GROUNDWATER ISSUES SUBCOMMITTEE OF THE TEXAS GROUNDWATER PROTECTION COMMITTEE RECORD OF MEETING Fourth Quarter Meeting, Fiscal Year 2025

Meeting Date: June 18, 2025 Meeting No.: 42

Place: videoconference Room: N/A

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MEETING ATTENDANCE

Subcommittee Members	Affiliation		
Kathy McCormack (Co-Chair)	Texas Commission on Environmental Quality (TCEQ)		
Chris Heiligenstein (Co-Chair)	Railroad Commission of Texas (RRC)		
Rebecca Storms	Texas Water Development Board (TWDB)		
Scout Vanderwal	Texas Department of State Health Services (DSHS)		
David Villarreal	Texas Department of Agriculture (TDA)		
T.J. Helton	Texas State Soil and Water Conservation Board		
	(TSSWCB)		
Stephanie Keith	Texas Alliance of Groundwater Districts (TAGD)		
Giovanni Piccinni	Texas A&M AgriLife Research (AgriLife Research)		
Justin Thompson	Bureau of Economic Geology of The University of Texas		
	at Austin (UTBEG)		
Larry Estrada	Texas Department of Licensing and Regulation (TDLR)		
Natalie Houston	United States Geological Survey (USGS)		
Carly Rotzler	Texas Parks and Wildlife Department (TPWD)		
Ken Rainwater	Texas Tech University (TTU)		
Agency Staff	<u>Affiliation</u>	Program_	
Stanley Aniagu	TCEQ	Toxicology, Risk Assessment, and Research	
	-	Division	
Abiy Berehe	TCEQ	Water Availability Division	
Allen Berthold	AgriLife Research		
Katie Brice	TCEQ	Water Availability Division	
Alan Cherepon	TCEQ	Water Availability Division	
Peggy Hunka	TCEQ	Water Availability Division	
James LaManna	TCEQ	Water Supply Division	
James-Eric Simon	TCEQ	Water Availability Division	
Kory Talcott	TCEQ	Water Availability Division	
Scott Underwood	TCEQ	Water Availability Division	
Phillip Valladolid	TWDB	·	
Interested Parties	<u>Affiliation</u>		
Monica Jacobs	Kelly Hart & Hallman IIP		

Monica Jacobs

Kelly Hart & Hallman, LLP

MEETING HANDOUTS

- 1. Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Meeting Agenda, June 18, 2025
- 2. TGPC GWI Subcommittee Meeting Record, March 12, 2025
- 3. TGPC Agricultural Chemicals (AgChem) Task Force (TF) Status Report, June 18, 2025
- 4. TGPC Publications Status Report, June 18, 2025
- 5. Texas Land Commissioner Executes Agreement to Explore Benefits of Produced Water Treatment in West Texas news article, <u>https://www.oaoa.com/local-news/texas-land-</u> commissioner-executes-agreement-to-explore-benefits-of-produced-water-treatment-in-westtexas/
- 6. Texas 89(R) Legislative Session Senate Bill (SB) 1145, https://capitol.texas.gov/BillLookup/Text.aspx?LegSess=89R&Bill=SB1145
- 7. Texas 89(R) Legislative Session House Bill (HB) 49, https://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=89R&Bill=HB49
- TWDB Report 391, Aquifer Storage and Recovery Report: ASR Suitability Survey for the Lower Valley Water District, El Paso County, Texas, https://www.twdb.texas.gov/innovativewater/asr/projects/LVWD/index.asp
- 9. El Paso Water Aquifer Replenishment Program video, https://www.youtube.com/watch?v=_xMmrBn4bXQ
- 10. TWDB Desalination Database Update, https://www.twdb.texas.gov/innovativewater/desal/maps.asp
- 11. TGPC GWI Subcommittee *Charge*, <u>https://tgpc.texas.gov/wp-</u> content/themes/responsive/subcommittees/gwissues/GWI_SubComm_Charge12Jul2023.pdf
- 12. Final Draft TGPC GWI Subcommittee Fiscal Year 2026 2027 Activity Plan
- 13. TCEQ Request for Grant Applications (RFGA) for Nonpoint Source (NPS) Projects Under the Clean Water Act Section 319(h) Grant Program, https://www.tceq.texas.gov/waterquality/nonpoint-source/grants/grant-pgm.html
- 14. USGS Updates for TGPC GWI Subcommittee Meeting, June 18, 2025

MEETING RECORD OF JUNE 18, 2025

1. PRE-MEETING REMINDERS

Before the meeting started, Kathy McCormack (TCEQ) provided the attendees with some tips that would facilitate a productive videoconference.

2. CALL TO ORDER AND INTRODUCTIONS

The TGPC approves all Subcommittee products and designated TGPC members attending this Subcommittee meeting participated as an employee or representative of their agency or organization, not as a designated TGPC member. Therefore, this Subcommittee meeting was not subject to the Open Meetings Act and it was held 100% virtually. The public was also able to attend this meeting via videoconference or teleconference at no cost.

Kathy McCormack (TCEQ), Co-Chair of the GWI Subcommittee, called the meeting to order at approximately 9:33 AM CDT and then called the roll of GWI Subcommittee members. The representative from Texas A&M AgriLife Extension Service (AgriLife Extension) was not present at the meeting.

3. STATUS REPORTS

Agricultural Chemicals Task Force

Alan Cherepon (TCEQ) reported on the Agricultural Chemicals Task Force:

- Due to issues with TCEQ purchasing, new 40-ml vials for samples had yet to be received, and only one set of 43 Cooperative Monitoring samples had been analyzed by immunoassay resulting in one detect which was below the Maximum Contaminant Level (MCL). Until the vials were received, no additional samples could be collected.
- An updated TCEQ Interagency Pesticide Database (IPD) report was being prepared to replace the previous 2008 report.
- On June 3 4, 2025, Alan Cherepon (TCEQ) attended TCEQ's annual Environmental Trade Fair in San Antonio and staffed the TGPC exhibit counter from which Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) grant-related information was distributed.
- On May 13 14, 2025, the annual U.S. Environmental Protection Agency (EPA)/States/Tribes Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Spring grant meeting for Fiscal Year (FY) 2025 was held in Austin with TDA as the host. Alan Cherepon (TCEQ) provided a summary of his activities for the first half of FY 2025, but very little water quality issues were addressed by others, as this subject continued to be a lower priority for the U.S. EPA. The Fall pesticide program meeting would be hosted by the U.S. EPA in Dallas in October 2025. The 2026 Spring grant meeting would be hosted by New Mexico.

TGPC Publications

Kathy McCormack (TCEQ) reported on the following TGPC publication:

- Joint Groundwater Monitoring and Contamination Report 2024 ("Joint Report", TCEQ publication SFR-56-24)
 - The 2024 *Joint Report* was published on June 2, 2025, and it was available at <u>https://tgpc.texas.gov/tgpc-publications/</u>.

Kathy McCormack (TCEQ) also reported on the following groundwater-related TCEQ publication:

- Groundwater Assessment (TCEQ publication AS-465/26) for the 2026 Texas Integrated Report of Surface Water Quality for Clean Water Act Sections 305(b) and 303(d) ("Texas Integrated Report")
 - Work on the 2026 Groundwater Assessment would begin in September 2025.
 - The published report would be provided to TCEQ's Water Quality Planning Division for inclusion in the 2026 *Texas Integrated Report*.

4. SET FUTURE MEETING DATE

The next TGPC GWI Subcommittee meeting was scheduled for Wednesday, September 10, 2025, at 9:30 AM CDT and it was planned as a videoconference.

5. DISCUSS CURRENT GROUNDWATER ISSUES

Oil and Gas Produced Water

In January 2024, the Railroad Commission of Texas (RRC) announced that they would be conducting one-year pilot studies regarding the beneficial reuse of oil and gas (O&G) produced water (https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/environmental-permit-types/pilot-projects/) and provided a "Pilot Study Framework" (https://www.rrc.texas.gov/media/nznn2wsj/240108-produced-water-framework-final.pdf). RRC had actually received 10 applications since 2015 for pilot projects using treated O&G produced water to grow a crop in Pecos, Reeves, Midland, and Martin counties, and eight permits had been issued – one in 2015, two in both 2023 and 2024, and three to-date in 2025. Multistage treatment processes in these pilot projects included various technologies such as oxidation, filtration, reverse osmosis, granular activated carbon, and thermal distillation.

The Texas General Land Office (GLO) signed an agreement with EOG Resources Inc. that provided access to one acre of state-owned land in Reeves County for potential future testing involving the irrigation of planted crops with treated O&G produced water in a controlled environment to study the effects on soil quality, vegetative health, soil biology, physiology, and nutrient allocation (https://www.oaoa.com/local-news/texas-land-commissioner-executes-agreement-to-explore-benefits-of-produced-water-treatment-in-west-texas/). A benchmark study would be established for the current soil, biological content, and conditions at the site, and then samples would be collected quarterly to determine if there were any changes to soil and plant

characteristics resulting from the application of the treated O&G produced water. This threeyear project was expected to begin in 2025.

The Texas Produced Water Consortium (TxPWC, <u>https://www.depts.ttu.edu/research/tx-water-consortium/</u>) Stakeholder Advisory Council had met four times since the last GWI Subcommittee meeting. They were still trying to finalize their Legislative Report's Addendum – they were cleaning up and checking sample analysis records, standardizing units and limits, and identifying common nomenclature for U.S. EPA analytical methods. They were working with the New Mexico Produced Water Research Consortium (NMPWRC, <u>https://nmpwrc.nmsu.edu/</u>) and Texas Tech University (TTU), and they had included RRC pilot study data. At the last two meetings:

- TCEQ reported that they were reviewing surface water discharge applications, talking with applicants, drafting permits, and had just started Texas Land Application Permit (TLAP) conversations;
- NMPWRC said that they had their final hearing in May 2025, and that they would continue to allow pilot projects with no discharge, which is the same as what they had been doing for the last four years;
- TxPWC planned to develop outreach strategies for both the technical community and the general public, and they had recently created some short video clips suitable for social media;
- They reported that \$13M had been appropriated for TxPWC for the next biennium;
- They were expanding their facilities and personnel in preparation for an increased workload;
- They were collaborating with Natura Resources on a feasibility analysis for the co-location of an advanced nuclear and thermal desalination in the Permian Basin; and,
- They hoped to work with TPWD and others to baseline the hydrologic, hydraulic, and ecological conditions of Red Bluff Reservoir and the Pecos River.

SB 1145 (<u>https://capitol.texas.gov/BillLookup/Text.aspx?LegSess=89R&Bill=SB1145</u>) regarding the authority of TCEQ to issue permits for the land application of treated O&G produced water was signed by the Governor on May 13, 2025, and it would be effective on September 1, 2025. The bill also required TCEQ to develop standards that prevented the pollution of surface water and groundwater.

HB 49 (https://www.capitol.state.tx.us/BillLookup/Text.aspx?LegSess=89R&Bill=HB49)

regarding the treatment and beneficial use of O&G produced water was signed by the House and Senate and then sent to the Governor on May 29, 2025. Unless vetoed by the Governor before June 22, 2025, the bill would be effective September 1, 2025. The bill expanded liability protections for O&G produced water treatment facilities to include oil and gas producers, landowners, and third-party conveyors; narrowed the exception to cover losses or damages if there were consequences after selling or treating this fluid so that a party was only liable for negligence if they did not follow administrative rules; and prohibited punitive damages for such claims. The bill also required RRC to adopt rules for the treatment of O&G produced water.

Carly Rotzler (TPWD) joined the meeting at approximately 9:49 AM CDT and was present for the remainder of the meeting. Larry Estrada (TDLR) left the meeting at approximately 9:57 AM CDT and was absent for the remainder of the meeting.

Emerging Chemical and Biological Contaminants

David Villarreal (TDA) reported that non-pesticide-related water quality issues (e.g., pharmaceuticals, microplastics, microbials, and biologicals) were still important to the U.S. EPA. Stanley Aniagu (TCEQ) reported that the Interstate Technology & Regulatory Council (ITRC) had recently released guidance documents on several Contaminants of Emerging Concern (CEC, e.g., biological contaminants, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), and green chemistry; <u>https://cec-1.itrcweb.org/</u>). Carly Rotzler (TPWD) reported that the *Texas Water Journal* had a recent article regarding *Microplastics and Microfibers in River Sediments: A Review of Current Literature and New Data from Texas Rivers* (<u>https://twj-ojs-tdl.tdl.org/twj/article/view/7181</u>).

Stanley Aniagu (TCEQ) left the meeting at approximately 10:03 AM CDT and was absent for the remainder of the meeting.

Aquifer Storage and Recovery (ASR)

TWDB had recently published Report 391, *Aquifer Storage and Recovery Report: ASR Suitability Survey for the Lower Valley Water District, El Paso County, Texas* (https://www.twdb.texas.gov/innovativewater/asr/projects/LVWD/index.asp), and a webinar on the report was held on June 11, 2025. Along with the Geographic Information System (GIS) data and report, the webinar slides were available on the webpage and a link to the webinar recording would be posted there once closed captioning was completed.

A 2.5-min video about El Paso Water's Aquifer Replenishment Program (<u>https://www.youtube.com/watch?v=_xMmrBn4bXQ</u>) had received an Honorable Mention at the Texas Water conference in March 2025.

Abandoned Water Wells

There was no discussion of this topic at the meeting.

Groundwater Quality Monitoring

Rebecca Storms (TWDB) reported that:

- Their sampling in the Gulf Coast and Yegua-Jackson Aquifers was on-going, and they were getting ready to plan activities for their joint Springs Monitoring Program with TPWD to revisit selected springs from a 2005 study and collect samples during the critical index period.
- Their Groundwater Monitoring department received half of their Exceptional Item Request (EIR) for groundwater data collection and analysis which included funding for the recorder well, springs monitoring, and groundwater quality programs (note that this request was for the other half of the funding that they did not receive in the previous legislative session). This may come with an added Full Time Equivalent (FTE) position, but they were still waiting for confirmation of the final resources. Since the entirety of the request was not

received, they did not yet know how the resources would be allocated, and those discussions were set to begin in the summer of 2025.

HB 1400 for the Groundwater Science, Research, and Innovation Fund did not pass, but the funding was included in the General Appropriations Act, and it would be managed by the Groundwater Division. The funding was for Groundwater Conservation Districts (GCDs) to conduct projects and programs for groundwater research, science, and data collection that benefit local groundwater management and planning.

Brackish Groundwater

TWDB released the latest update of its Desalination Database

(<u>https://www.twdb.texas.gov/innovativewater/desal/maps.asp</u>) which could be viewed as an interactive map

(https://www3.twdb.texas.gov/apps/waterdatainteractive/GroundwaterDataViewer/?map=desal) or a list (https://www3.twdb.texas.gov/apps/desal/DesalPlants.aspx). The database provided information about all 59 municipal desalination plants in Texas with a water production capacity of at least 0.025 million gallons per day (MGD) – their cumulative water production capacity was now 169 MGD:

- 56 facilities desalinated water using reverse osmosis while three used electrodialysis reversal.
- 43 plants desalinated groundwater, 15 plants desalinated surface water, and one plant desalinated reclaimed water.
- Groundwater plants had a cumulative water production capacity of 98 MGD, surface water plants had a cumulative water production capacity of 68 MGD, and the reclaimed water plant's water production capacity was 2.5 MGD.

James LaManna (TCEQ) noted that they had provided some Public Water System (PWS) data (<u>https://www.tceq.texas.gov/drinkingwater/technical_guidance/desalination-for-pwss</u>) for the TWDB Desalination Database update.

Rebecca Storms (TWDB) reported that:

- SB 7, the New Water Supply for Texas Fund, defined qualifying brackish water projects as those with Total Dissolved Solids (TDS) greater than or equal to 3,000 mg/L. This did not align with the Brackish Resources Aquifer Characterization System (BRACS) program TDS definition, but it did not impact the TWDB salinity definition or the BRACS program directly.
- There were several other bills in the Texas Legislature 89th Regular Session related to brackish groundwater that they had been tracking which were left pending or did not receive hearings (e.g., HB 4896, HB 5188, and SB 2658).

Evapotranspiration Networks

Rebecca Storms (TWDB) reported that the TexMesonet EIR included several initiatives, one of which was support for a statewide evapotranspiration (ET) dataset and coverage, but it had only received half of the requested funding. Because the entirety of the request was not received, they did not know how funding would be allocated to their ET efforts, and those discussions were set to begin in August 2025.

Others

There was no discussion of this topic at the meeting.

6. BUSINESS DISCUSSION AND POSSIBLE ACTION

TGPC GWI Subcommittee Charge

As required by the GWI Subcommittee's current *Activity Plan* (https://tgpc.texas.gov/gwissues/activity_plans/TGPC_GWI_FY2024_2025_ActivityPlan_12Jul2 023.pdf), Kathy McCormack (TCEQ) presented the GWI Subcommittee *Charge* (https://tgpc.texas.gov/wpcontent/themes/responsive/subcommittees/gwissues/GWI_SubComm_Charge12Jul2023.pdf) for its annual review and discussion. Chris Heiligenstein (RRC) had agreed to continue as Co-Chair for the next Fiscal Year and no additional changes were suggested, so the *Charge* would remain in effect.

Draft TGPC GWI Subcommittee Fiscal Year 2026 - 2027 Activity Plan

As required by the GWI Subcommittee's *Charge* (https://tgpc.texas.gov/wpcontent/themes/responsive/subcommittees/gwissues/GWI_SubComm_Charge12Jul2023.pdf), Kathy McCormack (TCEQ) presented the final draft of the TGPC GWI Subcommittee Fiscal Year 2026 – 2027 *Activity Plan*. David Villarreal (TDA) proposed, Justin Thompson (UTBEG) seconded, and all remaining members approved the final draft of the *Activity Plan*. The *Activity Plan* would be presented to the TGPC for approval at their next meeting.

Discussion of White Papers Under Development

Kathy McCormack (TCEQ) noted that TDLR had been thinking about the possibility of working with the TGPC on a white paper or Frequently Asked Question (FAQ) related to one or more topics.

Ken Rainwater (TTU) reported that power and cooling for data centers supporting Artificial Intelligence (AI) systems was a hot topic, and a better understanding of regional water sources (e.g., availability and quantity) was needed. Carly Rotzler (TPWD) added that treated O&G produced water (or another type of reuse water) could be considered for AI data center cooling.

Giovanni Piccinni (AgriLife Research) left the meeting at approximately 10:19 AM CDT and was absent for the remainder of the meeting.

7. ANNOUNCEMENTS

On May 1, 2025, TCEQ posted its RFGA for NPS projects under the Clean Water Act Section 319(h) Grant Program (<u>https://www.tceq.texas.gov/waterquality/nonpoint-source/grants/grant-pgm.html</u>). The deadline for proposals was June 27, 2025, and more information could be found on the website.

Natalie Houston (USGS) shared their groundwater-related updates, including:

- The Climate Response Network webpage (<u>https://www.usgs.gov/index.php/mission-areas/water-resources/science/climate-response-network</u>) was published on April 4, 2025, with a mapper (<u>https://rconnect.usgs.gov/crn-map/CRNmap.html</u>) and fact sheet (<u>https://doi.org/10.3133/fs20243057</u>);
- The National Water Availability Assessment (NWAA, <u>https://www.usgs.gov/news/national-news-release/usgs-release-a-comprehensive-look-water-resources-united-states</u>) and National Water Availability Assessment Data Companion (NWDC, <u>https://water.usgs.gov/nwaa-data/</u>) were available;
- Status of water-level altitudes and long-term and short-term water-level changes in the Chicot and Evangeline (undifferentiated) and Jasper aquifers, greater Houston area, Texas, 2024, Jason K. Ramage and Alexandra C. Adams, <u>https://www.usgs.gov/publications/statuswater-level-altitudes-and-long-term-and-short-term-water-level-changes-chicot-1</u>, had recently been published
- In June 2025, Jason Ramage, a Hydrologist in the USGS Houston office, would be featured in a podcast produced by Waterloop (<u>https://www.waterloop.org/</u>) about subsidence in the Houston-Galveston region; and,
- As part of the National Water Quality Network (NWQN, <u>https://nawqatrends.wim.usgs.gov/Decadal/</u>), they had completed sampling a network of 25 shallow monitoring wells (less than 80 feet deep) that were drilled in the early 2000s in conjunction with a National Water Quality Assessment (NAWQA) land use study (LUS) within the Trinity River Basin. All of the wells were located in the Houston metropolitan area, and the collected samples were analyzed for major and trace elements, nutrients, PFAS, Dissolved Organic Carbon (DOC), and tritium, and a subset of these wells were also analyzed for Volatile Organic Compounds (VOCs) and pesticides.

Rebecca Storms (TWDB) announced that a new agreement had been executed with the TCEQ Supplemental Environmental Project (SEP) that would allow funds to be used to install continuous (i.e., near real-time) water level monitoring recorder wells in up to two sites per aquifer per county, thus vastly increasing the eligible areas – the previous scope had only allowed one site per county.

8. PUBLIC COMMENT

Monica Jacobs (Kelly Hart & Hallman, LLP) commented on SB 7 and its TDS limit, the Vista Ridge groundwater export project in the Post Oak Savannah GCD of central Texas (15 billion gallons/year from the Carrizo-Wilcox Aquifer), and thanked the Subcommittee for its work.

Carly Rotzler (TPWD) noted a recent concern in the Neches and Trinity Valleys GCD of east Texas related to two proposed groundwater well field permits requesting the withdrawal of a total of 15 billion gallons/year from the Carrizo-Wilcox and Queen City Aquifers (https://www.palestineherald.com/news/community-meeting-set-on-east-texas-water-fight/article_7eecba57-e5b6-49bb-845b-cc17b04b142e.html).

9. ADJOURN

Kathy McCormack (TCEQ) adjourned the meeting at approximately 10:38 AM CDT.