

The TCEQ Border Initiative

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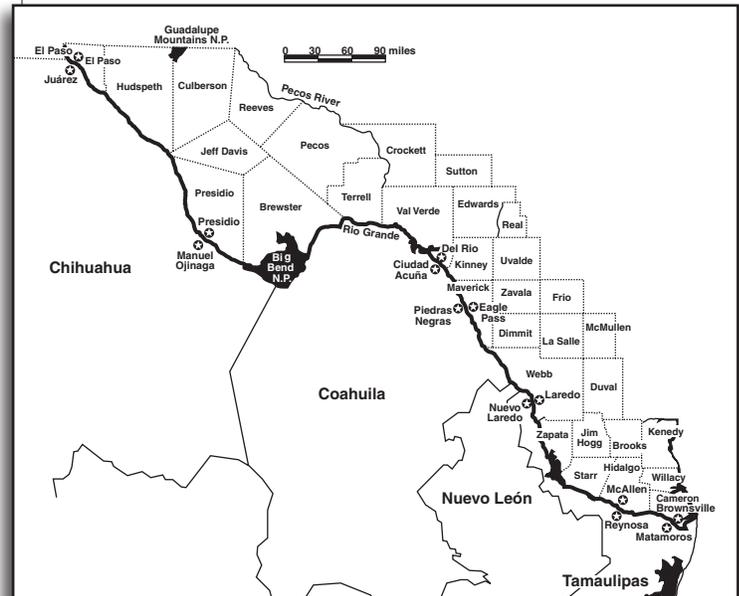
The Texas Commission on Environmental Quality has developed a comprehensive, cooperative initiative to serve border residents. Through this Border Initiative, the TCEQ leads individual projects and works with local, state, and federal stakeholders to maximize efforts to protect the environment of the U.S.-Mexico border region. Since environmental issues do not stop at international borders, the TCEQ collaborates with as many willing partners as possible along the border. The initiative strives to increase cooperation and the exchange of knowledge, experience, and technology as it relates to the environment in the border region, as well as promote the TCEQ's mission to protect Texas' public health and natural resources consistent with sustainable economic development.

The TCEQ Border Initiative is led by Chairman Bryan W. Shaw, Ph.D., P.E., and coordinated through the Border Affairs team, under the direction of the executive director. The TCEQ will ensure that efforts on the Texas border with Mexico have a measurable environmental benefit.

Local Focus

- The TCEQ has four regional border offices: El Paso, Midland, Laredo, and Harlingen. Regional-office personnel conduct regular investigations, respond to complaints, and serve as first responders for releases of hazardous materials, among other duties.
- The Rio Grande watermaster program is based in the Harlingen office, with personnel in the Laredo office and a satellite office in Eagle Pass. The watermaster ensures deliveries of water to water-right holders and manages withdrawals.
- In all four regional offices, personnel from the Small Business and Local Government Assistance program provide confidential assistance on air, water, and waste regulations to small businesses and small local governments, both face to face and through the toll-free hotline, at 800-447-2827.
- Central-office personnel in Austin also offer support.
- For instance, personnel from the Public Education Program answer questions about pending TCEQ permits and explain the permitting process and opportunities for public participation. The Office of the Chief Clerk conducts public meetings on permit applications around the state.
- Austin personnel in the Office of Air and Office of Compliance and Enforcement work on El Paso air quality issues related to attainment status with federal standards. The Monitoring Division

Texas Border with Mexican States



operates and maintains monitoring stations along the upper, middle, and lower Rio Grande in Texas to measure specific air quality parameters that vary by location. Data from these monitors are available to the public on the TCEQ website at www.tceq.texas.gov/goto/monitors.

- The agency has 85 full-time employees dedicated to border work, including regional and Border Affairs personnel.

State Focus

The TCEQ collaborates on border environmental goals with various agencies. Unless otherwise indicated, these are legislatively mandated.

- Chairman Bryan W. Shaw, Ph.D., P.E., represents the TCEQ on the Texas-Mexico Strategic Investment Commission, an interagency group chaired by the Texas border-commerce coordinator. Among its many charges, the commission must "identify areas of environmental protection that need to be addressed cooperatively between Texas and the Mexican states."
- The Border Affairs manager serves on the Inter-agency Work Group on Border Issues of the Office of the Texas Secretary of State. The TCEQ supplies



information on the agency's impact on border communities for use in developing public policy.

- In addition, the agency's colonias coordinator, who is also the Border Affairs manager, represents the TCEQ in the Colonias Coordination Work Group. This interagency effort is led by the colonias coordinator in the Office of the Secretary of State and meets quarterly to review individual projects in Texas that ensure delivery of water, wastewater, stormwater drainage, and paved roads to colonia residents.
- The agency helps develop special border reports in collaboration with other agencies. These include updates on agency activities for the annual Texas border-commerce coordinator's report and reports on activities related to colonias, such as the continuing reports required by Senate Bill 99, 80th Regular Session, on tracking the progress of colonia projects funded by the State of Texas.
- TCEQ personnel meet regularly with personnel from other agencies as needed to ensure completion of border-related projects and activities. For example, the TCEQ is an integral stakeholder in the Texas Water Infrastructure Coordination Committee.

National and International Focus

The TCEQ works nationally and internationally to accomplish environmental-protection goals. The agency works with other U.S. and Mexican states, federal agencies in both countries, and binational institutions created under environmental side agreements to the North American Free Trade Agreement (NAFTA).

Partnerships with Other States

- **State-to-State Strategic Environmental Plans.** The TCEQ has developed strategic environmental plans with Texas' four neighboring Mexican states—Chihuahua, Coahuila, Nuevo León, and Tamaulipas—and has been updating these plans. The plans foster technical exchange and mutually beneficial cooperative work between the TCEQ and counterpart environmental agencies of the other states.

Under the plans developed with Nuevo León and Tamaulipas, the TCEQ and its counterpart agencies collaborated on multi-day technical exchanges in Austin and in the Lower Rio Grande Valley on large-scale recycling, hazardous-waste management, sanitary landfills, and emergency preparedness. In 2013, TCEQ commissioners and Coahuila's minister of the environment signed a joint memorandum of cooperation during the agency's Environmental Trade Fair and Conference. Since then, Texas and Coahuila officials have coordinated on scrap-tire management, curbing illegal dumping of demolition and construction debris, and improving the water quality of urban streams and the middle Rio Grande.

- **Texas-Mexico Energy Task Force.** In September 2015, Gov. Greg Abbott and Mexico announced the

creation of an energy task force to foster economic growth on both sides of the border and to find new and innovative energy solutions. Commissioner John Niermann represents the TCEQ on the task force.

Collaboration with NAFTA Environmental Agencies

- **North American Commission on Environmental Cooperation (CEC).** The TCEQ tracks and participates in relevant activities of the CEC, which was created under the trilateral (Canada-U.S.-Mexico) environmental side agreement to NAFTA. Under the CEC charter, each nation can have two committees advising its respective cabinet-level environmental minister regarding CEC implementation.
- **Border Environment Cooperation Commission and North American Development Bank.** The TCEQ works closely with these two agencies, created under a U.S.-Mexico environmental side agreement to NAFTA, to ensure construction of environmental infrastructure in the border region and to protect the environment and public health. Since 2006, the two institutions have had a common board of directors.

In the fall of 2014, the board voted to fully integrate the two institutions, which is expected to take place in early 2017.

Partnerships with Local, State, Federal, and Binational Stakeholders

- **Border 2020.** The Border 2020 binational environmental program is the implementation plan of the La Paz Agreement for the protection of the environment of the U.S.-Mexico border. TCEQ management and personnel were deeply involved in developing the goals and strategies of Border 2020, building on its predecessor program, Border 2012.

Through Border 2020, the TCEQ works with local individuals and organizations (including border residents, local community leaders, academic institutions, and non-governmental organizations [NGOs]) and local, state, and federal agencies from both sides of the border on common environmental goals.

The U.S. Environmental Protection Agency (EPA) and its Mexican counterpart, the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT), lead Border 2020, with close participation by TCEQ personnel, in five binational policy forums, which are chaired by federal representatives from the United States and Mexico.

Agency personnel also participate in two regional work groups, the Tri-State (New Mexico, Texas, and Chihuahua) and the Four-State (Texas, Coahuila, Nuevo León, and Tamaulipas); TCEQ Chairman Bryan W. Shaw, Ph.D., P.E., is the Texas co-chair for both of these work groups.

- **Joint Air Quality Advisory Committee.** The JAC is a binational group also created under the La Paz Agreement. Composed of 22 members—half from Mexico and half from the United States (the two nations in the binational Paso del Norte airshed)—the group makes recommendations to the Border 2020 Air Policy Forum on ways to improve air quality in the airshed.

Since its creation in 1996, and due in large part to implemented recommendations (such as the delivery of oxygenated fuels to Ciudad Juárez to reduce carbon monoxide in the winter), the number of times the airshed exceeded the Mexican national carbon monoxide standard has dropped from 30 per year to one or two. In El Paso, initiatives such as the vehicle inspection and maintenance program have resulted in zero monitored violations since 2001, along with federal redesignation to attainment status for carbon monoxide.

- **Good Neighbor Environmental Board.** Chairman Bryan W. Shaw, Ph.D., P.E., was reappointed in 2015 to a term expiring in 2018 to represent the State of Texas on the GNEB, an advisory board to the U.S. President and Congress on environmental and infrastructure issues along the U.S.-Mexico border. The GNEB is charged with producing an annual report for its clients.
- **Lower Rio Grande Water Quality Initiative.** The agency continues binational work with Mexican state and federal agencies, the U.S. EPA, and the International Boundary and Water Commission (IBWC) to restore and protect water quality in the Rio Grande/Río Bravo downstream of Falcon Dam. The objectives of the initiative are to characterize the state of the river, develop a strategic plan to improve environmental conditions, and implement a monitoring plan to document progress.
- **Sister-City Emergency Planning.** Agency personnel from both the regional offices and Border Affairs support sister cities (adjacent cities separated by the border) in their local emergency planning. Illustrating the collaborative nature of binational work, projects invariably involve local and state participation, and often receive funds and support from federal sources, such as, respectively, the Border 2020 program and the Northern Command of the U.S. Department of Defense.

Based on input from local experts and city officials, the plans are being enhanced to include responses to “all hazards,” such as hurricanes and floods, not just to chemical releases.

categories: water quality, air quality, emergency management, and general (multimedia). It is not comprehensive.

Water Quality

Assisting Compliance

- **Assisted Water Systems with Current or Pending Enforcement Actions.** From January 2014 to April 2016, the Office of Water, through its contract for financial, managerial, and technical assistance, consulted with 96 water and wastewater systems in the border area. The on-site assistance varied from consolidation assessment to assistance with compliance issues, drought, and funding.

Monitoring Water Quality

- **Collaborated with Coahuila on the Restoration of the Arroyo Las Vacas.** The Coahuila Ministry of Environment led a collaborative project to survey, sample, and restore the Arroyo Las Vacas, an urban stream in Ciudad Acuña, Coahuila, and a named tributary to the Rio Grande/Río Bravo. The TCEQ assisted by providing quality-assurance documents, sharing Texas’ water quality standards, and hosting a technical exchange in Austin with 15 Mexican officials and students.

In November 2015, the TCEQ worked with the Coahuila Ministry of Environment and the International Boundary and Water Commission, United States and Mexico, and organized a binational training on surface water quality sampling at Amistad Dam near Del Rio, Texas. More than 30 technicians and officials of both nations from the three levels of government and from nonprofit organizations participated.

- **Conducted Aquatic-Life Monitoring of the Upper Pecos River.** The Pecos River is an important source of surface water in arid West Texas. The aquatic-life use for the upper Pecos River (Segment 2311) is impaired for depressed dissolved oxygen and is on the 2014 303(d) list (a report of impaired water bodies prepared by the TCEQ biennially, as required by the federal Clean Water Act). The 2014 303(d) list is available on the TCEQ website.

The TCEQ evaluated results of aquatic-life monitoring in the upper Pecos River to ensure the previously assigned water quality standards were appropriate. Upon review, the TCEQ adopted revised standards for aquatic life and the associated minimum-dissolved-oxygen criterion in February 2014. These changes are pending EPA action and must be approved by the EPA prior to use in the Texas Integrated Report of Surface Water Quality.

- **Installed Continuous Water Quality Monitoring on the Arroyo Colorado.** The TCEQ installed a continuous water quality monitoring station on the Arroyo Colorado near Rio Hondo, to monitor conditions and changes in water quality to support

Accomplishments, 2014-16

The TCEQ completed the following projects between January 2014 and April 2016. The list represents several

the development of the Arroyo Colorado Watershed Protection Plan. (See the third bullet item under “Protecting Surface Water Quality,” in the “Action Plan, 2016” section, below.)

Protecting Water Quality

- **Developed a Binational Lower Rio Grande Water Quality Initiative.** Over the past several years the TCEQ has partnered with U.S. federal and Mexican state and federal agencies to develop a framework for a binational plan to address water quality impairments and concerns in the Rio Grande/Río Bravo below Falcon Reservoir. These efforts culminated in a binational agreement (also called Terms of Reference) for collaboration among six agencies from the U.S. and Mexico. The agreement, which establishes the framework for cooperation and specifies the goals of the initiative, was signed by both countries in September of 2013.

Sampling. As part of the binational agreement, the partners collected data, most recently in spring 2016, to characterize water quality and develop and calibrate a binational water quality model of the river segment.

Modeling. The binational partners are developing a numerical water quality model of the river below Falcon Reservoir to guide binational decision-making to address water quality impairments and concerns. The partners plan to complete the model by the beginning of fiscal 2017.

Managing Water Availability

- **Hosted Water Awareness Summits in the Lower Rio Grande Valley.** Together with State Rep. Eddie Lucio III, the TCEQ organized a recurring water summit to raise awareness about the origin of public water in the Lower Rio Grande Valley and how to address future challenges. The most recent summit was held December 2014. The summits have been effective in engaging stakeholders, fostering relationships, and developing a regional perspective.
- **Supported the City of Laredo in Organizing a Pair of Binational Conferences on Water Conservation.** The TCEQ worked closely with the EPA and the Laredo Utilities Department on water-conservation conferences in Laredo; the most recent was held February 2015 (200 participants). The participants—including U.S. and Mexican local, state, and federal officials—shared information on water-conservation measures related to crop irrigation, the impact of drought on local communities, and incentive programs for water systems.
- **Facilitated the Establishment of Environmental-Flow Standards for the Rio Grande/Río Bravo, Rio Grande Estuary, and Lower Laguna Madre.** Senate Bill 3 (80th Texas Legislature) set out a new regulatory approach for environmental-flows for Texas’ rivers and bays. In February 2014, the TCEQ ad-

opted basin-specific environmental flow standards for the Rio Grande to be applied to water-right applications for new water. For more information, see <www.tceq.texas.gov/goto/bbasc>.

Air Quality

- **Provided Clean School Bus Grants.** The Texas Clean School Bus program reimburses school districts and charter schools for the installation of retrofit technology to reduce diesel emissions. The program directly benefits the health of schoolchildren by reducing concentrations of particulate matter and other pollutants in and around the school-bus cabin.

In fiscal 2016, the program invested more than \$1 million in state and federal funds for the improvement of onboard air quality for 49 school buses along the Texas border with Mexico. From the start of the program, in September 2008, through August 2016, the TCEQ has invested \$6.4 million in state and federal funds to retrofit 868 buses in 26 school districts in border counties.

Modeling and Analyzing Air Quality

- **Generated Emissions Profile for Cross-Border Transit Buses.** In fiscal 2014 and 2015, the TCEQ contracted with the Texas A&M Transportation Institute to generate border-specific drive cycles for cross-border transit buses at El Paso-Ciudad Juárez ports of entry. The TCEQ analyzed the data following federal emissions models to develop a more refined on-road mobile emissions inventory.
- **Improved the Characterization of Ozone Formation in the Paso del Norte Airshed.** In fiscal 2015, the TCEQ worked with the University of Texas at El Paso (UTEP) to calculate photolysis-rate coefficients based on real-time data to improve our understanding of ozone formation in El Paso. The project included the purchase of an actinic flux spectrometer, data collection, simulation, and analysis of the transport of ozone and its precursors across the international border. UTEP presented the results of the study to a large group of TCEQ experts and at a binational forum on air quality. The results will help ozone forecasting and targeted methodologies to decrease ozone concentrations.
- **Quantified Long-Haul Mexican Diesel Traffic between Laredo and San Antonio.** Mobile diesel emissions are expected to be an increasing contribution to the emissions inventory of the Eagle Ford and San Antonio areas. In fiscal 2015 the TCEQ managed a project with the Texas A&M Transportation Institute to survey the current volume of and anticipate increases in long-haul Mexican diesel traffic on the IH 35 corridor between Laredo and San Antonio. The project results will help planning to maintain air quality in San Antonio in the face of increasing diesel truck traffic.

Monitoring Air Quality

- **Partnered with Ciudad Juárez to Improve Continuous Air Quality Monitoring.** In 2016 the TCEQ Border Affairs program collaborated with the Ciudad Juárez Ecology Department to assesses and calibrate three continuous air monitors that are part of the Juárez network. The team held multiple planning calls with up to 20 stakeholders, Ciudad Juárez staff visited TCEQ headquarters in Austin, and a third party audited the Juárez monitors and submitted a full assessment.

Fostering Energy Efficiency for Improved Air Quality

- **Led Conferences on Clean Energy and Energy Efficiency.** In 2014 the TCEQ Border Affairs program collaborated with Keeping Pace in Texas <www.keepingpaceintexas.org/> on its annual conference on the Property Assessed Clean Energy program, and in 2015 the TCEQ hosted a smaller, follow-up conference in the Lower Rio Grande Valley on energy-efficiency upgrades for independent school districts.

Waste Management

- **Improved Scrap-Tire Management in the Border Region through Education and Cleanup Events.** As part of a four-pronged approach to improving scrap-tire management in the border region, the TCEQ focused on market development, education, fair and consistent enforcement, and remediation of existing tire piles.

In March 2014, the TCEQ spearheaded a group—including the State of Texas Alliance for Recycling, the EPA, and the Rubber Manufacturers Association—to hold a two-day workshop in El Paso on scrap-tire management. A follow-up to an earlier event held in San Antonio, the workshop employed the “Future Search” methodology, a way to achieve consensus among stakeholders with differing goals. Participants included local, state, and federal government officials from both sides of the border as well as representatives from NGOs, academia, and private industry, in order to fully represent the tire-management community.

The El Paso meeting, responding to a local need, led to the creation of the Paso del Norte Tire Advisory Committee (TAC), which has met a half dozen times since 2014. (See the second bullet item under “Waste Management,” in the “Action Plan, 2016” section, below.)

- **Led Scrap Tire Cleanup Events.** Over several weekends during spring 2014 and 2015 and fall 2015, the TCEQ collaborated with the EPA and local governments to hold scrap-tire collections, also known as “tire amnesty days,” in Hidalgo County and rural areas of El Paso County. The most recent tire cleanup event was held in El Paso County in October 2016.

Emergency Management and Other Projects

Emergency Management and Preparedness

- **Supported Binational Technical Training on Hazardous-Waste Management and Emergency Response.** In 2014 and 2015, TCEQ personnel from the Harlingen, Laredo, and El Paso offices worked closely with the EPA and counterparts in Mexico to transfer emergency-response equipment, enhance contingency plans, and hold emergency-simulation events for emergency responders from both sides of the border.

In fall 2016, Border Affairs personnel worked closely with municipalities on both sides of the border in the Lower Rio Grande Valley in their signing of a cross-border contingency plan, which was developed after several years’ effort. The plan formalizes cross-border communications and emergency-response strategies for the cities of Brownsville and Harlingen in Texas and Matamoros and Valle Hermoso in Tamaulipas.

Other: General Projects

The following projects are broader, or more general, in scope, addressing more than one category or “medium” (air, water, or waste), and often embracing a collaborative approach.

- **Continued State-to-State Environmental Programs.** The TCEQ has a comprehensive state-to-state agreement with the environmental ministry of Coahuila and has collaborated on binational issues and completed several technical exchanges. Five-year agreements with the environmental ministries of Nuevo León and Tamaulipas ended in 2015 and 2016, respectively, aligned with their governors’ terms. The TCEQ maintains a close relationship with its neighboring states in Mexico and will pursue new agreements with the new administrations.
- **Focused on Border Issues at the TCEQ Environmental Trade Fair.** During the TCEQ Environmental Trade Fair in May 2016, Border Affairs organized a full day of presentations on environmental quality topics along the Texas border with Mexico. Topics included Mexico’s energy reform and opportunities for Texas’ economy, overview of oil and gas development in the U.S. border region, recent binational efforts in developing green infrastructure for border cities, and scrap-tire management. A total of 400 people attended the various panels.
- **Participated in the Colonias Work Group and the Economically Distressed Areas Program Task Force.** The agency’s colonias coordinator represented the TCEQ at regular meetings to implement Senate Bill 99 (80th Texas Legislature), on the tracking of state-funded projects that provide basic services for colonias. The TCEQ leads meetings on specific colonia-related issues along the U.S.-

Mexico border and in Nueces County and actively participates in resolving issues related to water and wastewater in colonias through quarterly meetings led by the colonias coordinator of the Secretary of State's Office. The most recent SB 99 report was released December 2014.

- **Continued Education, Investigations, and Compliance Assistance Related to Oil and Gas Activities in the Eagle Ford.** The Eagle Ford Shale is one of the largest domestic crude-oil and natural-gas developments in more than 40 years. Roughly 50 miles wide and 400 miles long, the Eagle Ford spreads across Texas from the Mexican border toward Brazos County, covering all or parts of 24 Texas counties.

Multiple offices of the TCEQ have been active in working with local governments, regulated entities, and other interested parties. The TCEQ developed and distributed regulatory information, guidance documents, e-mail notifications, and Web pages. TCEQ staff regularly presented on oil and gas topics in half a dozen forums.

- **Participated on the Good Neighbor Environmental Board.** In May 2014, EPA Administrator Gina McCarthy named TCEQ Chairman Bryan W. Shaw, Ph.D., P.E., to the GNEB; Chairman Shaw was reappointed in 2015. The TCEQ drafted portions of the 2014 report and the 2015 advice letter to the president and the U.S. Congress and is contributing to the 17th report on environmental resilience, for release in late 2016. The reports, records of meetings, list of members and other resources are available online, at <www2.epa.gov/faca/gneb>.

Action Plan, 2016-2017

The following projects or programs will be carried out by the TCEQ in 2016-2017 as part of the agency's Border Initiative. This list is not comprehensive.

Water Quality, Availability, and Emergency Management

Protecting Surface Water Quality

- **Characterize Bacteria in the Lower Laguna Madre/Brownsville Ship Channel Watershed.** The Lower Laguna Madre/Brownsville Ship Channel watershed is the area between the Rio Grande watershed and the Arroyo Colorado watershed. The TCEQ is supporting the Texas Water Resources Institute financially and technically in its collection of data to assess the sources of bacterial impairments and concerns about nutrients and dissolved oxygen in the watershed. The project will also engage stakeholders through the formation of a Watershed Partnership. This group will decide on the next steps for addressing bacteria issues within the watershed. The current project will be completed by June 2018.

- **Collaborate with Coahuila on Surface Water Quality Monitoring Programs.** The Coahuila Ministry of Environment is leading a collaborative project to survey, sample, and restore the state's waterways, several of them named tributaries to the Rio Grande/Río Bravo. The TCEQ is supporting this effort with technical exchanges and cross-border collaboration, especially highlighting TCEQ's Clean Rivers Program.
- **Develop a Watershed Protection Plan for the Arroyo Colorado.** The Arroyo Colorado is impaired because of bacteria in the upstream portions and the tidal areas. Periods of low dissolved oxygen also occur in the tidal areas. Since 2007, the TCEQ Office of Water has provided technical and financial assistance to support the watershed protection plan (WPP) for the Arroyo Colorado <www.arroyocolorado.org>, a road map for water quality. The Arroyo Colorado Partnership, administered by the Texas Water Resources Institute, coordinates the WPP and facilitates stakeholder participation. An updated WPP is scheduled for completion in late 2016.
- **Continue the Binational Lower Rio Grande Water Quality Initiative.** In fiscal 2016, the binational partnership completed a series of synoptic water quality monitoring surveys. The partners will use the synoptic survey data, along with historical data exchanged by the two countries in 2013, to develop and calibrate a binational model of water quality for the lower Rio Grande/Río Bravo below Falcon Reservoir.
The model, which will be instrumental in guiding binational decision-making to address water quality impairments and concerns, is expected to be completed in fiscal 2017.
- **Participate in Upper Rio Grande Salinity Management.** The salinity-management project continues in southeastern New Mexico and West Texas along the Pecos River, which is a tributary to the Rio Grande, and Lake Amistad. The TCEQ participates as part of a coalition of local water utilities, irrigation districts, university research organizations, and state and federal agencies. As a non-federal cosponsor of the project with the state of New Mexico, the TCEQ is working with the U.S. Army Corps of Engineers to develop recommendations to improve the water quality of the Pecos River and the Rio Grande.
Other related agency initiatives include maintaining stations for continuous water quality monitoring on the upper Rio Grande and its tributaries that affect the salinity in Amistad Reservoir. The real-time data are viewable online at <www.texaswaterdata.org>.

Protecting Public Drinking Water

- **Host the Annual Public Drinking Water Conference.** This free two-day conference, held each August in Austin, provides tools and information

related to operating a public drinking-water system or water utility in Texas. It offers specific guidance on current and upcoming drinking-water regulations, new technologies, and operating a public water system. Attendees also have the opportunity to consult one-on-one with a TCEQ staff member about their water system in the technical-assistance room.

The 2016 conference sold out. For the latest information on the 2017 conference, visit <www.tceq.texas.gov/goto/pdw-conf>.

Air Quality

Monitoring Air Quality

- **Continue Air Quality Monitoring along the U.S.-Mexico Border.** The TCEQ will continue to collect and report real-time air quality measurements at various locations along the U.S.-Mexico border from Brownsville to Paso del Norte (the binational airshed shared by El Paso and Ciudad Juárez) and provide air quality forecasts to the public.
Daily air-quality forecasts for El Paso, Laredo, and the Lower Rio Grande Valley are available at <www.tceq.state.tx.us/goto/airtoday>. A Texas map with particulate-matter monitors and current levels is available at <www.tceq.texas.gov/goto/pm2-5>.
- **Enhance West Texas Visibility Monitoring.** The TCEQ currently operates the West Texas Visibility Monitoring Network, a network of high-resolution digital cameras used to identify and track natural events such as dust storms in the El Paso region. The TCEQ and the EPA shared the cost of a project, completed in 2014, to update and expand the network to include more monitoring sites, update old servers, and enhance the website image display and archival access to images.
- **Develop a Diesel Emissions Reduction Program for Drayage Trucks in the Paso del Norte Airshed.** The TCEQ is partnering with the Texas A&M Transportation Institute and binational trucking companies to develop a training module for drivers of drayage and heavy-duty diesel trucks in the El Paso-Ciudad Juárez area to reduce emissions and fuel consumption. The project includes analysis of routes, logistics, wait times at ports of entry, and driver behavior. The TCEQ will scale the training module to use at ports of entry along the Texas border.
- **Facilitate Binational Technical Exchanges on Air Quality Monitoring.** The objective of this project is twofold: to enhance air quality monitoring in the border region and to foster technical exchanges between neighboring states' regulatory agencies. The TCEQ will work with local, state, and federal agencies to troubleshoot, update, and enhance air quality monitoring along the border, with a focus on the El Paso-Ciudad Juárez metropolitan area.
- **Improve Wind-Profiler Data in El Paso.** A radar wind profiler detects wind speed and direction at

various elevations aboveground. The data are vital to understanding air-pollutant transport. Building on a project that began in summer 2014 to modify and upgrade an existing radar wind profiler in El Paso and move it to a new site, the TCEQ and the EPA will share the cost of operating the monitor and analyzing data for fiscal 2016 and 2017.

- **Operate a New Ceilometer in El Paso.** A ceilometer is an instrument to measure the cloud-base height and mixing height of the boundary layer, which is vital in understanding the development and dispersion of pollutants. The TCEQ and the EPA will share the cost of purchasing, installing, and operating a new ceilometer and analyzing the data through August 2017. This is the first ceilometer for the TCEQ and will serve as a pilot project for future ceilometers in the state.

Air Quality Planning

- **Adopt a Limited Maintenance Plan for Carbon Monoxide.** El Paso was re-designated to attainment for CO in 2008. A second 10-year maintenance plan is due to the EPA in October 2016. Because the CO design value in the El Paso area falls well below 85 percent of the National Ambient Air Quality Standard (NAAQS), the area qualifies for a Limited Maintenance Plan. If the plan is approved by the EPA, future transportation conformity determinations would be greatly simplified. The NAAQS for CO is 9.0 parts per million (ppm). The 2013-through-2014 CO design value for El Paso is 2.6 ppm.
- **Continue Work on the Joint Advisory Committee for the Improvement of Air Quality in the Paso del Norte.** The TCEQ serves as U.S. state co-chair of the JAC, and Border Affairs personnel give administrative support to its meetings, held three times a year. The JAC began in 1996. On May 12, 2016, the committee held its 66th meeting and celebrated its 20th anniversary. The TCEQ recently added new technology for JAC stakeholders and others to participate remotely by video conference with full interpretation. For more information, see <www.cccjac.org>.
- **Administer Rider 7 Funding for Air Quality Planning.** The Texas Legislature appropriated funds through Rider 7 of the fiscal 2016-17 appropriations bill to the TCEQ for air quality planning. The TCEQ and El Paso's Metropolitan Planning Organization signed a Rider 7 contract and are working closely on the projects. Collaborative work between the TCEQ and local programs will continue to protect human health and the environment in El Paso and the greater Paso del Norte air basin.
- **Implement the 2015 Ozone Standard.** On Oct. 1, 2015, the EPA revised the primary NAAQS for eight-hour ozone from 75 to 70 parts per billion (ppb). Based on preliminary air-monitoring data for 2015, four areas in Texas would not meet the new ozone standard: Dallas-Ft. Worth, El Paso, San Antonio, and

Houston-Galveston-Brazoria. The state's recommendations on the ability of counties to attain the revised NAAQS, which were due to the EPA on Oct. 1, 2016, were submitted Sept. 30. The states' recommendations will likely be based on the latest complete monitoring data available at the time for 2013 through 2015. El Paso's preliminary 2015 design value is 71 ppb.

- **Work with Local Governments to Continue the Improvement of Air Quality in El Paso.** Ambient air quality in El Paso continues to improve. Ozone levels have remained below the 2008 NAAQS of 75 ppb since 2010, carbon monoxide levels are well below the standard, and levels of fine particulate matter (PM_{2.5}) also remain below the standard set in 2012. Levels of coarse particulate matter (PM₁₀) have decreased in the city, following the implementation of updated control measures.

Enhanced monitoring and best-management practices by the community are necessary to attain, and remain in attainment of, the current standards. The TCEQ will continue collaborating with local governments to update the emissions inventory in the Texas part of the basin.

Waste Management

- **Advance Sustainable Management of Scrap Tires along the Border.** The unauthorized disposal of scrap tires is a major issue on the border, posing a potentially significant threat to human health (e.g., from mosquito-borne viruses like West Nile and Zika) and air quality (e.g., from tire-pile fires). In 2016, the TCEQ continues to work with federal, state, and local stakeholders in the border region, both in the U.S. and Mexico, to improve sustainable tire management. With the aforementioned partners, the TCEQ will address the problem of illegal dumping in four principal ways: educational outreach to tire generators and the general public; market development; fair and consistent enforcement; and the cleanup of legacy piles.
- **Participate in the Paso del Norte Tire Advisory Committee.** In 2014, the TCEQ Border Affairs program led a collaborative project together with three of the four bordering Mexican states, the State of Texas Alliance for Recycling, the Rubber Manufacturers Association, and the EPA to define the desired future of scrap-tire management in the tri-state area of New Mexico, Texas, and Chihuahua. The group identified four strategic goals and formed the Paso del Norte Tire Advisory Committee to address them. For more information, see <www.pasodelnortetires.com>.

Emergency Management, Compliance, and Other

Emergency Management and Preparedness

- **Work with Stakeholders on Cross-Border Emergency-Response Planning.** The TCEQ will work with local stakeholders to create regional

emergency-response plans from a binational perspective. Personnel will work with fire departments and *protección civil* (local and state emergency-management agencies in Mexico) to update and further develop contingency plans for the groups of sister cities along the international border that Texas shares with the four Mexican states of Chihuahua, Coahuila, Nuevo León, and Tamaulipas. Often, one of the improvements to these plans is to include responses to "all hazards," such as hurricanes and floods, not just to chemical releases.

The TCEQ also leads regular meetings, knowledge exchanges, and exercises where emergency officials from both countries respond to a simulated emergency in real time.

Compliance Assistance and Environmental Enforcement

- **Assist Water Systems in the Border Area with Current or Pending Enforcement Actions.** Personnel from the TCEQ Office of Water will perform financial, managerial, and technical assessments for local water systems that are under enforcement. In addition, the TCEQ will either perform consolidation analyses or produce compliance-feasibility studies, as requested.
- **Conduct Training for Border Municipalities, Districts, and Public Water Systems.** The border area presents several unique challenges for drinking-water systems of all sizes, including the high number of systems that rely on surface water as their primary source, which requires a more complex treatment process than groundwater. The TCEQ Water Supply Division will conduct regular workshops for, and provide technical guidance to, local water utilities.
- **Expand the Efforts of the Compliance Assistance, Environmental Stewardship, and Cooperative Enforcement (CAESCE) Task Force in the Border 2020 Three-State Regional Work Group.** The Border 2020 CAESCE Task Force examines ways to promote environmental compliance and enforcement in the Paso del Norte region, especially with respect to the transboundary movement of hazardous waste. The cross-border flow of used and scrap tires is also a priority topic.

Other: General Projects

The following projects are broader, or more general, in scope, addressing more than one category or "medium" (air, water, or waste), and often embracing a collaborative approach.

- **Continue State-to-State Environmental Programs.** Agency personnel, especially in Border Affairs, will work with counterparts from Mexican state agencies on mutual issues with the aim of enhancing and protecting our shared border environment.

The agency is updating these plans as necessary to accommodate ongoing needs, both of the TCEQ and its counterpart agencies in the four neighboring Mexican states.

- **Continue Outreach Efforts on Oil and Gas Topics in the Eagle Ford Shale.** TCEQ experts will continue to participate in and lead various educational and outreach opportunities related to responsible oil and gas development in the Eagle Ford Shale formation.
- **Host Texas-Mexico Environmental Summit.** Commissioner Toby Baker and Carter Smith, the executive director of the Texas Parks and Wildlife Department, are working closely with their counterparts from the four neighboring states in Mexico to host a Texas-Mexico Environmental Summit in early 2017. The summit will bring together leaders from the three levels of government from both countries to talk about environmental

challenges facing the border and how to improve cross-border collaboration in protecting human health and the environment.

- **Support Local Stakeholders through the Border 2020 Program.** Border Affairs personnel will support local stakeholders, including residents, academia, NGOs, and local and state governments, and assist them in applying for environmental-management grants to meet their needs. Border Affairs will lend its expertise and give logistic support to the program, fostering collaboration, communication, and protection of the border environment.
- **Produce a Session on Border Topics at the TCEQ Environmental Trade Fair.** During Texas' Environmental Trade Fair in May 2017, Border Affairs will organize a full day of presentations on important topics related to environmental quality along the Texas border with Mexico.

For more information:

Contact TCEQ Border Affairs by phone at 512-239-3500 or by e-mail at <ba@tceq.texas.gov>.

www.tceq.texas.gov/publications/gi/gi-392.html

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