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To: The Honorable Brooks Landgraf, Committee Chair, House Committee on Environmental Regulation
The Honorable Claudia Ordaz, Vice-Chair, House Committee on Environmental Regulation
The Honorable Members, House Committee on Environmental Regulation

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September 15, 2026

Sierra Club's Comments Regarding Improving the Regulatory Process

The Sierra Club Lone Star Chapter representing more than 21,000 members across Texas submits the following comments to the House Committee on Environmental Regulation. We appreciate the Committee's attention to improving the regulatory processes in Texas and the opportunity to provide our recommendations for either additional regulatory or legislative action. Texas is blessed with abundant natural resources and a robust economy, but we need Texas solutions to assure that our economic development is accompanied by a strong, and clear regulatory framework that protects our communities. We believe that the answer is neither deregulation or overregulation but a balanced approach that leads to positive outcomes for all Texans. We appreciate the invitation to present to the committee, and apologize that neither of us can be here to present in person to present our recommendations.

Texas has made progress in our environmental outcomes, but challenges remain

As a state with a large population, industrial base, petrochemical industry and oil and gas production, it is not surprising that Texas has environmental challenges stemming from that growth. Still, Texas has made progress over the last 30 years through its delegated programs in air, water and land.

According to data provided by the TCEQ, Texas has reduced NOx - Nitrogen Oxide emissions by more than any other state between 2001 and 2023 - some 70 percent. NOx in addition to directly impacting health outcomes is also a major cause of the formation of ozone. Ozone, composed of three oxygen atoms, is caused when NOx and Volatile Organic Compounds form in the presence of sunlight.

Similar though not as dramatic reductions have been seen in VOCs, SO₂ and many toxic chemicals through a combination of major efforts in the petrochemical industry, addressing previously “grandfathered” power plants, and cleaner engines and fuels for mobile and non-mobile vehicle emissions. TERP - the Texas Emissions Reduction Program - has been a big reason for part of this success (See section below).

Our main Texas electric grid is another success story. With a small initial goal for renewable energy and an investment in transmission known as CREZ, Texas utilized our unique energy-only market to drive innovation, and today is the leading state for utility-scale wind, solar and battery storage. What’s interesting is all it took was a modest goal to spur this innovation and we no longer need the goal - in fact it was removed from statute. This investment has been a leading cause of emissions reduction since wind and solar and battery storage have no direct NO_x, SO₂, CO₂ or particulate matter emissions. *Sierra Club would note, however, that the recent advent of large data centers is leading to investments in diesel back-up generation and onsite gas generation which could counteract the real progress we have made in reducing grid-tied emissions.* Table 1 shows some of the real positive outcomes of our investment in Clean Energy (and energy efficiency).

Table 1. Energy Efficiency and Renewable Energy Estimated NO_x Tons Reduced

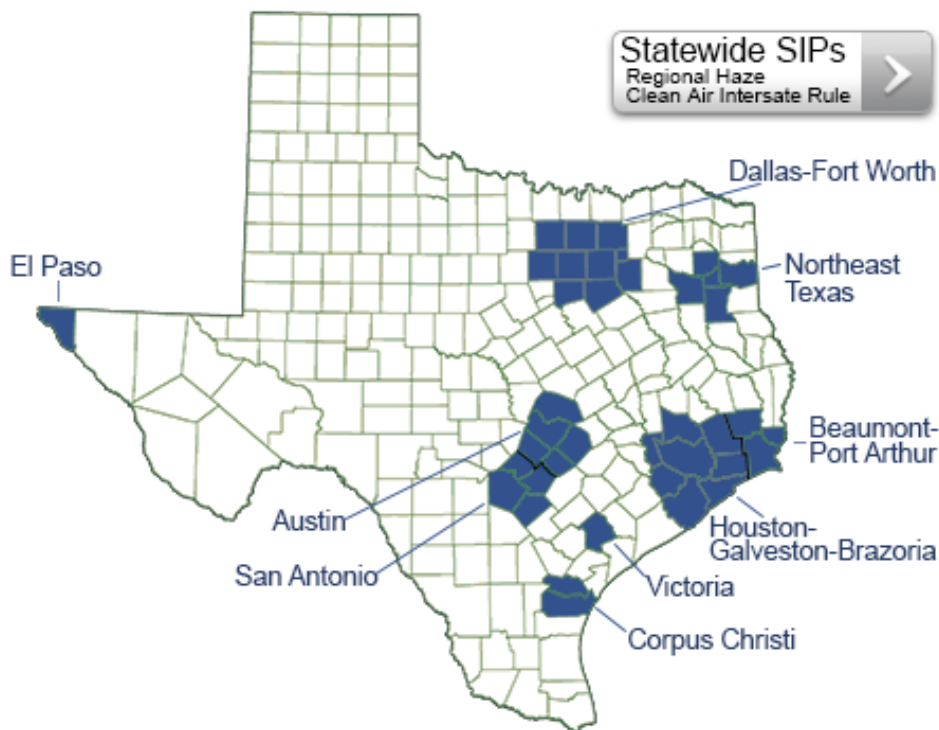
	2022	2027
Renewable Energy	32,816	208,019
PUCT Energy Efficiency Programs	188	390
SECO Programs	493	1,146
Code Compliance	355	1080
New AC Standards	290	438

Energy Systems Laboratory, Energy Efficiency/Renewable Energy Impact in the Texas Emissions Reduction Plan (TERP), Annual Report to the Texas Commission on Environmental Quality January 2022 - December 2022

Still, Texas faces real challenges to meet clean air act standards required under the Federal Clean Air Act.

First, despite real and dramatic emissions reductions, nearly half of Texans live in areas of the state where on certain days, ozone or smog levels are too high, causing that area to not meet EPA-required health-based standards. Put simply, on these hot summer days, for many Texans

the air is not safe to breathe. In addition to ozone, several counties in Texas currently violate new EPA PM 2.5 standards. In fact, the two largest population areas of the state - Dallas-Fort Worth and Houston-Brazoria-Galveston - continue to have hundreds of days that are considered unhealthy because of high levels of ozone.



Areas of State That are Non-Attainment or Near-Non-Attainment for Ozone. Currently, Bexar, Houston-Galveston-Brazoria, and Dallas-Fort Worth and El Paso are considered non-attainment, while Travis County and areas near Waco have violated the latest 70 PPBs 8-hour standard

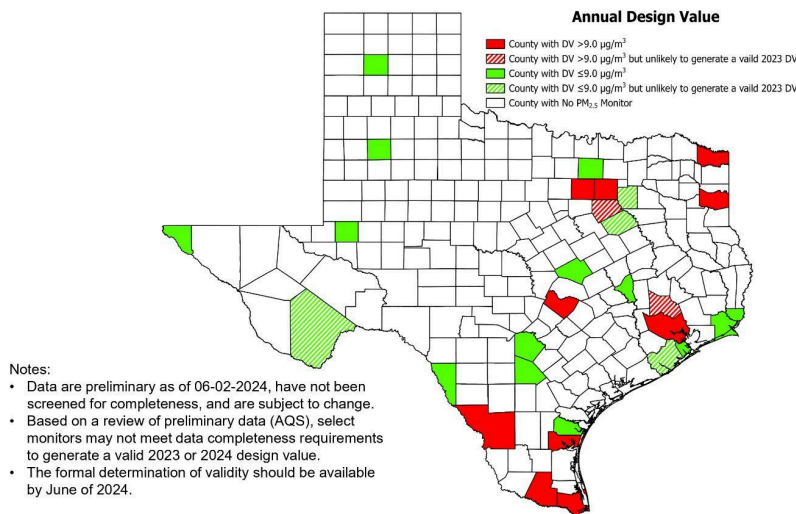
It is worth noting that a lack of monitoring, particularly in West Texas have led to a finding that these areas do not violate the ozone standard, but Sierra Club believes we must expand our monitoring network as these areas face new air pollution challenges from oil and gas development and the build-out of new gas plants and data centers.

Particulate matter - and specifically "Fine Particulate Matter" of 2.5 microns or less - are equally vexing and long-term issues. While this Administration appears to have paused determination of

non-attainment as the most recently adopted standard is reviewed, millions of Texans face high levels of PM 2.5 - tiny particulate matter particles that directly impact health, and over time, do kill. A combination of tiny fine particles blown in from large construction sources like coal plants and wildfires, but also more localized pollution from diesel trucks, concrete batch plants, oil and gas production and a variety of other sources impacts Texans, particularly the young and old. Despite significant work in 2024 to determine non-attainment areas for Texas for the new PM 2.5 standard, the Governor did not submit a final letter to the EPA and the administration has been on a hold pattern for final determination.

Unfortunately, in the meantime there is no SIP process for the new PM 2.5 standard as TCEQ awaits direction. Unfortunately, Texans are paying the price for this inaction.

Potentially Affected Counties



County	Preliminary 2023 Annual DV (µg/m³)
Harris	12.5
Cameron	11.0
Bowie	10.3
Montgomery	10.0*
Dallas	9.9
Kleberg	9.9
Hidalgo	9.7
Webb	9.7
Tarrant	9.6
Travis	9.6
Harrison	9.5
Ellis	9.2**
Atascosa	9.0
El Paso	9.0
Bexar	8.9
Jefferson	8.8
Navarro	8.7**
Nueces	8.4
Brazoria	8.3**
Galveston	8.3
Orange	8.3
Kaufman	8.1*
Brazos	8.0
Maverick	7.9
Denton	7.7
Bell	7.4
Ector	7.3
Brewster	6.2*
Potter	6.0
Lubbock	5.7

*unlikely to generate a valid 2023 DV but may generate a valid 2024 DV
**unlikely to generate a valid 2023 or 2024 DV

Another growing challenge is methane. Methane is the main component in (natural) gas that is a useful product in Texas's economy, but in the air poses both a health and climate risk to our state. Methane over its 20-year lifespan has been found to be 80 times more potent as a climate disruptor than carbon dioxide and no state releases more methane from its oil and gas sector than Texas.

While the Biden Administration proposed and implemented a major "methane" rule in 2024, which required the Texas Commission on Environmental Quality to begin a State



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Implementation Plan designed to reduce methane emissions by more than 80 percent, that SIP was delayed due to actions by the Trump Administration through the Methane Delay Rule.

More recently, the Trump Administration is proposing to roll back part of the rule, and that proposed change is currently being assessed by the Office of Budget and Management, but we expect a proposal for public input later this year.

Texas does not need to wait. Other oil and gas states like New Mexico and Colorado have already adopted their own methane rules, refusing to wait around for the federal government to make a decision. TCEQ already has the authority to implement a strong SIP and implement state-wide rules, no matter the final version adopted by the EPA. As the leading oil and gas state, Texas should develop a strong program that uses a combination of clear standards with specific methane control goals - such as capturing 98% of all methane and banning routine flaring - and a network of monitoring stations and mobile infrared cameras designed to locate leaks, which can then be quickly repaired. A strong Leak Detection and Repair Program is key to our future. Just as we have invested in a strong LDAR program in our downstream petro-chemical industry, we should do the same upstream.

A specific but related air quality concern in both the upstream and downstream oil and gas industry are high levels of hydrogen sulfide. Texas last adopted an ambient air quality standard for hydrogen sulfide some 50 years ago, and its time the Legislature and the industry invested in efforts to reduce these high levels that impact Texas's health and in a few cases, have led to the death of workers.

Similarly, while much time and effort has been made to reduce both direct wastewater discharge pollution through improved permitting and discharge standards, continued growth and sprawl has often overwhelmed local wastewater systems, leading to a proliferation of new systems. Non-point source water solution in rural areas continues to confound Texans. TCEQ has had a hard time keeping up with the hundreds of segments of our streams, rivers, reservoirs, bays and estuaries that are considered "Impaired" under the State's 303 (D) list. According to the most recent Integrated Water Report, over 480 water bodies are required to implement TMDL (Total Maximum Discharge Limit) studies, showing the vast nature of the challenge faced by Texas. (Note the 2026 Texas Integrated Report was recently submitted to EPA).

Number of water bodies assigned to assessment categories in the 2024 Texas Integrated Report

Category	Description	Number of Waterbodies
1	All designated uses are supported, no use is threatened.	95
2	Available data or information indicate that some but not all of the designated uses are supported.	275
3	Insufficient or unreliable available data or information to make a use support determination.	116
4	Available data or information indicate that at least one designated use is not being supported or is threatened, but a TMDL is not needed.	136
5	Available data or information indicate that at least one designated use is not being supported or is threatened, and a TMDL is needed. Category 5 is the CWA Section 303(d) list of impaired waters.	481

Total		1,103
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The Air and Water Challenges Point to the Need for a Strong Statewide Investment in Regulations, Monitoring and Enforcement

Texas is not a place that can afford to move backwards on environmental progress. Whatever the back and forth between administrations at the EPA, the state must have a strong State Implementation Plan for ozone, particulate matter and methane, and strong Water Quality Standards with a process to move water bodies through a TMDL process and off the 303 (D) list. The state must continue to invest in boots on the ground and staff, a vast monitoring network for water and air quality, and voluntary efforts like TERP to meet our needs.

Recently, the Texas Commission on Environmental Quality, in its latest Legislative Appropriations Request, is requesting additional staff. The Legislature should consider this TCEQ request to add \$63 million and 126 additional full-time positions, with a particular focus on employees in the water programs which are historically underfunded.

In addition to funding staff, the Legislature must expand monitoring efforts in both water and air quality. The Sierra Club would support a one-time use of left-over TERP funds in Account 5071 to expand the TCEQ's air quality monitoring network.

Without waiting for the back and forth of every administration on standards and rules governing PM 2.5 and methane, Texas should and can invest now in developing SIPs to reduce these pollutants.

TERP - a Voluntary Effort - Continues to be Successful and Must be Strengthened

While regulatory approaches have done their part, some of this success can be attributed to the success of the Texas Emissions Reduction Plan (TERP), a series of voluntary incentive programs that have helped reduce thousands of tons of nitrogen oxides over the last 25 years. Established in 2021 through legislative action, TERP has distributed over \$1.4 billion in grants to reduce NO_x emissions across Texas.

A major shift in the use of TERP was in 2021 because of the action of this committee, TERP is now flowing outside the budget process, meaning that the TCEQ is able to receive the funds without needing the legislature to allocate leading to a more seamless process. Beginning Sept. 1, 2021 (fiscal 2022), the Texas Legislature authorized TCEQ to use the revenue deposited to the TERP Trust to implement and administer the TERP programs. [THSC Section 386.252](#) requires



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TCEQ to transfer no less than 35% of TERP Trust revenue to the state highway fund for use by the Texas Department of Transportation (TxDOT) for congestion mitigation and air quality improvement projects in nonattainment areas and affected counties

By far the most cost-effective program has been the Diesel Emissions Reduction Incentive, or DERI, which has provided \$1,374,364,837 for 13,513 projects to replace or upgrade 21,679 vehicles and pieces of equipment since 2001. The DERI Program is projected to reduce 191,068 tons of NOX emissions in the DERI-eligible counties. The DERI Program remains the most cost-effective TERP program, with a historical average cost of \$7,193 per ton of NOX Reduced. It's important to note that the DERI program has several sub-programs within it, including the ERIG program. Other cost-effective programs include the Seaport and Rail Yard Areas Emissions Reduction Program, and the Texas Clean Fleet Program. Some other programs are not as cost-effective, but do provide important benefits in terms of moving the market toward alternative fuels, or have other benefits on other pollutants, such as the Texas School Bus Program, which has significant benefits on reducing particulate matter emissions and toxics which impact school children.

TERP Programs 2001 - 2023

TERP Program	Total Projects	Total Grants Expended	NOx Tons Reduced	\$s/Ton Reduced
DERI & ERIG	13,529	\$1,394,595,876	192,031.57	\$7,262.33
Seaport and Rail Yard Areas	467	\$37,137,756	1642.69	\$22,607
Texas Clean Fleet Program	45	\$81,617,123	750	\$108,778
Texas Clean School Bus Program (TCSB)	598	\$42,067,207	302.00	\$139,296
Texas Natural Gas	163	\$59,690,445	1,724	\$34,629

Vehicle Grants Program (TNGVGP)				
TXDOT (FY 23)	6	\$95,054,042.00	Less than 1	Vary widely in six project from \$614 to \$467,239,872 per ton.

Finally, TERP also has a component to measure the benefits of energy efficiency, with the State Energy Conservation Office and Energy Systems Laboratory at Texas A & M collaborating on a number of reporting and measurements, and implementation of better building codes. Last session, Texas approved SB 783, which directs SECO to consider adoption of higher energy codes for new construction, including for state-funded buildings, and Sierra Club is hopeful rulemaking will occur in 2027.

The Sierra Club has been a strong supporter of TERP, a non-regulatory approach to reducing pollution throughout Texas. While Texas should continue this effort, Sierra Club would support some reforms to TERP moving forward:

- First, the decision to allocate 35% of TERP Funds to TXDOT for air quality mitigation projects has not proved cost-effective. Annual reports from TXDOT required by legislation show these projects are at times 100 of times less cost-effective at reducing ozone precursors. The Legislature should consider reducing the amount going to TXDOT. We have advocated for no more than 20 percent going to TXDOT.
- The Legislature should consider adopting legislation similar to HB 3868 from last session, sponsored by Chairman Landgraf. That bill had several important reforms to improve efficiencies and maximize competition within the program through the consolidation of a number of TERP programs, the alignment of provisions governing existing programs within TERP, and by ensuring infrastructure funds are made eligible through the Texas Clean School Bus Program. Additionally, CSHB 3868 creates a new third-party scrappage database of vehicles and vehicle owners that would qualify for vehicle scrappage provisions of TERP.
- Consider a new program focused at addressing leaks of methane and related emissions from the oil and gas industry. While TERP already allows some grant funding for new technologies that help reduce emissions from oil and gas production, a specific program focused on locating leaks and super-polluter events regionally could address emissions

before they become catastrophic. Such a program would help identify these events, and then give industry a reasonable time - such as 14 days - to fix the issue before enforcement would be implemented.

- Utilize TERP in a way to reduce both ozone precursors and PM 2.5 emissions. Texas should focus on programs that have co-benefits.
- Continue to monitor efforts to reduce pollution through energy efficiency programs, as well as through implementation of SB 783 for better energy building codes.
- Consider a one-time use of the balances still found in the TERP Account before the 2021 legislation. With over \$2 billion in Account No. 5731, Sierra Club would support a four-year \$200 million air quality monitoring effort to expand monitoring of methane, PM 2.5, ozone and toxic issues like hydrogen sulfide.

Public Participation Can No be Sacrificed in the Name of Regulatory Flexibility

Two sessions ago, this committee made a real statement on the need for improved public participation in environmental decisions and permitting with the passage of SB 1397, the TCEQ sunset bill. That bill made real progress in assuring that permits and permit applications are online, and that TCEQ invests in an office to expand access to information and public participation.

Sierra Club is concerned by a proposed rule at the EPA that would lower requirements for public participation in so-called minor air permits used commonly for “smaller” sources of air pollution. In fact, we are already seeing abuse in our view of data centers using “minor permits” to permit onsite and backup power generation, and escape basic notice and other requirements. Recently, we filed a notice to sue a data center in the San Antonio area for its use of these “minor” permits.

Sierra Club recommends strong commitment to public notice, the opportunity for public meetings, and for more significant permits, the opportunity for contested case hearings. We remain concerned about the defacto use of “guidance” by TCEQ to deny requests for contested case hearings if the affected person is more than one mile from an emission or discharge point.

Sierra Club does recommend legislative action to assure that companies do not abuse the use of minor permits by stacking them and avoiding more rigorous regulatory review. Assuring that such permits receive cumulative analysis, best practices, and required notice and comment will be imperative as Texas continues to see development of large data centers which require massive back-up generation. We should also consider more rigorous standards on diesel engines, such as requiring Tier 4 Diesel Engine Standards.

Texas Must Lead and Determine its Storage and Disposal Authority on High and Low-Level Radioactive Waste

Sierra Club has supported recent efforts in 2021 and 2025 to clarify Texas' role in the disposal and storage of radioactive waste. As a Compact State, we maintain a responsibility to dispose of low-level radioactive waste from Texas and Vermont, and we have chosen to allow imports of Low-Level Radioactive Waste to the Texas site in Andrews County. Recent legislative action by Chairman Landgraf and others have assured that we as a state will not become a place where high-level radioactive waste is stored or disposed of with the exception of high-level waste already stored onsite at our nuclear power plants. Sierra Club would note of the recent proposed rule at the NRC to allow "Greater than Class C" and Transuranic Waste to be disposed of in near-surface level sites. We have a concern that this could lead to the Andrews Site to become the defacto site for Greater Than Class C radioactive waste if the NRC were to move forward on its proposal. We oppose this change and hope Texas will make appropriate changes to protect us from becoming the defacto disposal site for Greater than Class C Radioactive Waste.

Sierra Club's Recommendations Regarding Governing Water Quality

The Legislature should ensure that TCEQ's Surface Water Quality Standards revision process is timely, transparent, and provides meaningful opportunities for public participation. The Texas Commission on Environmental Quality (TCEQ) is required to review the state's Surface Water Quality Standards (SWQS) every three years, but the current revision cycle has stretched well beyond its original timeline. Since 2024, when TCEQ started the process of SWQS revision, the agency has hosted only one public meeting, in March 2025. A second meeting was scheduled for February 2026, then canceled shortly before it was supposed to happen, and no new date has been announced. The SWQS revision was originally expected to be completed in spring 2026 but it's still underway.

The state's SWQS guide how Texas rivers, streams, lakes, and coastal waters should be protected, and provide the basis for many permitting activities that fall under the TCEQ's jurisdiction. The agency has indicated that staff capacity has been part of the challenge. If additional staff or resources are needed to finalize this revision and keep future revisions on schedule and also ensure more opportunities for public participation, *the Legislature should provide that funding.*

The Legislature should direct TCEQ to clarify its Tier 2 antidegradation requirements by setting clear and objective criteria for *de minimis* exception. The Tier 2 antidegradation policy as currently codified in 30 TAC §307.5 effectively treats it similarly to Tier 1 antidegradation, despite Tier 2 antidegradation prohibiting all activities unless "lowering of water quality is

necessary for important economic or social development.”¹ TCEQ defines “degradation” as “a lowering of water quality by more than a de minimis extent.”² As currently defined, the “de minimis” exception undermines the purpose of the Tier 2 review set forth in 30 TAC § 307.5,³ because it fails to establish objective criteria for determining when degradation is acceptable and under what circumstances exceptions to water quality standards can be granted. We raised this issue directly to TCEQ in response to their request for preliminary public comment on the SWQS revision in July 2024. To ensure transparency and protections for Texas waterbodies with the best water quality, the Legislature should direct TCEQ to either remove the *de minimis* exception or establish clear criteria for its use.

The Legislature should direct TCEQ to revise its Recreational Use Categories to properly address levels of bacteria in water bodies. In our comments to TCEQ, we have raised concerns multiple times about TCEQ’s approach to dividing recreational uses into Primary Contact Recreation 1 (PCR1) and Primary Contact Recreation 2 (PCR2). A downgrade to PCR2 assumes that swimming and wading either do not occur or occur only rarely. We’re concerned that in reality this may underestimate how people actually use these water bodies and their potential exposure to harmful pathogens.

PCR2 allows higher levels of *E. coli* bacteria: 206 colonies per 100 milliliters, compared to the stricter PCR1 limit of 126. Allowing higher bacteria levels based on an assumption that people are less likely to come into contact with the water puts public health at greater health risk. There should be a compelling rationale and evidence for making that change. However, TCEQ often bases these decisions on limited site observations and just a few interviews, if any at all, even though a “reasonable level of inquiry” to justify downgrades from PCR1 to PCR2 is required by §307.4(j)(3)(A) of the *Texas Surface Water Quality Standards* and defined in the agency’s own *Recreational Use-Attainability Analyses: Procedures for a Comprehensive RUAA and a Basic RUAA Survey*.⁴

PCR1 should remain the default unless there’s sufficient evidence to justify downgrade. At a minimum, TCEQ should follow its own rules for the site observation and the reasonable level of inquiry before downgrading a water body to PCR2. Additionally, we believe that TCEQ should respond to public comments on proposed downgrades in writing. Otherwise, from the public’s perspective, the process doesn’t look transparent: TCEQ proposes a downgrade, collects public comments, and then moves forward with the downgrade, leaving it unclear whether the agency considered the public input at all.

¹ 30 Tex. Admin. Code § 307.5(b)(2)

² CFR § 131.12(a)(2)

³ Texas’s antidegradation policy roughly parallels that of EPA. See 40 C.F.R. § 131.12(a)

⁴ Recreational Use-Attainability Analyses (RUAAs). Procedures for a Comprehensive RUAA and a Basic RUAA Survey (March 2014). P. 7. Accessed at:
<https://www.tceq.texas.gov/downloads/water-quality/standards/ruaa/recreational-uaa-procedures-2014.pdf>

The Legislature should direct TCEQ to establish clearly defined standards for salinity.

As Texas continues to actively pursue seawater desalination as a new water supply strategy, the state needs to develop stringent salinity standards to protect our bays and estuaries from concentrated brine discharges. Current salinity criteria described in 30 TAC §307.4(g)(3) are vague and insufficient: *“Salinity gradients in estuaries must be maintained to support attainable estuarine dependent aquatic life uses... Absence of numerical criteria must not preclude evaluations and regulatory actions based on estuarine salinity, and careful consideration must be given to all activities that may detrimentally affect salinity gradients.”*

Last session, HB 3728 would have directed TCEQ to establish salinity criteria, but the bill didn’t pass. At the time, TCEQ indicated that the agency was already working on salinity standards. More than a year later, TCEQ hasn’t held a public meeting specifically on salinity standards, and no standards have been proposed.

Texas needs clear standards for salinity, whether numeric or narrative, or a combination of both. Numeric criteria would provide measurable standards for monitoring of salinity, while the narrative approach would ensure that salinity levels remain within biologically acceptable ranges, relying on salinity tolerances of local species. Louisiana is one of the states that uses narrative standards,⁵ and Texas can apply a similar framework. Both strategies offer a more comprehensive approach to protect the salinity balance in coastal waters.

To clarify, we support seawater desalination when it’s done responsibly and believe that responsible regulation is not a barrier when it aims to ensure that seawater desalination plays a lasting role in our state’s water future. As an organization, we continue to believe that the best solution is for desalination plants to consider discharging their brine beyond the barrier islands, and Texas already offers lower regulatory burdens if proposed plants do discharge at least three miles seaward. However, if desalination plants propose to discharge into bays and estuaries, then stringent salinity standards are imperative. The Legislature should explicitly direct TCEQ to incorporate the development of standards for salinity in the ongoing SWQS revision process.

To protect water quality and the ecological productivity of Texas bays and estuaries, the Legislature should require seawater desalination facilities to locate their intake and discharge points offshore, outside of bays and estuaries. Texas bays and estuaries support fisheries, wildlife, and coastal communities, and their water quality depends in part on maintaining the salinity conditions that these ecosystems require. A 2018 study on seawater desalination in Texas prepared by the Texas Parks and Wildlife Department and the Texas General Land Office as directed by the 84th Legislature identified environmentally suitable zones for seawater desalination intakes and discharges at least 3 miles offshore beyond the barrier islands.⁶

⁵[LAC Title 33 Part IX Water Quality](#), Louisiana Department of Environmental Quality

⁶ Texas Parks and Wildlife Department (TPWD) & Texas General Land Office (GLO). September 2018. Marine Seawater Desalination Diversion and Discharge Zones Study. Prepared pursuant to HB 2031, 84th Texas Legislature. Accessible at: <https://tpwd.texas.gov/publications/pwdpubs/media/hb2031dz.pdf>

According to this study, locating discharge and intake points offshore would reduce the risks to salinity levels and aquatic species well-being, and we strongly recommend following the best available science as Texas continues to pursue seawater desalination.

The Legislature should direct TCEQ to establish SWQS for pre-production plastics and strengthen requirements for preventing, monitoring, reporting, and cleaning up spills. Texas SWQS have another major gap: they don't address pre-production plastic pollution, and in fact, don't recognize plastic pellets that continue to end up in the environment in large amounts, as a separate pollutant that should be regulated. Currently, spills of pre-production plastics – which include nurdles, powders, and flakes – are primarily regulated through the Texas Pollution Discharge Elimination System (TPDES) permits, where facilities are allowed to discharge no more than “trace amounts” of floating solids.” However, this is not enough to address the growing issue of pre-production plastic pollution in Texas.

TCEQ actually proposed language addressing pre-production plastics during the 2022 SWQS revision, but later withdrew it after industry groups challenged the agency's authority. The current SWQS revision doesn't address the issue, and TCEQ specifically stated in March 2025 that they don't plan to include any SWQS for pre-production plastics in the ongoing revision. Leaving this issue unregulated is irresponsible and could lead to serious impacts on public health, wildlife, coastal economies, and the broader economy of the state. Needless to say, raw plastic materials are very toxic for humans and wildlife. Therefore, we strongly recommend the Legislature to direct TCEQ to develop standards that would protect our waterways from this type of pollution. In addition, the Legislature should require facilities that manufacture, store, or transport pre-production plastics to monitor their wastewater and stormwater for releases, immediately report spills, and have clear cleanup and spill prevention requirements. TCEQ should also be required to increase monitoring of waters near plastic manufacturing facilities and transportation corridors where this pollution is most likely to occur.

The Legislature should direct TCEQ to develop surface water quality standards for treated produced water discharges and provide the resources needed for adequate baseline and long-term monitoring. TCEQ is currently reviewing eight permits to discharge treated produced water in the Pecos River watershed, yet the agency hasn't developed surface water quality (discharge) standards specifically for these types of discharges. Produced water can contain numerous constituents of concern, including heavy metals, organic and inorganic compounds, naturally occurring radioactive materials (NORMs), and chemicals used in oil and gas production. Clear surface water quality standards supported by science are needed to inform discharge permit limits and would give TCEQ a consistent basis for evaluating permits and setting discharge limits.

These standards should go hand in hand with adequate monitoring. More comprehensive baseline water quality and water flow monitoring is needed before treated produced water

discharges begin so that any future changes in receiving waterbodies can be assessed against existing conditions.

We raised a similar concern in our comments on the TCEQ Draft 2026 Integrated Report. The Lower Pecos River, Segment 2310, had previously been listed as impaired for total dissolved solids (TDS). In the 2026 Integrated Report, TCEQ removed that impairment. In response to our concerns about the limited geographic coverage of the monitoring data used to make that determination, TCEQ explained that TDS was assessed using data from two stations along Segment 2310 and stated that the agency “makes determination of the number of sites and sampling frequency based on the available resources” and that “it is not always possible to cover all assessment units within a segment.”⁷

If treated produced water is going to be discharged into the Pecos River watershed, the state needs to be able to closely monitor water quality and flows before and after those discharges begin. This will require more monitoring stations and broader geographic coverage. We recommend that the Legislature provide TCEQ with additional resources, as needed, to establish adequate baseline monitoring and maintain long-term monitoring throughout the watershed, including upstream and downstream of potential discharge points.

In addition, because the Pecos River flows for more than 925 miles from the Sangre de Cristo Mountains in New Mexico to the Rio Grande near Del Rio, Texas, better baseline flow and stormflow data are important. USGS has numerous gauges along the Pecos River, while the International Boundary and Water Commission maintains gauges near Pandale and Langtry, Texas, and at Amistad Reservoir. The Legislature should work with USGS and the International Boundary and Water Commission to determine whether additional monitoring stations, telemetry, or stream gauges are needed to better understand flows in the Pecos River. If treated produced water discharges are authorized, understanding the timing and volume of those flows will be important.

The Legislature should provide clarification to TCEQ related to the development of standards for land application of treated produced water. During the 89th Legislative session, Sierra Club cautiously supported the intent of SB 1145. In particular, we supported transferring permitting authority for land application of treated produced water from the Railroad Commission (RRC) to TCEQ. We also supported the final version of the bill directing TCEQ to adopt standards for land application that prevent pollution of surface and subsurface water. Getting those standards right was an important part of our support for the bill.

Unfortunately, the implementation of SB 1145 has so far been very concerning. Rather than developing a regulatory program specifically for land application of treated produced water, TCEQ proposed incorporating it into an existing framework under 30 TAC Chapter 309 that was

⁷ 2026 Texas Integrated Report - Response to Public Comment. Texas Commission on Environmental Quality.
<https://www.tceq.texas.gov/downloads/water-quality/assessment/2026-integrated-report/2026-public-comment.pdf>

developed for other – much less toxic – wastewater streams. Many of the questions we expected the rulemaking to address are still unresolved. For example, the proposed rules don't establish clear treatment requirements or monitoring requirements for many constituents that can be found in produced water. Baseline groundwater monitoring would cover TDS, chloride, sulfate, nitrate, pH, and E. coli, but not many other constituents of concern associated with produced water. The rules also don't adequately address what happens with repeated applications to the same land and whether contaminants could accumulate in soil or migrate into groundwater over time. In addition, the setbacks proposed in the rules would allow treated produced water to be applied as close as 100 feet from waters of the state and 150 feet from private water wells, but no clear explanation of how those distances were determined or whether they are sufficient to protect nearby water resources was provided by TCEQ. These are just some of the concerns that we raised in our comments on the SB 1145 proposed rules earlier this year.

We find the lack of clear standards, monitoring mechanisms, and other requirements in this rulemaking very concerning in light of liability protections enacted through HB 49 last session. We opposed this legislation because of our concern about expanding liability protections while there are still significant unknowns around the treatment and reuse of produced water. Now the law, HB 49 provides liability protections for parties involved in treatment and beneficial reuse if they follow applicable rules and permits. If liability protections depend in part on compliance with those rules and permits, then what the rules and permits actually require matters a great deal.

The Legislature should clarify the responsibilities of TCEQ and the Railroad Commission (RRC) related to reuse of treated produced water outside the oil and gas field. At the recent hearing of the Senate Committee on Natural Resources on August 11, the RRC highlighted the need for clarification of its and TCEQ's authority over produced water as it relates to its treatment and reuse, including discharges into waterways. Under the current jurisdiction, RRC regulates produced water and treatment activities, while TCEQ regulates discharges into waters of the state and application on land. But the discussion at the hearing made it obvious that the point at which responsibility moves from one agency to the other isn't clear. It's important to clarify where RRC's responsibility ends and TCEQ's begins to prevent any potential lapses in regulatory oversight as produced water is treated and moved outside the oil and gas field. The Legislature should provide additional clarity to address this concern as soon as possible.

The Legislature should continue funding the TxPWC's research on beneficial reuse of produced water and not rush ahead of science. The 87th Legislature established the TxPWC "to study the economics of and technology related to, and the

environmental and public health considerations for, beneficial uses of fluid oil and gas waste.”⁸ Continued funding is needed to do this work. In the meantime, Texas shouldn’t move toward large-scale reuse before the results of this research can be used to establish appropriate treatment requirements and develop regulations.

As a member of the Texas Produced Water Consortium (TxPWC), we have been closely following research on treatment and beneficial reuse of produced water and have contributed to the development of the water quality report released by the Consortium earlier this year.⁹ We’ve also been actively engaged on these issues at the Legislature and Texas Commission on Environmental Quality (TCEQ).

At the annual TxPWC conference that we attended last month, scientists made it clear that research on beneficial reuse of produced water is still in progress, particularly on toxicity, treatment, and long-term impacts. For example, the most recent study published just a few days ago by the scientists from the TxPWC, which focused on the effectiveness of using treated produced water to irrigate alfalfa, stated that “long-term studies are needed to evaluate sustainability and potential cumulative impacts on soil, plants, and microbial communities.”¹⁰

We support continued research on beneficial reuse of produced water, which we believe could eventually become a usable source for certain purposes outside the oilfield. However, while we continue seeing promise in this research and understand the urgency to find alternatives to underground disposal, we’re concerned that policy and regulations – which are supposed to be informed by science – are outpacing this research. If Texas is serious about scaling up beneficial reuse, the main issue shouldn’t be framed around how to streamline permitting, but rather how to do it responsibly and avoid creating new potentially more serious problems. Science needs to be at the center of these discussions.

Thank you for the opportunity to provide these comments. We look forward to working with the Committee during the interim and into the upcoming legislative session to assure that Texas continues to become a cleaner state with a high quality of life, even with robust economic development and population growth.

⁸ Tex. S.B. 601, 87th Leg., R.S. (2021): <https://capitol.texas.gov/tlodocs/87R/billtext/pdf/SB00601F.pdf>

⁹ *Produced Water Treatment Pilot Testing: Water Quality Report*. Texas Produced Water Consortium, 2026. www.depts.ttu.edu/research/tx-water-consortium/downloads/TxPWCPilotTestingWaterQualityReportFINALweb.pdf

¹⁰ *Field Evaluation of Polished Desalinated Produced Water for Alfalfa Irrigation in Semi-arid Environment*. 2006. Irrigation Science, 44:120, <https://link.springer.com/article/10.1007/s00271-026-01165-7>