

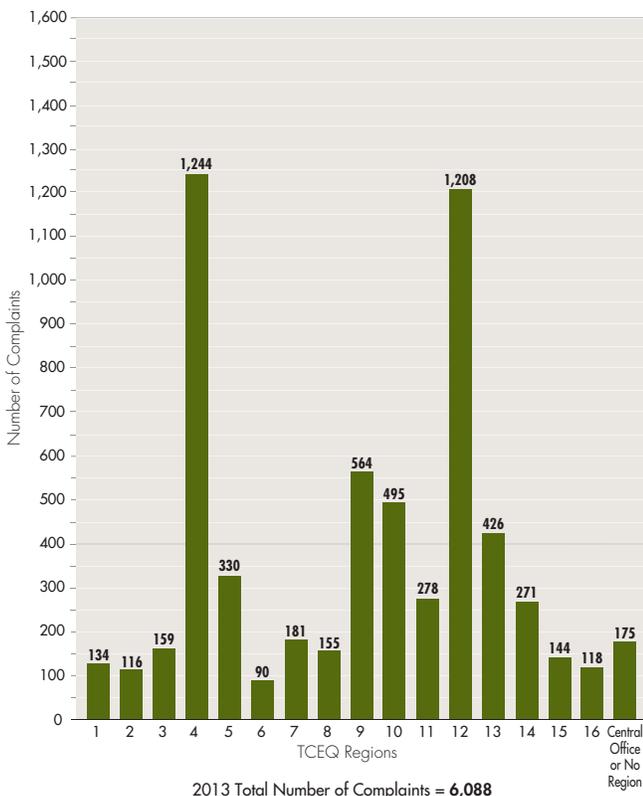
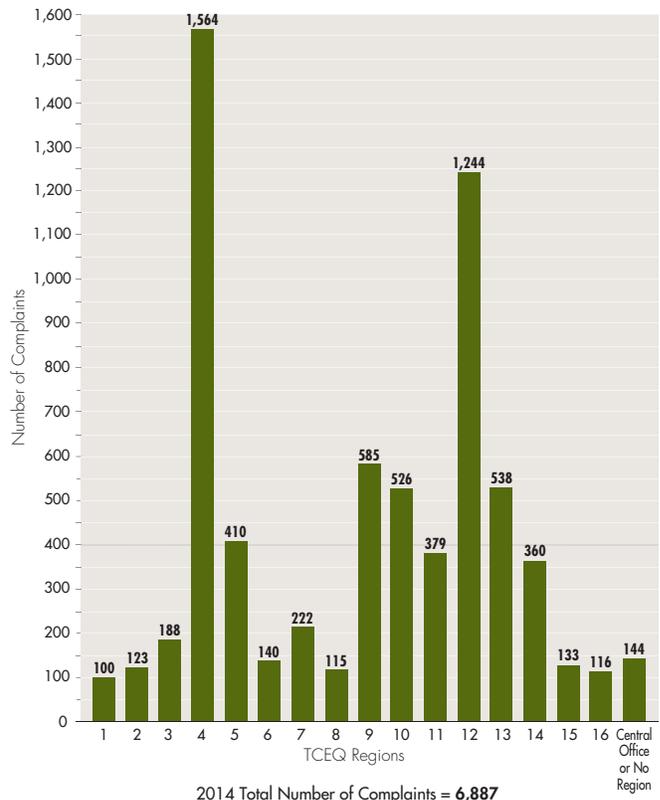


Figure A-3

### Complaints by Region, FY 2014

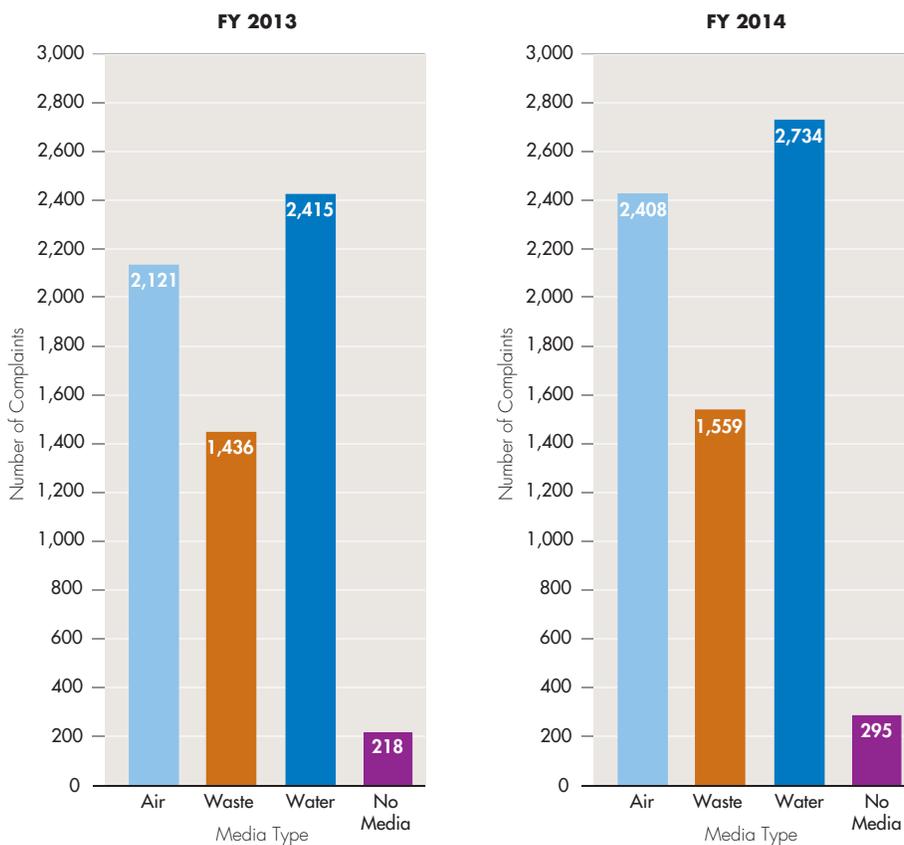


## Complaints Received by Environmental Media (Air, Waste, and Water)

Total complaints received can be analyzed by environmental media (air, waste, and water) statewide and by region or central office. By media, water complaints represent the largest number of complaints received, as seen in Figure A-4.

Figure A-4

### Complaints by Media Type, Statewide



For years, air complaints constituted the largest portion of total complaints received statewide, beginning in fiscal 2003 with the TCEQ’s first reporting of complaints received. But in fiscal 2009 and 2010, the agency received more complaints related to water than air. The data reflect an apparent increase in the interest and concerns that Texans have regarding their water quality and water resources, such as water rights. In fiscal 2011 and 2012, the TCEQ experienced an increase in complaints during drought conditions when water-right holders were asked to take steps to conserve water, implement their drought contingency plans, and prepare for suspensions or curtailments.

This trend has continued into fiscal 2013 and 2014; however, the number of water-related complaints has slightly decreased since fiscal 2011 and remained somewhat stable through fiscal 2014. This trend is demonstrated in figures A-5 and A-6, which show the distribution of complaints received by region and by media.

Water complaints outnumbered air complaints in 11 of the 16 regions in fiscal 2013 and 2014. By comparison, water complaints in fiscal 2011 outnumbered air complaints in 10 regions; and in fiscal 2012, in 11 regions. Air complaints continued to be the leading category in the heavily populated region of Dallas–Fort Worth for fiscal 2013 and 2014.

## Complaints Received by Priority Level

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

### 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

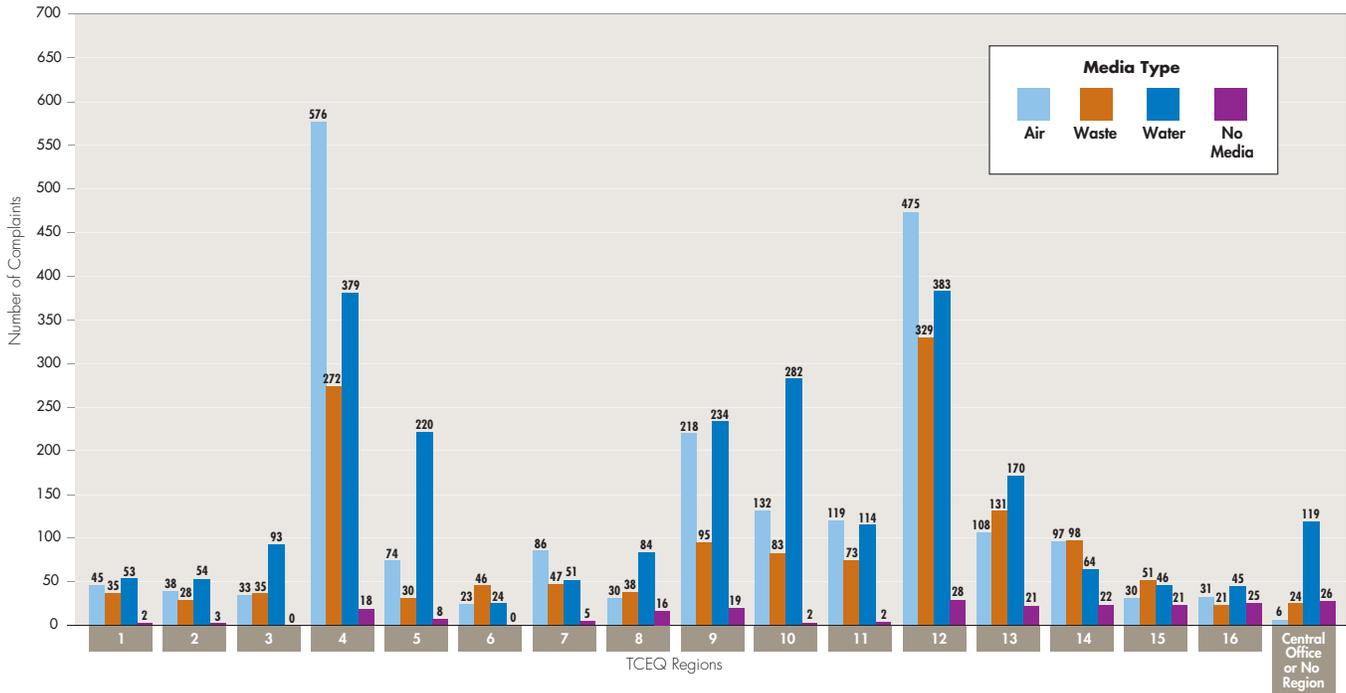
As soon as possible, but no later than five working days from receipt.

### Respond within 14 Calendar Days

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

Figure A-5

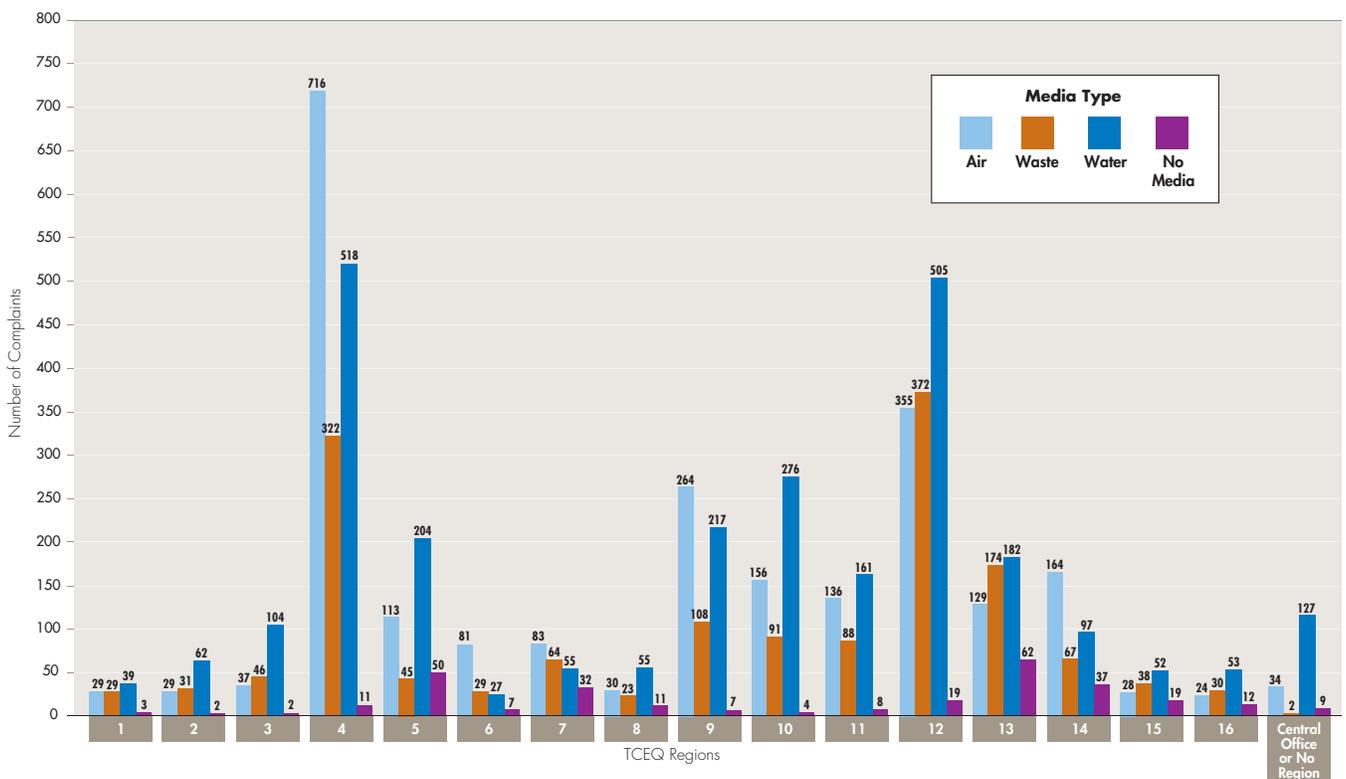
### Complaints by Region & Media Type, FY 2013



Total Number of Air Complaints = 2,121    Total Number of Waste Complaints = 1,436    Total Number of Water Complaints = 2,415    Total Number of No Media Complaints = 218

Figure A-6

### Complaints by Region & Media Type, FY 2014



Total Number of Air Complaints = 2,408    Total Number of Waste Complaints = 1,559    Total Number of Water Complaints = 2,734    Total Number of No Media Complaints = 295

### Respond within 30 Calendar Days

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

### Respond within 45 Calendar Days

As soon as possible, but no later than 45 calendar days from receipt.

### Respond within 60 Calendar Days

As soon as possible, but no later than 60 calendar days from receipt.

### Respond within 90 Calendar Days

As soon as possible, but no later than 90 calendar days from receipt. This category was added in fiscal 2008 for use only with complaints related to the recycling of electronic components.

### Refer or Do Not Respond

This classification is for complaints that, due to jurisdictional issues, are referred to other authorities for investigation, or for complaints that the TCEQ does not routinely investi-

gate 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. Response time is based on management's evaluation of the project and the overall staff workload.

Figure A-7 shows the distribution of complaints by priority classification statewide. Approximately 76 percent of the complaints received during the last two years were classified as requiring investigation in 30 calendar days or less.

## Complaints 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 about 66 percent of the complaints received, no specific enforcement action is necessary. But in some cases, the agency must take enforcement action in the form of a Notice of Violation (NOV) or a Notice of Enforcement (NOE).

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

An NOE is issued when a substantial violation of TCEQ rules or state laws has been documented and formal action is required. Often, an NOE leads to the assessment of administrative penalties.

In fiscal 2013, the agency issued 1,115 NOVs and 165 NOEs as a result of complaint investigations; in fiscal 2014, the totals were 1,099 NOVs and 268 NOEs (Figure A-8).

## Complaints Investigated by Program Type

Another analysis is by the type of investigation conducted to address each complaint—the program type. In the CCEDS, air complaints are not subdivided by program type, but waste and water media each have several subcategories of programs.

Figure A-7

### Complaints by Priority, Statewide

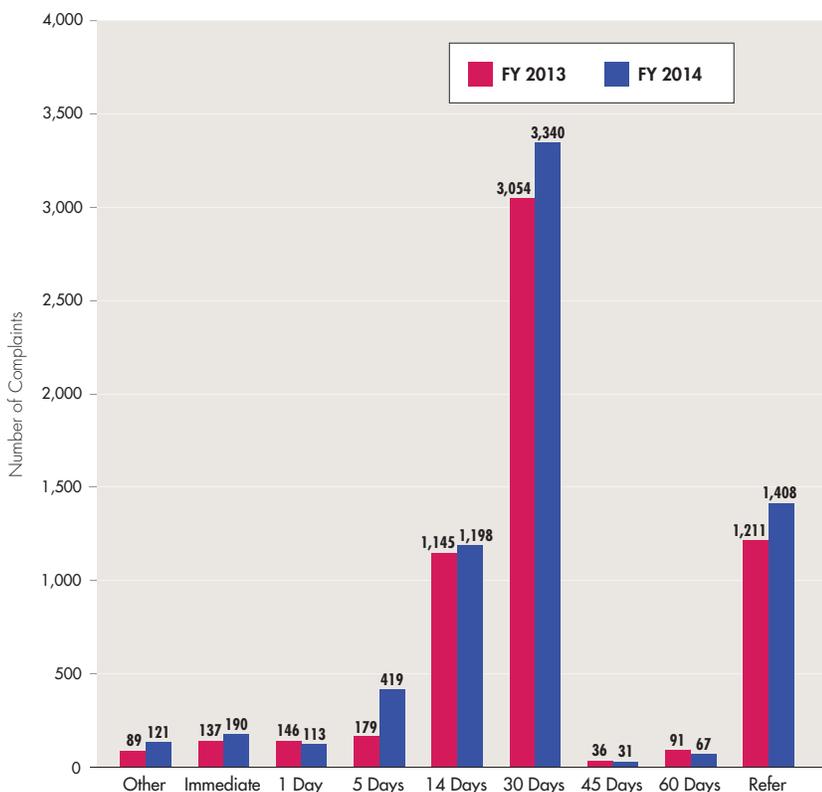
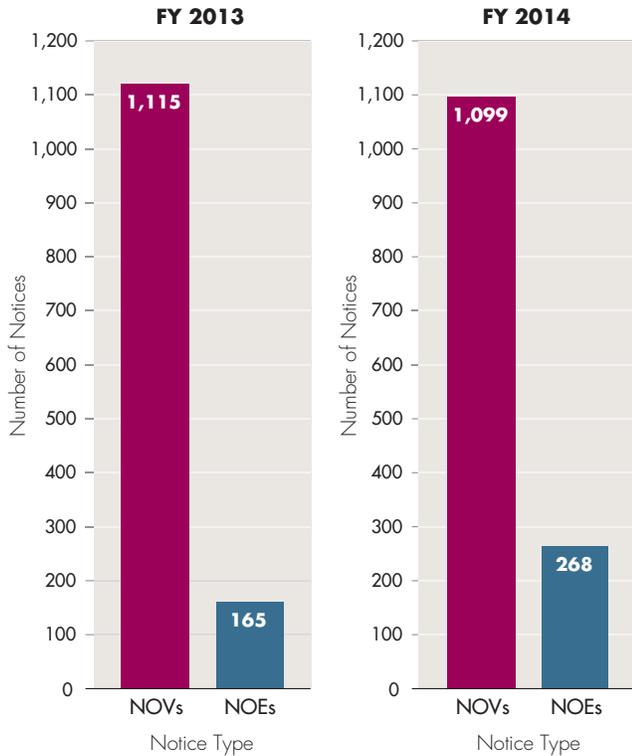


Figure A-8

### Complaints Resulting in NOV's & NOE's, Statewide



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

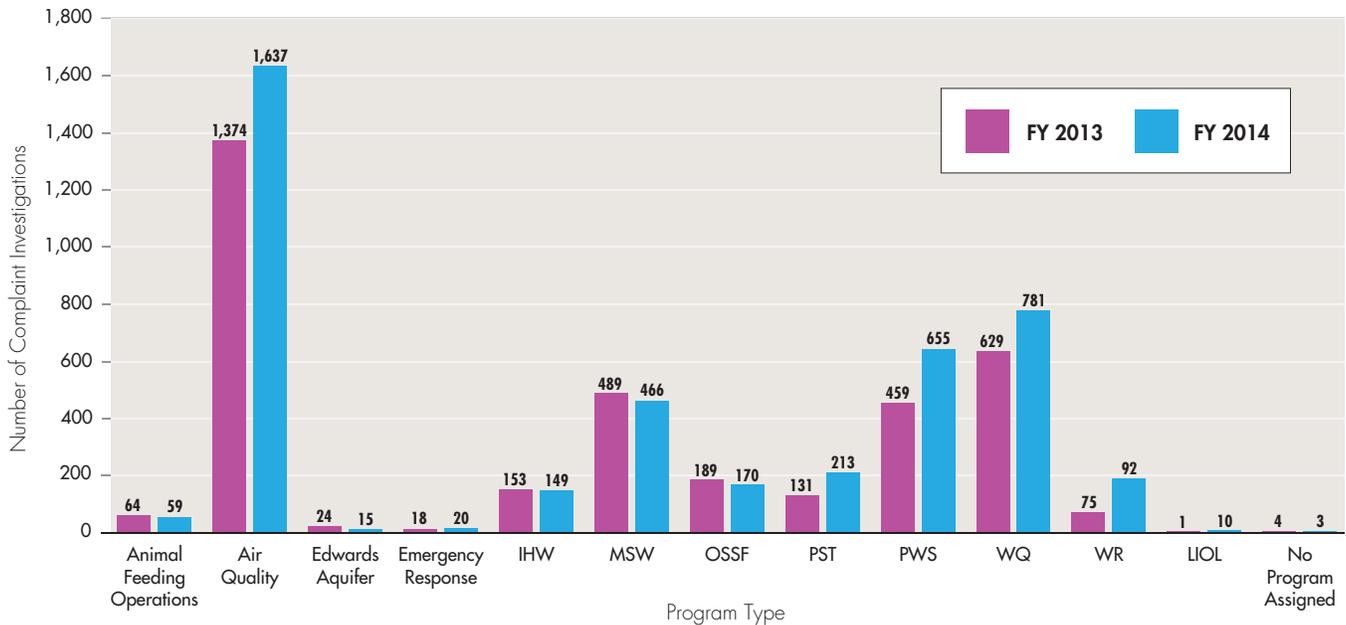
The water program types are animal feeding operations, the Edwards Aquifer Protection Program, on-site sewage facilities, public water supply, water rights, and water quality. Water quality also comprises several program sub-types (sludge transporters, beneficial use, stormwater, municipal and industrial 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 2013, 3,480 complaint investigations were conducted in response to the 6,088 complaints received. A total of 1,211 complaints were prioritized for referral or no agency response (as indicated in Figure A-7). The remaining complaints were either investigated in conjunction with other complaints, or were associated with investigations that were not yet approved in fiscal 2013.

In fiscal 2014, 4,034 investigations were conducted in response to 6,887 complaints received. A total of 1,408 complaints were prioritized for referral or no response. The

Figure A-9

### Complaint Investigations by Program Type



**Key**

IHW = Industrial and Hazardous Waste  
MSW = Municipal Solid Waste  
OSSF = On-Site Sewage Facilities

PST = Petroleum Storage Tanks  
PWS = Public Water Supply  
WQ = Water Quality

WR = Water Rights  
LIOL = Landscape Irrigator Operator Licensing

remaining complaints were either investigated in conjunction with other complaints, or were associated with investigations that were not yet approved in fiscal 2014.

In fiscal 2013, air complaint investigations made up 34 percent of the total; water complaint investigations, 39 percent; and waste investigations, 23 percent. In fiscal 2014, air investigations were 35 percent of the total; water investigations, 39 percent; and waste investigations, 22 percent.

Typically, a small portion of complaint investigations (about 4 percent in fiscal 2013 and 2014) do not fall under the specific program areas listed in this report.

## Conclusions

The complaint data for fiscal 2013 and 2014 are typical of complaints received and investigated in previous years, with minor variations within some analysis categories. Although the total number of complaints received has decreased from previous fiscal years, the number of

complaints received and investigated across all media continued to stabilize.

The increased percentage of complaints occurring in the water program continued through fiscal 2011, but declined in fiscal 2012, and has stabilized through fiscal 2014. Fiscal 2013 and 2014 continued to see a higher number of complaints (primarily air and water related) associated with oil and gas activities across the state. In response to public concerns regarding oil and gas activities, the TCEQ has undertaken a significant effort to monitor and characterize emissions and air quality related to gas-production facilities, and to identify regulatory approaches to alleviating these concerns.

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

# Permit Time-Frame Reduction and Tracking

The Texas Commission on Environmental Quality is charged with issuing permits and other authorizations for the control of air pollution, the management of hazardous and nonhazardous waste, the management of surface water, the protection of water quality, the remediation of soil and groundwater, and the safe operation of *in situ* mines and water and wastewater utilities.

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 median 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 in the most efficient manner possible. Each year, the TCEQ receives more than 100,000 applications for various types of permits, licenses, registrations, and authorizations.

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.

At the end of fiscal 2014, the permitting backlog had decreased to 748, compared to 868 at the end of fiscal 2012. 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 agency established time-frame goals for processing each type of permit. These goals, or "target maximums," 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 2014 in the following categories:

- air permits
- waste permits
- water quality permits
- water right permits
- water supply authorizations
- licenses for radioactive materials and uranium
- 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.

The backlog numbers for air permitting continue to be below the goals, due to the ongoing workload increase in permit-by-rule registrations for oil and gas operations. Water rights permitting numbers are below the goals, due to the ongoing, severe drought conditions that required a focus on priority-call responses, which diverted resources from permitting activities.

## 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 went online in 2008 and makes it easy for the agency to add more applications. The TCEQ has also established fee incentives for water quality general permits obtained through the e-permitting system.

In 2014, the Water Quality Permitting Program added enhancements to the e-permitting system to improve user experiences, which resulted in increased usage of the system. Also, an electronic permitting application for the Aggregate Production Operation registration program was created.

The Air Permitting Program added an option to allow for online completion of oil and gas related notifications and air permitting requirements. In October 2012, this option, which had only been available for counties in the Barnett Shale, was expanded for use statewide. In December 2013, owners began having the option to submit air permitting change-of-ownership requests through the e-permitting system.

Another transaction available electronically is the notifications of oil and gas well completions required to satisfy federal air requirements. Additionally, electronic permitting of maintenance, startup, and shutdown (MSS) emissions for various industries, including oil and gas sites, ensures faster responses for the regulated community. Finally, since May 2014, companies are able to submit a registration for all permit-by-rule (PBR) applications through the e-permitting system.

During fiscal 2013 and 2014, the agency's ePay system processed about 76,800 fee payments and collected about \$23 million in fees.

### **Implement targeted initiatives within permitting programs.**

Waste Permits:

- The introduction of several new checklists and forms to facilitate more consistent and complete applications.
- Adding updates related to pending applications to the TCEQ website to keep stakeholders more informed.

Radioactive Materials Licenses, Uranium Licenses, UIC Permits:

- Revised application forms in 2013 to improve readability and clarity.

- Holding pre-application meetings with current or prospective regulated entities and post-application meetings with applicants to ensure a better understanding of TCEQ rules and procedures.

Water-Right Permits:

- Creation of a new team to focus on non-permitting tasks that were previously assigned to the permitting team.
- Two positions have been dedicated to tracking, troubleshooting, prioritizing, and expediting permits.

Water Quality:

- Expediting permit applications related to drought preparedness or drought contingency plans.

Air Permits:

- Providing an enhanced administrative-review process to address deficiencies in applications to reduce erroneous public notices and improve the information provided for the technical-review process.
- Providing draft Title V Operating Permits online, instead of via e-mail, which allows for broader access and reduces the use of paper.

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

The TCEQ offers over 20 types of standard permits in the air permitting program; 13 general permits in its water quality program; six permits by rule and three registrations by rule in the waste permitting program; and one general permit in the UIC program. The continued use of these authorizations has helped to reduce the time frames for the processing of permits.

In March 2014, a new general permit was developed for evaporation ponds, which reduces the application processing time from 330 days to less than 90.

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

In addition to the time-frame goals for the processing of 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 economic-development projects. During fiscal 2013 and 2014, the TCEQ tracked and issued 26 permits for major economic-development projects.

Figure B-1

**Air Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
New Source Review (NSR) New Permits	299	286	45	18	2,099	358	285
New Source Review Amendments	967	880	145	3	2,027	315	315
NSR New Permits – Federal Timeline	1	1	0	386	386	386	365
NSR Amendments – Federal Timeline	1	4	1	303	1,045	766	365
Federal New Source Review (Prevention Significant Deterioration, Nonattainment, 112g) New & Major Modifications	103	92	12	18	1,763	763	365
Permits by Rule	13,647	14,161	33	1	479	65	45
Standard Permits (w/o public notice), Changes to Qualified facilities (SB1126) & relocations	2,261	2,260	24	1	391	42	45
Standard Permits (with public notice)	138	138	0	14	78	82	150
Standard Permits for Concrete Batch Plants (with public notice)	284	240	1	5	391	109	195
<b>Priority 1 Totals</b>	<b>17,701</b>	<b>18,062</b>	<b>261</b>				
<b>Priority 2</b>							
New Source Review Alterations & Other Changes	1,660	1,634	8	1	497	70	120
New Source Review Renewals	977	831	100	12	1,092	200	270
New Site Operating Permits (SOP)	65	71	3	70	794	70	365
Site Operating Permit Revisions	576	531	17	1	1,317	180	365
Site Operating Permit Renewals	427	292	28	22	1,881	377	365
New General Operating Permits (GOP)	104	97	5	6	271	70	120
General Operating Permit Revisions	146	144	0	4	717	111	330
General Operating Permit Renewals	97	129	2	7	567	121	210
<b>Priority 2 Totals</b>	<b>4,052</b>	<b>3,729</b>	<b>163</b>				
<b>Overall Totals</b>	<b>21,753</b>	<b>21,791</b>	<b>424</b>				

Figure B-2

**Waste Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
IHW New Permits	5	4	0	440	589	506	450
IHW Class 3 Modifications	13	10	0	14	462	325	450
IHW Major Amendments*	0	0	0	0	0	0	450
MSW New Permits	8	15	0	19	630	229	360
MSW Major Amendments	16	21	0	78	736	361	360
MSW Registered Transfer Stations	3	5	0	176	326	272	230
MSW Registered Liquid Waste Processor	0	2	0	217	217	217	230
<b>Priority 1 Totals</b>	<b>45</b>	<b>57</b>	<b>0</b>				
<b>Priority 2</b>							
IHW Renewals	38	38	1	198	1,302	560	450
<b>Priority 2 Totals</b>	<b>38</b>	<b>38</b>	<b>1</b>				
<b>Overall Totals</b>	<b>83</b>	<b>95</b>	<b>1</b>				

\* No stand-alone IHW major amendments were submitted during fiscal 2013-14. All IHW major amendments processed during the biennium were part of an IHW permit renewal application.

From Sept. 1, 2012 through Aug. 31, 2014 the TCEQ processed to a final decision 52 Industrial and Hazardous Waste (IHW) and 43 Municipal Solid Waste (MSW) authorizations. As shown in Table B-2, the average processing time for these applications ranged from 217 days to 560 days. These average processing times were within their respective targets, with the exception of IHW New Permits, IHW Renewals, and MSW Major Amendments and MSW Registered Transfer Stations. MSW Major Amendments only slightly exceeded its goal.

New initiatives to help streamline applications and reduce review times include the introduction of several checklists and forms to assist in more consistent and complete applications, adding updates related to pending applications to the TCEQ webpage to keep stakeholders more informed, and resolving minor issues and minor application deficiencies through phone calls or emails.

**Definitions**

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

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

**Total Under Review** – The total number of applications/permits/amendments pending as of the report date.

**Average Processing Time (Days)** – The average processing time of applications/permits/amendments completed over the previous 12 month period, WITHOUT exceptions.

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

**Number Under Review Exceeding Target** – The total pending applications/permits/amendments exceeding target WITHOUT exceptions.

**Percent Exceeding Target** – The Total Number Under Review Exceeding Target divided by the Total Under Review.

Figure B-3

**Water Quality Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
New Permits (Major Facilities)	7	4	0	235	352	314	330
Major Amendments (Major Facilities)	67	16	22	181	835	346	330
New Permits (Minor Facilities)	197	118	7	120	811	295	330
Major Amendments (Minor Facilities)	144	91	7	176	788	300	300
Sludge Registrations	46	45	1	23	309	109	270
<b>Priority 1 Totals</b>	<b>461</b>	<b>274</b>	<b>37</b>				
<b>Priority 2</b>							
Renewal Major Facilities	236	156	20	154	919	275	330
Renewal Minor Facilities	1,098	860	19	42	973	229	300
<b>Priority 2 Totals</b>	<b>1,334</b>	<b>1,016</b>	<b>39</b>				
<b>Overall Totals</b>	<b>1,795</b>	<b>1,290</b>	<b>76</b>				

Figure B-4

**Water Rights Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
Water Rights New Permits	88	55	82	12	1,247	367	300
Water Rights Amendments w/Notice	65	38	61	24	1,531	471	300
Water Rights Requiring Notice Review Pursuant to Work Session	46	54	30	70	1,165	457	300
Water Rights Amendments without Notice, Rio Grande Watermaster Area	54	49	7	5	497	225	180
Water Rights Amendments without Notice, Outside Rio Grande Watermaster Area	29	23	1	38	353	147	180
<b>Priority 1 Totals</b>	<b>282</b>	<b>219</b>	<b>181</b>				
<b>Overall Totals</b>	<b>282</b>	<b>219</b>	<b>181</b>				

Figure B-5

**Water Supply Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
Water District Expedited Bond Applications	173	162	3	18	138	69	60
Water District Regular Bond Applications	185	216	2	8	698	161	180
Water District Expedited Escrow Releases & Surplus Fund Requests	88	99	0	2	84	38	60
Water District Regular Minor Applications	272	289	0	1	707	51	120
Water District Expedited Creation Applications	10	8	1	107	178	132	120
Water District Regular Creations & Conversions	8	5	0	71	321	188	180
Certificates of Convenience & Necessity—New or Amended*	191	269	17	14	598	219	180
Certificates of Convenience & Necessity—Transfers*	89	79	20	86	714	339	365
Water Engineering Plan Reviews	4,027	3,699	0	1	133	30	60
Exceptions	1,390	1,475	5	1	232	86	100
Alternative Capacity Requirements	106	114	0	9	205	80	90
<b>Priority 1 Totals</b>	<b>6,539</b>	<b>6,415</b>	<b>48</b>				
<b>Overall Totals</b>	<b>6,539</b>	<b>6,415</b>	<b>48</b>				

\*The Certificate of Convenience and Necessity Program transferred to the Public Utility Commission of Texas as of September 1, 2014.

From September 1, 2012 through August 31, 2014, the TCEQ's Water Supply Division completed reviews for 6,415 applications and authorizations. As shown in Table B-5, the average processing time for the applications and authorizations completed during fiscal 2013 and 2014 ranged from 30 to 339 days. Of the total number of applications and authorizations processed, 91 percent met target timeframes.

Severe drought conditions, as well as growing population trends, have resulted in public water systems considering new water resources and innovative/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. Additionally, the Water Supply Division expedited many reviews to allow public water systems to receive funding and meet health-based drinking water quality regulations.

Figure B-6

**Radioactive Materials Permits (Uncontested) Processing Times**

Application Type	Received in FY13 and FY14	Processed in FY13 and FY14	Exceeding Target as of 8/31/14	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
<b>Priority 1</b>							
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	1	1	0	352	352	352	990
Underground Injection Control New Permits	17	6	0	212	375	337	390
Underground Injection Control General Permits	0	0	0	n/a	n/a	n/a	60
Underground Injection Control Permit Major Amendments	9	10	2	212	351	275	390
Underground Injection Control Class III Production Area Authorizations	1	2	1	277	457	367	390
Underground Injection Control Class I Pre-Injection Unit Registrations	3	2	1	236	381	308	390
<b>Priority 1 Totals</b>	<b>31</b>	<b>21</b>	<b>4</b>				
<b>Priority 2</b>							
Uranium Radioactive Material License Renewals	0	0	3	n/a	n/a	n/a	885
Uranium Radioactive Material License Major Amendments	3	2	1	130	622	376	885
Uranium Radioactive Material License Minor Amendments	2	1	0	141	141	141	230
Low-Level Radioactive Waste, Radioactive Material License Renewals	1	0	1	n/a	n/a	n/a	990
Low-Level Radioactive Waste, Radioactive Material License Major Amendments	4	4	0	302	387	365	990
Low-Level Radioactive Waste, Radioactive Material License Minor Amendments	21	21	4	31	602	147	230
Underground Injection Control Permit Renewals	21	27	4	212	742	370	390
Underground Injection Control Class V Authorizations	190	207	1	1	1,097	66	60
<b>Priority 2 Totals</b>	<b>242</b>	<b>262</b>	<b>14</b>				
<b>Overall Totals</b>	<b>273</b>	<b>283</b>	<b>18</b>				

n/a: No permit action was completed within fiscal 2013-14.

Figure B-6 cont.

## **Radioactive Materials Permits (Uncontested) Processing Times**

New initiatives to help streamline applications and reduce review times include revisions of application forms in 2013, holding pre-application meetings with current or prospective regulated entities, conducting more meetings with applications to better ensure understanding of regulations, forms, and procedures, and working to resolve minor issues and minor application deficiencies through phone calls or emails.

### **Additional Information:**

New activity among Texas uranium producers has been slow because of the depressed world uranium market. No new licenses were issued in the last two years. However, TCEQ uranium staff members have completed technical review work on two major amendments for expansions at two *in situ* uranium facilities and have begun work on a third major amendment expansion in this biennium.

Most of the amendment requests received from uranium licensees in the last two years have been approved as administrative amendments. Uranium staff completed 11 administrative amendments including the release of two sub-sites for unrestricted use and personnel changes in two radiation safety officers. Staff also completed a license termination that resulted in the release of three more sub-sites but did not result in a major or minor licensing action.

The TCEQ Uranium Program is also reviewing reclamation and closure activities at the three legacy impoundment sites: RGR Panna Maria, ExxonMobil Ray Point, and ConocoPhillips Conquista. RGR continues to work through complex groundwater issues related to their Alternate Concentration Limit amendment. ConocoPhillips and ExxonMobil are pursuing soil decontamination campaigns and are planning on opening up small areas of their capped impoundments to dispose of that contaminated soil. Overall, these facilities have demonstrated slow, but steady progress towards closure.

# Office of Public Interest Counsel Annual Report to the TCEQ

— FISCAL YEARS 2013 & 2014 —

## Introduction

In 2011, the 82<sup>nd</sup> Legislature passed House Bill 2694, which continued the Texas Commission on Environmental Quality (commission or TCEQ) and made changes to several functions of the commission. In particular, Article 3 of the bill addressed the responsibilities of the Public Interest Counsel (Counsel) and amended certain provisions of Chapter 5 of the Texas Water Code relating to the duties of the Office of Public Interest Counsel (OPIC or office).

As required by Article 3, Section 3.03 of the legislation, Section 5.2725 of the Texas Water Code, this report contains:

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 Section 5.273 of the Texas Water Code.

In even-numbered years, the report must be submitted in time to be included with the reported information in the commission's reports under Texas Water Code, Sections 5.178 (a) and (b), and in the commission's biennial legislative appropriations requests, as appropriate. This report is provided to comply with the requirements of Section 5.2725 of the Texas Water Code and is respectfully submitted to the commission for its consideration.

## OPIC Mission

OPIC was created in 1977 to ensure that the commission promotes the public's interest. To fulfill the statutory directive

of Section 5.271 of the Texas Water Code, OPIC participates in contested case hearings and other commission proceedings to ensure that decisions of the commission are based on a complete and fully developed record. In these proceedings, OPIC also protects the rights of the citizens of Texas to participate meaningfully in the decision-making process of the commission to the fullest extent authorized by the laws of the State of Texas.

## OPIC Philosophy

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

## Overview and Organizational Aspects

OPIC develops positions and recommendations on all matters affecting the public interest, including environmental permitting, compliance and enforcement, and rulemaking. The office is also 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 on all matters under the Commission's jurisdiction;

- 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;
- Providing review and comment on rulemaking proposals;
- Participating in public meetings on permit applications with significant public interest; and
- Responding to inquiries from the public to ensure that their concerns are brought before the commission and addressed in the decision-making process.

As a party to commission proceedings, OPIC is committed to providing independent analysis and recommendations that serve the integrity of the application and hearings process. OPIC’s participation is intended to ensure that relevant evidence on issues affecting the public’s interest is developed and made part of the record. As a result, the Commission is better able to make informed decisions, issue permits that are protective of human health and the environment and take into account the greater public interest, as well as the interests of affected parties.

The Counsel is appointed by the Commission. The Counsel supervises the overall operation of OPIC by establishing policy and administrative processes, managing the Office’s budget, hiring staff, and ensuring compliance with agency and office policy and administrative requirements. Currently, OPIC has eight full-time equivalent positions: the Counsel; a senior attorney; five assistant public interest counsels and an 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.

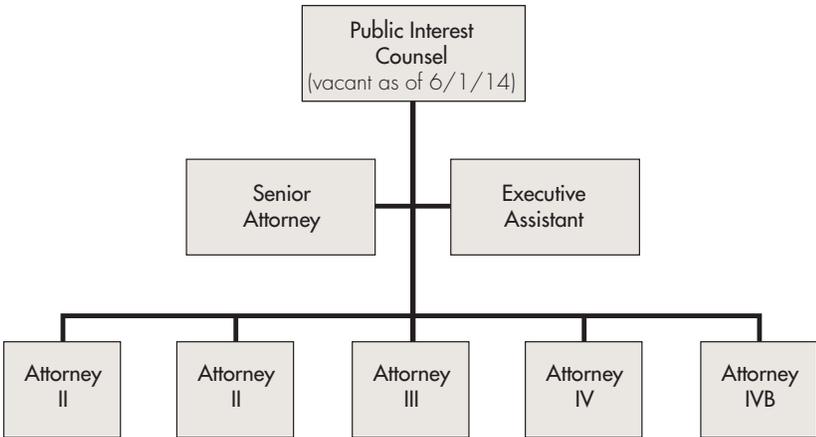
### Evaluation of OPIC’S Performance

Section 5.2725(a)(1) of the Texas Water Code requires that OPIC 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 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, utility and

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

Utility and district proceedings include proceedings at SOAH and at the commission related to water and sewer ratemaking and rate appeals, impact fee and standby fee assessments, cost of service appeals, certificates of necessity and convenience, sales, transfers and mergers, and the creation of districts and other miscellaneous utility or district related matters.

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

Enforcement proceedings include enforcement proceedings active at SOAH, commission proceedings related to the consideration of proposed orders, and proceedings initiated with the issuance of the executive director's preliminary report and petition.

## OPIC's Performance Measures

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

**Goal 1:** To provide effective representation of the public interest as a party in all environmental and utility 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 utility and district proceedings heard by the TCEQ

### Outcome Measures:

- Percentage of environmental proceedings in which OPIC participated
- Percentage of utility and 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 Measures:

- 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 for 75 percent of enforcement contested case and other proceedings heard by the TCEQ

### Outcome Measures:

- Percentage of enforcement hearings and other enforcement proceedings in which OPIC participated

## Evaluation of OPIC Under Its Performance Measures

OPIC's performance measures for environmental, utility and district, rulemaking and enforcement proceedings are expressed as percentages of all such proceedings in which OPIC could have participated. The numerators for the performance measure percentages are derived from the work assignments tracked by the office during fiscal year 2013 and fiscal year 2014 and a review of matters considered by the commission at its public meetings held during each fiscal year. These assignments include active matters carried forward from the past fiscal year, as well as matters

assigned during the relevant fiscal year. The denominators for the performance measure percentages—all of the proceedings in which OPIC could have participated—are derived from SOAH quarterly reports, TCEQ Litigation Division Reports and a review of matters considered by the commission at its public meetings held during each fiscal year.

### Fiscal Year 2013

In fiscal year 2013, OPIC participated in a total of 1,373 proceedings. Of this total, 65 were environmental proceedings, 46 were utility and district proceedings, and 64 were rulemaking proceedings. Furthermore, OPIC participated in 1,198 enforcement proceedings by reviewing enforcement matters considered at commission agendas, and by assigning attorneys to monitor or participate as needed in docketed cases where an executive director’s preliminary report and petition had been issued or the matter was pending at SOAH.

OPIC’s participation in 65 of 71 total environmental proceedings resulted in a participation percentage of 92 percent.

OPIC’s participation in 46 of 62 utility and district proceedings resulted in a participation percentage of 74 percent.

OPIC’s participation in 64 rulemaking proceedings, including all active rule assignments carried forward from fiscal year 2012 as well as the review of all proposals and adoptions considered by the commission during fiscal year 2013, resulted in a participation percentage of 100 percent.

OPIC’s participation in 1,198 of 1,356 enforcement proceedings resulted in a participation percentage of 88 percent.

The fiscal year 2013 OPIC participation percentages for environmental, utility and district, rulemaking, and enforcement proceedings are shown in Figure 2 below.

### Fiscal Year 2014

In fiscal year 2014, OPIC participated in a total of 1,211 proceedings. Of this total, 76 were environmental proceedings, 42 were utility and district proceedings, and 49 were rulemaking proceedings. Furthermore, OPIC participated in 1,044 enforcement proceedings by reviewing enforcement matters considered at commission agendas, and by assigning attorneys to monitor or participate as needed in docketed cases where an executive director’s preliminary report and petition had been issued or the matter was pending at SOAH.

OPIC’s participation in 76 of 76 total environmental proceedings, resulted in a participation percentage of 100 percent.

OPIC’s participation in 42 of 44 utility and district proceedings resulted in a participation percentage of 95 percent.

OPIC’s participation in 49 rulemaking proceedings, including all active rule assignments carried forward from fiscal year 2013 as well as the review of all proposals and adoptions considered by the commission during fiscal year 2014, resulted in a participation percentage of 100 percent.

OPIC’s participation in 1,044 of 1,085 enforcement proceedings resulted in a participation percentage of 96 percent.

The fiscal year 2014 OPIC participation percentages for environmental, utility and district, rulemaking and enforcement proceedings are shown in Figure 3 (below).

Figure C-2

#### Proceedings with OPIC Participation Fiscal Year 2013

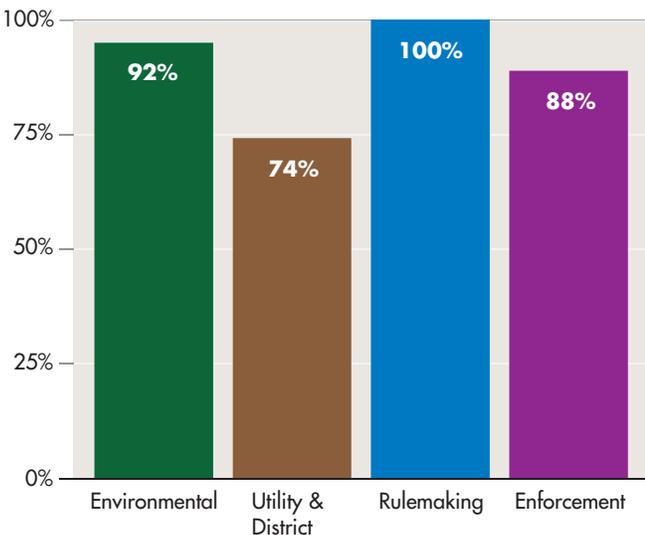
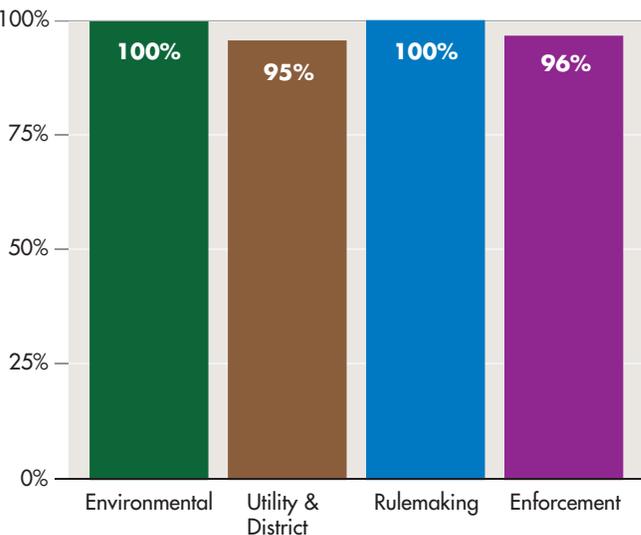


Figure C-3

#### Proceedings with OPIC Participation Fiscal Year 2014



## Summary of OPIC Performance

The Outcomes Table below summarizes the measure of OPIC’s performance in meeting its goals and objectives for fiscal year 2013 and fiscal year 2014.

Figure C-4

### Projected and Actual Outcomes of Goals

Outcome	Projected FY 2013	Actual FY 2013	Projected FY 2014	Actual FY 2014
<b>Goal 1A:</b> Percentage of environmental proceedings in which OPIC participated	75%	92%	75%	100%
<b>Goal 1B:</b> Percentage of utility & district proceedings in which OPIC participated	75%	74%	75%	95%
<b>Goal 2:</b> Percentage of rulemaking proceedings in which OPIC participated	75%	100%	75%	100%
<b>Goal 3:</b> Percentage of enforcement hearings and other enforcement proceedings in which OPIC participated	75%	88%	75%	96%

### Use of Technology

The passage of House Bill 2694 requiring implementation of performance measures required OPIC to develop new administrative processes and case management reports. OPIC staff, with the assistance of the executive director’s Information Resources Division, developed a reporting process that allows OPIC to track its work on any matters active at any point within a fiscal year regardless of the date such matters were opened or closed. For determining the total number of possible matters in which OPIC could have participated for each performance measure, OPIC also reviewed SOAH’s quarterly reports, agendas from commission public meetings, and reports from the Litigation Division of the Office of Legal Services. While we now have a more effective system in place, we will continue to work with appropriate offices in the agency to take advantage of technological advancements to improve the ability to measure performance and ensure accountability to the public.

### Legislative Changes Affecting Participation in Utility Cases

Through fiscal year 2014, OPIC has participated in water and sewer rate and district matters pursuant to our duty to represent the public interest in all proceedings before the commission. In 2013, the legislature amended Chapter 13 of the Texas Water Code to transfer the regulation of water and sewer utilities to the Texas Public Utility Commission (PUC), effective Sept. 1, 2014. The legislation further amended the law to give the Office of Public Utility Counsel authority to represent the interests of residential and small commercial consumers in water and sewer rate cases. The law authorized the Office of Public Utility Counsel to participate as a party in rate and sewer cases under Chapter 13 of the Texas Water Code anytime on or after Sept. 1, 2013, a year prior to the transfer of jurisdiction of these matters to the PUC.

OPIC’s responsibility to represent the public interest in all proceedings before the commission did not change. Notwithstanding the Office of Public Utility Counsel’s authority to intervene and participate as a party, OPIC has continued to participate in all water and sewer rate cases before the commission and will continue to do so until the end of fiscal year 2014 when jurisdiction over these utility matters is transferred to PUC.

### Assessment of Budget Needs

Section 5.2725(a)(2) of the Texas Water Code directs OPIC to provide the commission with an assessment of the budget needs of the office, including the need to contract for outside expertise. The operating budget for OPIC in fiscal year 2013 totaled \$624,452.44. The operating budget for OPIC in fiscal year 2014 totaled \$605,044.00.

Figure C-5  
**OPIC Budget, FY 2013 and FY 2014**

Budget Category		FY 2013 Budget	FY 2014 Budget
31	Salaries	\$569,752.44	\$580,344.00
35	Professional/Temporary	\$37,750.00	\$7,750.00
37	Travel	\$7,100.00	\$7,100.00
39	Training	\$5,485.00	\$5,485.00
41	Postage	\$25.00	\$50.00
43	Consumables	\$500.00	\$550.00
46	Other Operating Expenses	\$1,645.00	\$1,570.00
54	Facilities, Furniture & Equipment	\$2,195.00	\$2,195.00
TOTAL		\$624,452.44	\$605,044.00

## Outside Expertise

The fiscal year 2013 budget included \$30,000 in funding to allow OPIC to contract for outside expertise. OPIC worked with agency staff to develop the procedures for obtaining outside technical support. Creating and implementing the process for OPIC to retain and contract with outside experts proved complicated and time consuming. OPIC was unable to implement this process in time to use the funding included in the fiscal year 2013 budget. Therefore, the fiscal year 2014 budget did not include funding for OPIC to retain outside expertise. However, once contracting procedures were established with the assistance and guidance of the executive director's purchasing staff, OPIC requested and received \$4,200 in funding to receive outside expertise in one specific case. OPIC received consulting services from Irvin L. Bilsky, P.E., for purposes of OPIC's participation in a complex air permitting contested case hearing. Contracting procedures are now in place and OPIC has the ability to retain experts more quickly. Accordingly, OPIC could retain experts expeditiously in more complex environmental proceedings should future budgets restore the \$30,000 in funding for such purposes.

## Regulatory Recommendations

The Texas Water Code, Section 5.273, authorizes OPIC to recommend needed legislative and regulatory changes.

Such recommendations are to be included in OPIC's annual reports under Texas Water Code, Section 5.2725(a)(3). OPIC proposes no legislative recommendations for purposes of this report. OPIC's recommendations for regulatory changes are discussed below.

## 1. Proposal concerning the timing of the filing of the executive director's response to comments when there has been a direct referral of an application to the State Office of Administrative Hearings

OPIC submits this proposal for purposes of clarity and consistency for procedural timeframes when there is a direct referral of a permit application for a contested case hearing.

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. Texas Water Code Section 5.557(c) states that the commission by rule shall provide for public comment and the executive director's response to public comment to be entered into the administrative record of decision on the application when there is a direct referral.

Commission rules in 30 Texas Administrative Code Chapter 80 (TAC) carry out this statutory mandate. All parties in a contested case where there has been a direct referral have the right to respond to and present evidence on issues raised in public comment and the response to comment. 30 TAC Section 80.126. Public comment and the response to comment are to be sent to SOAH if they are filed subsequent to the referral. 30 TAC Section 80.6(b)(4)(B). However, the rules currently do not specify the timing or sequence of the issuance of the response to comments and the convening of a preliminary hearing when there is such a referral.

On April 10, 2013, the commission considered direct referral of the application by Exxon Mobil Chemical

Corporation for new Air Quality Permit No. 102982; TCEQ Docket No. 2013-0657-AIR. On April 22, 2013, the commission issued an interim order that direct referred the application to SOAH and ordered that the preliminary hearing in this matter shall not convene until after the executive director has issued his response to comments.

In some prior proceedings where there has been a direct referral, however, there has been no such specific instruction and responses to comment have been sent to SOAH for inclusion in the record after the preliminary hearing was convened and while SOAH proceedings were underway. These matters include: El Paso Electric Company; TCEQ Docket No. 2012-2608-AIR; SOAH Docket No. 582-13-1520; EOG Resources, TCEQ Docket No. 2012-0971-AIR, SOAH Docket No. 582-12-6347; Tenaska Trailblazer Energy Center, TCEQ Docket No. 2009-1093-AIR, SOAH Docket No. 582-09-6185; IPA Coleta Creek, TCEQ Docket No. 2009-0032-AIR, SOAH Docket No. 582-09-2045; and NRG Limestone, TCEQ Docket No. 2007-1820-AIR, SOAH Docket No. 582-08-0861.

In earlier direct referrals, the convening of the preliminary hearing and setting of the procedural schedule prior to issuance of the response to comments presented timing difficulties and subsequent disputes over the need to modify the procedural schedule. Rule 80.126 affords parties the opportunity to present evidence on issues raised by the response to comments. After the response to comments was issued and parties perceived a need to conduct discovery and prepare prefiled testimony based on positions taken in the response to comments, they argued that they could not adequately prepare for hearing under the schedule that was set in advance of knowing when the response to comments would be issued. The commission's interim order in Exxon requiring that the preliminary hearing not be convened until the response to comments is issued avoids these procedural problems and, therefore, OPIC recommends that this position be set forth in rule.

The proposed rulemaking would delete or revise provisions in 30 TAC Section 55.210(c) (2) and (3) requiring that any public meeting held after direct referral be held on the same day as the preliminary hearing or as close to the hearing as practicable. If the comment period extends through a public meeting and if the response to comments must be issued prior to the preliminary hearing, it would not be practicable or possible to hold any public meeting so close to the preliminary hearing. Restrictions on the timing of the public meeting contained in these provisions would be meaningless since the driving consideration would be the timing of the response to comments.

The following provision would be added to the commission's Chapter 80 rules in 30 TAC Sections 80.6, 80.105(a), 80.126 and such other Chapter 80 rules deemed appropriate:

**For applications referred to SOAH under Section 55.210 of this title (relating to Direct Referrals), the preliminary hearing shall not be convened until after the Executive Director has issued the response to comments under 30 TAC Section 55.156(b) and 55.210(d).**

## 2. 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 requires the commission to specify issues referred to hearing when granting hearing requests, however this is not an unfettered entitlement of applicants. The Legislature clearly 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 to grant the executive director such independent authority under Texas Water Code Section 5.557(a).

Often when the agency receives a large volume of hearing requests from citizens who are in close proximity to a facility, there is little doubt that there are affected persons who will eventually be granted a contested case hearing. In these situations, a hearing is a reasonable certainty, even before the agency begins the laborious task of setting consideration of the requests for a commission

agenda and mailing notice and a request for briefs to a multitude of interested persons. OPIC's proposed rule change would require a mandatory direct referral under these circumstances. Such a rule change would conserve agency resources in a number of ways, including reducing the number of multiple mass mailings from multiple agency offices. This change would also conserve the agency's human resources otherwise required to process, review, analyze, and consider hundreds of hearing requests in circumstances where a hearing is already a reasonable certainty.

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

**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 who resides in a permanent residence 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 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.

### 3. Proposal Concerning Consideration of Site Compliance History Upon Change of Ownership

OPIC submits the proposal described below in order to avoid penalizing new innocent purchasers of a site under enforcement based on the bad acts of prior site owners

and to facilitate the sale of troubled sites to new owners who are willing to bring sites into compliance.

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

The current system for calculating compliance history has resulted in owners of regulated entities being held responsible for acts that occurred years before their ownership of a site began. Because compliance history is used to make decisions on permitting and enforcement matters, current owners are being adversely affected, through no fault of their own. Additionally, the current system can have the effect of dissuading a potential buyer from purchasing a troubled site that could benefit from new ownership. While a purchaser of a site can conduct due diligence and make an informed decision as to whether to purchase a site, others who inherit a site have no such opportunity. Such individuals may become owners of a site with a poor compliance history which could complicate operations or sale of a site.

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

While a rule change could create a potential for abuse by those who would transfer ownership between

affiliated entities, proposed rule language could minimize the potential for abuse.

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

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

## Conclusion

OPIC appreciates the opportunity afforded by this statutory reporting requirement to reflect upon OPIC's mission and goals and evaluate its status and progress in meeting the office's performance measures. OPIC commits to continuing its work in a transparent manner and to ensuring that all information necessary to evaluate the work of the office in representing the public interest is readily available to the public.

# Evaluation of Water Basins in Texas without a Watermaster

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

## Overview of Watermaster Programs

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

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

- reviewing diversion notifications
- authorizing appropriate diversions
- deterring illegal diversions
- providing real-time monitoring of area streamflows
- investigating alleged violations of Chapter 11
- mediating conflicts and disputes among water users

TWC Chapter 11, sets forth the mechanisms by which a watermaster program can be established:

- by the executive director in a *water division* established by the commission under Section 11.325
- by court appointment
- by the commission, upon receipt of a petition of 25 or more *water-right holders* in a river basin or

segment of a river basin, or on its own motion, if the commission finds that senior water rights have been threatened.

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

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

- Rio Grande, which serves the Rio Grande Basin and coordinates releases from the Amistad and Falcon reservoir systems. Established by a 1956 court appointment.
- South Texas, which serves the Lavaca, Nueces, San Antonio, and Guadalupe river basins, as well as the adjacent coastal basins. Established in 1988, based on a water-division creation order signed in 1988 and amended in 1998.
- Concho River, which serves a portion of the Concho River segment of the Colorado River Basin. Created by the Legislature in 2005.

## Criteria and Schedule

At an agency work session on September 28, 2011, the commissioners established the following criteria to consider in performing the 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 on an annual basis in each river basin?

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

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

## Evaluation Activities in Fiscal 2013

For the fiscal 2013 evaluation, the agency performed the following:

- Updated the web page for the evaluation process, with an opportunity for stakeholders to receive automated updates by e-mail. (See <[www.tceq.texas.gov/permitting/water\\_rights/wmaster/evaluation](http://www.tceq.texas.gov/permitting/water_rights/wmaster/evaluation)>.)
- Mailed initial outreach letters (Figure D-1) to the stakeholders in each area on March 1, 2013, and accepted comments until April 5, 2013. Stakeholders included all water-right holders, county judges and extension agents, river authorities, agricultural interests, industries, environmental organizations, and other interested parties.
- Held five stakeholder meetings from May 21 through June 4, 2013, in Fort Worth, Corsicana, Conroe, Houston, and Liberty. A total of 32 people attended the meetings. At each meeting the manager of the Watermaster Section, the South Texas watermaster, and a TCEQ regional office representative were present to deliver information and answer questions.

Below is a summary of the 32 comments received through June 14, 2013, as part of the agency’s stakeholder process.

- Of the comments received from the stakeholders on the establishment of a watermaster program:
  - ◆ 25 were opposed
  - ◆ 3 were in favor
  - ◆ 4 were neutral

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

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

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

- In the Trinity River Basin, 53 investigations were conducted in fiscal 2010, 59 in fiscal 2011, and 23 in fiscal 2012. The investigations in 2010 and 2011 included county-specific initiatives not in response to complaints.
- In the San Jacinto River Basin, there were 7 investigations in fiscal 2010, 10 in FY 2011, and 9 in FY 2012.
- The estimated costs to the agency to conduct these activities, which are outside a watermaster area, were:
  - ◆ 2010, Trinity Basin: \$20,255; San Jacinto Basin: \$2,537
  - ◆ 2011, Trinity Basin: \$21,705; San Jacinto Basin: \$3,624
  - ◆ 2012, Trinity Basin: \$8,337; San Jacinto Basin: \$3,262

The cost to conduct the required evaluations of these basins in 2013:

- Office of Water: \$105,831, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$140
- Office of Compliance and Enforcement: \$2,189, which included staff time, travel time, and equipment use
- Representatives from OCR and IGR participated in the evaluation process but incurred no cost

## Agenda Presentation

At the commission's agenda meeting on August 16, 2013, TCEQ personnel gave a presentation and recommendation related to the evaluation conducted in fiscal 2013. Included was a list of considerations for the commissioners to discuss, as outlined below:

- No watermaster program be established in either the Trinity or the San Jacinto river basins or associated coastal basins.
- A watermaster program that includes all four basins evaluated. Approximate first-year cost: \$548,693. Approximate costs for subsequent years: \$403,771.
- A watermaster program that includes only the Trinity River Basin and Trinity–San Jacinto Coastal Basin. Approximate first-year cost: \$456,566. Approximate costs for subsequent years: \$339,439.
- A watermaster program that includes only the San Jacinto River Basin and San Jacinto–Brazos Coastal Basin. Approximate first-year cost: \$225,703. Approximate costs for subsequent years: \$163,639.

## Evaluation Activities in Fiscal 2014

For the fiscal 2014 evaluation, the agency:

- Updated the Web page for its evaluation process, with an opportunity for stakeholders to receive automated updates by e-mail. (See <[www.tceq.texas.gov/permitting/water\\_rights/wmaster/evaluation](http://www.tceq.texas.gov/permitting/water_rights/wmaster/evaluation)>.)
- Mailed initial outreach letters (Figure D-2) to the stakeholders in each area on March 5, 2014, and accepted comments until April 4, 2014. Stakeholders included all water-right holders, county judges and extension agents, river authorities, agricultural interests, industries, environmental organizations, and other interested parties.
- Held three stakeholder meetings from June 3 through June 5, 2014, in Tyler, Lufkin, and Beaumont. Final stakeholder comments were due on June 13. A total of 52 people attended the meetings. In each meeting, the manager of the Watermaster Section and a TCEQ regional-office representative were present to deliver information and answer questions.

All of the 18 comments received from the stakeholders through June 13, 2014, opposed establishment of a watermaster program.

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

- There were no court orders to appoint a watermaster for these basins.
- There were no active or approved petitions to appoint a watermaster for these basins.
- Except for the two priority calls in 2011, the TCEQ is not aware of any water shortages or issues; however, certain cities have implemented watering restrictions based on their drought contingency plans.

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

- In the Sabine River Basin, 38 investigations were conducted in fiscal 2011, 52 in fiscal 2012, and 42 in fiscal 2013.
- In the Neches River Basin, there were 23 investigations in fiscal 2011, 68 in fiscal 2012, and 36 in fiscal 2013.
- In Neches-Trinity Coastal Basin, there were no investigations in fiscal 2011, 8 in fiscal 2012, and 6 in fiscal 2013.
- The estimated costs to the agency to conduct these activities, which are located outside a watermaster area, were:
  - ◆ 2011: Sabine River Basin, \$7,183; Neches River Basin, \$6,312; and Neches-Trinity Coastal Basin, no costs
  - ◆ 2012: Sabine River Basin, \$11,304; Neches River Basin, \$9,947; and Neches-Trinity Coastal Basin, \$1,602
  - ◆ 2013: Sabine River Basin, \$9,205; Neches River Basin, \$7,965; and Neches-Trinity Coastal Basin, \$1,295

The costs to conduct the required evaluations of these basins in 2014:

- Office of Water: \$105,537.22, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$140.00
- Office of Compliance and Enforcement: \$1,245.78, which included staff time, travel time, and equipment use
- Representatives from OCR and IGR participated in the evaluation process but incurred no costs.

## Agenda Presentation

At the commission's agenda meeting on August 20, 2014, TCEQ personnel gave a presentation and recommendation related to the evaluation conducted in fiscal 2014. Included was a list of considerations for the commissioners to discuss, as outlined below:

- No watermaster program to be established in any of the basins.
- A watermaster program that includes all three basins evaluated. Approximate first-year cost: \$478,300. Approximate costs for subsequent years: \$361,800.
- A watermaster program for only one basin, either the Sabine River Basin or the Neches River Basin. Approximate first-year cost: \$295,300. Approximate costs for subsequent years: \$234,000.

## Executive Director's Recommendation in Fiscal 2013 and 2014

With no court orders or petitions to create a watermaster, or a repeated history of threatened water rights, the ED recommended that the Commission not move forward on

its own motion with the creation of a watermaster program in any of the basins being reviewed in fiscal 2013 and fiscal 2014: Trinity River, San Jacinto River, Trinity–San Jacinto Coastal, San Jacinto–Brazos Coastal, Sabine River, Neches River, nor Neches-Trinity Coastal.

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 also consider area stakeholder input. It is important to have stakeholder support in articulating the threat and the need to establish a new regulatory program, as stakeholders will be responsible for paying a new fee to support the new program.

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

Figure D-1

**Outreach Letters to Stakeholders, FY 2013**

Bryan W. Shaw, Ph.D., *Chairman*  
 Carlos Rubinstein, *Commissioner*  
 Toby Baker, *Commissioner*  
 Zak Covar, *Executive Director*

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

*Protecting Texas by Reducing and Preventing Pollution*

March 1, 2013

Re: Preliminary Watermaster Evaluation for the San Jacinto River Basin

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating four river basins, including the San Jacinto River Basin, to determine whether there is a need to establish a watermaster program to manage surface water rights. The purpose of this letter is to notify you, seek written input on the evaluation, and to identify the information the agency should consider during this process.

According to Sections 11.326(g) and (h) of the Texas Water Code, the Executive Director (ED) must evaluate all river basins that do not currently have a watermaster to determine whether one should be appointed. The ED must report the findings from the evaluation and make recommendations to the TCEQ Commissioners. The Commissioners may direct the ED to move forward with or 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 Texas 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 the first opportunity to participate in this process. As part of the evaluation, we also plan to mail notifications to all current water right holders within the San Jacinto River Basin of stakeholder meetings expected to be held in the spring of 2013. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for late summer.

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

We will consider the following criteria when evaluating a basin:

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

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

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Figure D-1 cont.

**Outreach Letters to Stakeholders, FY 2013**

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

The enclosed fact sheet includes general information about the watermaster 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.

In order that we may best review your comments, please include the following information in your letter:

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

Please send written comments by April 5, 2013 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](mailto:watermaster@tceq.texas.gov).

If you have any questions or additional comments, please feel free to contact my staff in the Watermaster Section: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631. In addition, you may sign up to receive email updates:  
<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](http://www.tceq.texas.gov/goto/watermaster).

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

Sincerely,



Amy Settemeyer, Manager  
Watermaster Section, MC-160  
Water Availability Division  
Texas Commission on Environmental Quality

Enclosure

Figure D-1 cont.

**Outreach Letters to Stakeholders, FY 2013****Watermaster Evaluation Fact Sheet - 2013****Background**

On May 28, 2011, the Texas Legislature adopted the Texas Commission on Environmental Quality (TCEQ) Sunset legislation, House Bill 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. This evaluation is required at least once every five years, and the TCEQ developed a schedule to consider several basins each year. During 2012, the TCEQ evaluated the Brazos River Basin, the Brazos-Colorado Coastal Basin, the Colorado River Basin, and the Colorado-Lavaca Coastal Basin. For 2013, TCEQ will evaluate the Trinity River Basin, the Trinity-San Jacinto Coastal Basin, the San Jacinto River Basin, and the San Jacinto-Brazos Coastal Basin.

**What is a Watermaster Program?**

Watermaster programs manage surface water and operate from field offices within their designated basin(s) performing 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 the user with lower priority 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. Additionally, a watermaster may take more formal action such as a Notice of Violation, Notice of Enforcement, or Field Citation, which could generate assessed penalties.

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

**Advantages of a Watermaster Program.**

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

Figure D-1 cont.

## Outreach Letters to Stakeholders, FY 2013

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

### **Program Costs and Fees.**

According to state law, permitted 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 by law from water rights permitting and therefore any fees associated with the watermaster program.

The total amount assessed per water right holder is comprised of both a base fee charged on each account and an annual fee based on the volume of water that may be diverted for each authorized use. The current base fee is \$50 per account and generally does not change from year to year. The use fee is calculated each year and is based on the proposed operating budget for each watermaster program.

In addition to the cost of the watermaster program itself, most users will be required to add a meter to their pumps. Depending on the specific technology, a meter may cost \$400 or more. However, metering may lead to enough of a savings in pumping costs to offset the cost of the meter. In other words, the user might find that he or she had been running the unmetered pumps longer than it took to get the needed volume of water.

### **Participating in the Process**

We encourage input on this evaluation process. If you are interested in the evaluation of the Trinity River Basin, Trinity-San Jacinto Coastal Basin, San Jacinto River Basin, San Jacinto-Brazos Coastal Basin, or if you have any questions on this process, please contact us:

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

**By Email:** [watermaster@tceq.texas.gov](mailto:watermaster@tceq.texas.gov)

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

**Web Site:** [www.tceq.texas.gov/goto/watermaster](http://www.tceq.texas.gov/goto/watermaster)

Figure D-1 cont.

**Outreach Letters to Stakeholders, FY 2013**

Bryan W. Shaw, Ph.D., *Chairman*  
 Carlos Rubinstein, *Commissioner*  
 Toby Baker, *Commissioner*  
 Zak Covar, *Executive Director*

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY***Protecting Texas by Reducing and Preventing Pollution*

May 7, 2013

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

Dear Stakeholder:

The purpose of this letter is to invite you to attend stakeholder meetings and to provide updates regarding the Texas Commission on Environmental Quality's (TCEQ) review of the need for a watermaster in the Trinity River Basin, Trinity-San Jacinto Coastal Basin, San Jacinto River Basin, and San Jacinto-Brazos Coastal Basin. According to Section 11.326(g) and (h) of the Texas Water Code, the TCEQ must evaluate all river basins in the state that do not currently have a watermaster program to determine whether one should be appointed or not. In 2013, we are evaluating the four basins above.

On March 1, 2013 we mailed letters to all water right holders, county judges, extension agents, and other interested parties in the basins and requested input for our evaluation of these basins. We will be holding the following stakeholder meetings to discuss the evaluation and the watermaster program, and welcome additional comments:

6:00 p.m. – May 21, 2013  
 Liberty Independent School District  
 Auditorium  
 1629 Grand Avenue  
 Liberty, Texas 77575

6:00 p.m. – May 23, 2013  
 City of Corsicana  
 Library Civic Room  
 100 N 12th Street  
 Corsicana, Texas 75110

6:00 p.m. – May 28, 2013  
 Houston-Galveston Area Council  
 3555 Timmons Lane  
 2<sup>nd</sup> Floor – Conf. Room A  
 Houston, Texas 77027

6:00 p.m. – May 30, 2013  
 City of Conroe  
 300 West Davis Street, Suite 240  
 Conroe, Texas 77301

6:00 p.m. – June 4, 2013  
 TCEQ Region 4 Office  
 2309 Gravel Drive  
 Fort Worth, Texas 76118

We will be accepting additional comments in response to the stakeholder meetings through **5:00 p.m. on June 14, 2013**, which will be the close of the comment period. Please mail your comments to the Watermaster Section, MC 160, P.O. Box 13087, Austin, Texas 78711-3087 or email them to [watermaster@tceq.texas.gov](mailto:watermaster@tceq.texas.gov).

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Figure D-1 cont.

**Outreach Letters to Stakeholders, FY 2013**Stakeholder  
Page 2

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

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

Sincerely,



Amy Settemeyer, Manager  
Watermaster Section, MC-160  
Water Availability Division  
Texas Commission on Environmental Quality

Figure D-2

**Outreach Letters to Stakeholders, FY 2014**

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



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

March 5, 2014

Re: Preliminary Watermaster Evaluation for the Neches River Basin

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating three basins, including the Neches River Basin, to determine whether there is a need to establish a watermaster. The purpose of this letter is to notify you and seek written input on the process, to identify the information the agency should consider during our evaluation.

According to Sections 11.326(g) and (h) of the Texas Water Code the Executive Director (ED) must evaluate all river basins that do not currently have a watermaster to determine whether one should be appointed. The ED must report the findings from the evaluation and make recommendations to the TCEQ Commissioners, who may direct the ED to move forward with or 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 the first opportunity to participate in this process. As part of the evaluation, we also plan to mail notifications to all current water right holders within the Neches River Basin of stakeholder meetings expected to be held in the spring of 2014. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for later this summer.

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

We will consider the following criteria when evaluating a basin:

- (1) *Has there been a court order to create a watermaster?*
- (2) *Has TCEQ received a petition requesting a watermaster?*

Figure D-2 cont.

**Outreach Letters to Stakeholders, FY 2014**

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

The enclosed fact sheet includes general information about the watermaster program as well as the evaluation process. 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.

In order that we may best review your comments, please include the following information in your letter:

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

Please send written comments by April 04, 2014 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](mailto:watermaster@tceq.texas.gov).

If you have any questions or additional comments, please feel free to contact my staff in the Watermaster Section: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631. In addition, you may sign up to receive email updates: <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](http://www.tceq.texas.gov/goto/watermaster).

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

Sincerely,



Amy Settemeyer, Manager  
Watermaster Section, MC-160  
Water Availability Division  
Texas Commission on Environmental Quality

Enclosure

Figure D-2 cont.

**Outreach Letters to Stakeholders, FY 2014****Watermaster Evaluation Fact Sheet - 2014****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. This assessment is required at least once every five years, and the TCEQ developed a schedule to consider several basins each year. During 2012, the TCEQ evaluated the Brazos River Basin, the Brazos-Colorado Coastal Basin, the Colorado River Basin, and the Colorado-Lavaca Coastal Basin, and in 2013 the Trinity River Basin, the Trinity-San Jacinto Coastal Basin, the San Jacinto River Basin, and the San Jacinto-Brazos Coastal Basin. For 2014 TCEQ will evaluate Sabine River Basin, Neches River Basin, and Neches-Trinity 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 the user with lower priority to reduce or stop pumping if needed.
- ❖ When streamflows diminish, the watermaster allocates available water among the water right holders according to each user's priority date.
- ❖ If a water-right holder does not comply with the water right or with TCEQ rules, the executive director may direct a watermaster to adjust the control works, including pumps, to prevent the owner from diverting, taking, storing, or distributing water until the water right holder complies.

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

***Advantages of a Watermaster Program.***

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

- ❖ Watermasters can coordinate diversions in the basin, ensuring that all water users get the best overall value from the water available to them.

Figure D-2 cont.

## Outreach Letters to Stakeholders, FY 2014

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

### **Program Costs and Fees.**

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

The total amount assessed per water right holder is comprised of both a base fee charged on each account and an annual fee based on the volume of water that may be diverted for each authorized use. The current base fee is \$50 per account and generally does not change from year to year. The use fee is calculated each year and is based on the proposed operating budget for each watermaster program.

In addition to the cost of the watermaster program itself, most users will be required to add a meter to their pumps. Depending on the specific technology, a meter may cost \$400 or more. However, metering may lead to enough of a savings in pumping costs to offset the cost of the meter. In other words, the user might find that he or she had been running the unmetered pumps longer than it took to get the needed volume of water.

### **Participating in the Process**

We encourage input on this process. If you are interested in the evaluation of the Sabine River Basin, Neches River Basin, Neches-Trinity Coastal River Basin, or if you have any questions on this process, please contact us:

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

**By Email:** [watermaster@tceq.texas.gov](mailto:watermaster@tceq.texas.gov)

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

**Web Site:** [www.tceq.texas.gov/goto/watermaster](http://www.tceq.texas.gov/goto/watermaster)

Figure D-2 cont.

**Outreach Letters to Stakeholders, FY 2014**

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

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY***Protecting Texas by Reducing and Preventing Pollution*

April 30, 2014

Re: Stakeholder Meetings - Watermaster Evaluation for the Sabine River Basin, Neches River Basin and Neches-Trinity Coastal Basin

Dear Stakeholder:

The purpose of this letter is to invite you to attend stakeholder meetings and to provide updates regarding the Texas Commission on Environmental Quality's (TCEQ) review of the need for a watermaster in the Sabine River Basin, Neches River Basin and Neches-Trinity Coastal Basin. According to Section 11.326(g) and (h) of the Texas Water Code, the TCEQ must evaluate all river basins in the state that do not currently have a watermaster program to determine whether one should be appointed or not. In 2014, we are evaluating the three basins above.

On March 5, 2014, we mailed letters to all water right holders, county judges, extension agents, and other interested parties in the basins and requested input for our evaluation of these basins. We will be holding the following stakeholder meetings to discuss the evaluation and the watermaster program, and welcome additional comments:

6:00 p.m. – June 3, 2014  
 TCEQ Region 5 Office  
 2916 Teague Drive  
 Tyler, TX 75701-3734

6:00 p.m. – June 4, 2014  
 Angelina College  
 Community Services, Room 104  
 3500 South First Street  
 Lufkin, TX 75904

6:00 p.m. – June 5, 2014  
 TCEQ Region 10 Office  
 3870 Eastex Freeway  
 Beaumont, TX 77703-1830

We will be accepting additional comments in response to the stakeholder meetings through **5:00 p.m. on June 13, 2014**, which will be the close of the comment period. Please mail your comments to the Watermaster Section, MC 160, P.O. Box 13087, Austin, Texas 78711-3087 or email them to [watermaster@tceq.texas.gov](mailto:watermaster@tceq.texas.gov).

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Figure D-2 cont.

**Outreach Letters to Stakeholders, FY 2014**

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

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

Sincerely,



Amy Settemeyer, Manager  
Watermaster Section, MC-160  
Water Availability Division  
Texas Commission on Environmental Quality