

GROUNDWATER ISSUES SUBCOMMITTEE
OF THE
TEXAS GROUNDWATER PROTECTION COMMITTEE
RECORD OF MEETING
First Quarter Meeting, Fiscal Year 2023

Meeting Date: September 7, 2022
Meeting No.: 31

Place: videoconference
Room: N/A

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MEETING ATTENDANCE

Subcommittee Members

Kathy McCormack (Co-Chair)
 Chris Heiligenstein (Co-Chair)
 Natalie Ballew
 Eric Lawrence
 David Villarreal
 T.J. Helton

Julia Stanford
 Rosario Sanchez
 Bridget Scanlon

David Gunn
 Ken Rainwater
 Joel Pigg

Linzy Foster

Affiliation

Texas Commission on Environmental Quality (TCEQ)
 Railroad Commission of Texas (RRC)
 Texas Water Development Board (TWDB)
 Texas Department of State Health Services (DSHS)
 Texas Department of Agriculture (TDA)
 Texas State Soil and Water Conservation Board (TSSWCB)
 Texas Alliance of Groundwater Districts (TAGD)
 Texas A&M AgriLife Research (AgriLife Research)
 Bureau of Economic Geology of The University of Texas at Austin (UTBEG)
 Texas Department of Licensing and Regulation (TDLR)
 Texas Tech University (TTU)
 Texas A&M AgriLife Extension Service (AgriLife Extension)
 United States Geological Survey (USGS)

Agency Staff

Kayla Ayala

 Alan Barraza
 Abiy Berehe
 Alan Cherepon
 Lorrie Council
 Hailey Davidson

 Kristin DeBone
 Grant Gibson
 Jason Godeaux
 Cindy Hooper
 Peggy Hunka
 James LaManna
 Casey Stevens
 Justin Thompson
 Scott Underwood
 Margaret Willis

Affiliation

Program

TCEQ Program Support and Environmental Assistance Division
 TCEQ Water Quality Division
 TCEQ Water Availability Division
 TCEQ Water Availability Division
 TCEQ Radioactive Materials Division
 TCEQ Program Support and Environmental Assistance Division
 TCEQ Water Quality Planning Division
 TCEQ Water Availability Division
 TCEQ Water Availability Division
 TCEQ Water Availability Division
 TCEQ Water Availability Division
 TCEQ Water Supply Division
 TDLR
 UTBEG
 TCEQ Water Availability Division
 DSHS

Interested Parties

N/A

Affiliation

MEETING HANDOUTS

1. Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Meeting Agenda, September 7, 2022
2. TGPC GWI Subcommittee Meeting Record, June 8, 2022
3. TGPC Agricultural Chemicals (AgChem) Task Force (TF) Status Report, September 7, 2022
4. TGPC Publications Status Report, September 7, 2022
5. 2022 Texas Produced Water Consortium Report to the Texas Legislature, <https://www.depts.ttu.edu/research/tx-water-consortium/2022-report.php>
6. US EPA Published HAs 15Jun2022 for Four PFAS, <https://www.epa.gov/sdwa/drinking-water-health-advisories-has#published>
7. US EPA Press Release 15Jun2022 – Funding to Address PFAS, <https://www.epa.gov/newsreleases/epa-announces-new-drinking-water-health-advisories-pfas-chemicals-1-billion-bipartisan>
8. US EPA Press Release 26Aug2022 – Proposal to Designate Certain PFAS as CERCLA Hazardous Substances, <https://www.epa.gov/newsreleases/epa-proposes-designating-certain-pfas-chemicals-hazardous-substances-under-superfund>
9. BBC News Article 22Aug2022 – New Mechanism to Break Down PFAS, <https://www.bbc.com/news/science-environment-62561756>
10. Claims Journal Article 09Jun2022 – Climate-Driven Flooding Poses Well Water Contamination Risks, <https://www.claimsjournal.com/news/national/2022/06/09/310887.htm>
11. Draft TGPC GWI Subcommittee Annual Report
12. White Paper Outline Update
13. Draft *Prioritizing New Drinking Water Infrastructure Funding in Texas* White Paper
14. Draft *Potential Impacts of Unregulated Private Water Systems in Child Care Operations* White Paper

MEETING RECORD OF SEPTEMBER 7, 2022

1. PRE-MEETING REMINDERS

Before the meeting started, Chris Heiligenstein (RRC) 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.

Chris Heiligenstein (RRC), Co-Chair of the GWI Subcommittee, called the meeting to order at approximately 9:34 AM CDT and then called the roll of GWI Subcommittee members.

3. STATUS REPORTS

Agricultural Chemicals Task Force

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

- The Fiscal Year (FY) 2022 Cooperative Groundwater Pesticide Monitoring program activities between TWDB and TCEQ were completed.
 - 226 samples (includes QC samples) were analyzed for atrazine by immunoassay.
 - There were two quantifiable detects with a high of 0.13 ppb and four non-quantifiable detects.
- Except for 23 blanks, all results from the Cooperative Groundwater Pesticide Monitoring program had been entered into the TCEQ Interagency Pesticide Database (IPD) – 213 samples and atrazine results were added, as well as 77 wells and springs not previously in the IPD well table. USGS data would be entered into the IPD in early FY 2023, and then the updated IPD would be sent to U.S. Environmental Protection Agency (EPA) Region 6 along with updated 2022 pesticide water sample results from TCEQ's Public Drinking Water and Source Water Protection programs.
- A table-top display and staff providing information on the TGPC, including pesticide information and data, was set up at the TCEQ Annual Public Drinking Water Conference in Austin on August 9-10, 2022.
- The revised Quality Assurance Project Plan (QAPP) for the Pesticide Management Plan (PMP) for implementation of the *Texas State Management Plan for Prevention of Pesticide Contamination of Groundwater* had been sent to U.S. EPA Region 6 for review and approval for FY 2023.

TGPC Publications

Cindy Hooper (TCEQ) reported on the following TGPC publications:

- *Joint Groundwater Monitoring and Contamination Report – 2021* (“*Joint Report*”, SFR-56)
 - The *2021 Joint Report* was finalized in July 2022 and published online (<https://www.tceq.texas.gov/groundwater/groundwater-planning-assessment/sfr-056-joint-groundwater-monitoring-contamination-report>) in August 2022, along with an Excel file listing the groundwater contamination cases in the report.
- *Activities and Recommendations of the Texas Groundwater Protection Committee: Report to the 88th Legislature* (“*Legislative Report*”, SFR-47)
 - The Legislative Report Subcommittee had last met in June 2022, and they presented the draft report to the TGPC at its July 2022 meeting. TGPC members provided feedback and concurrence with the draft *Legislative Report* by August 31, 2022.
 - Final edits would be made and discussed at the next TGPC meeting. The *Legislative Report* for the 88th Legislature was anticipated to be published and distributed to the Texas Legislature by December 31, 2022.
- *Landowner’s Guide to Plugging Abandoned Water Wells* (“*Plugging document*”, RG-347/347esp)
 - A Spanish version of the April 2021 plugging document was recently developed and it, along with the English version, were available on the TGPC website (<https://tgpc.texas.gov/tgpc-publications/#Current>).

Cindy Hooper (TCEQ) also reported on the following groundwater-related TCEQ publications:

- Groundwater Assessment (AS-465/22) for the *2022 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d)* (“*Texas Integrated Report*”, <https://www.tceq.texas.gov/waterquality/assessment/22twqi/22txir>)
 - TCEQ adopted the *Draft 2022 Texas 303(d) List* on June 1, 2022, and the U.S. EPA approved the *2022 Texas 303(d) List* on July 7, 2022.
 - The 2022 Groundwater Assessment was available at <https://www.tceq.texas.gov/downloads/water-quality/assessment/integrated-report-2022/2022-groundwater-as-465-22.pdf>, and the next Groundwater Assessment would be prepared in early 2024.
- *Priority Groundwater Management Areas and Groundwater Conservation Districts, Report to the 88th Legislature* (“*PGMA/GCD Legislative Report*”, SFR-53/22)
 - Work on the *PGMA/GCD Legislative Report* had started between TWDB and TCEQ. TCEQ planned to distribute the report to legislative leadership in early January 2023.

4. SET FUTURE MEETING DATE

The next TGPC GWI Subcommittee meeting was scheduled for Wednesday, December 7, 2022, at 9:30 AM CST and it was planned as a videoconference.

5. DISCUSS CURRENT GROUNDWATER ISSUES

Oil and Gas Produced Water

Chris Heiligenstein (RRC) reported that the Texas Produced Water Consortium had published its legislatively-mandated report (<https://www.depts.ttu.edu/research/tx-water-consortium/2022-report.php>). The Myhighplains.com news website (<https://www.myhighplains.com/water-and-drought-on-the-high-plains/2022-texas-groundwater-summit-data-dollars-and-delegation/>) had the following summary of that report:

“The Texas Produced Water Consortium (TxPWC), housed at Texas Tech University in Lubbock, was established by Senate Bill 601 in 2021 with the aim of gathering information and resources to study the potential uses of produced water and the possible benefits.

According to Executive Director Rusty Smith and the *2022 Texas Produced Water Consortium Report to the Texas Legislature*, excess water produced by fracking wells in the Permian Basin could offer a new water source for Texas if pilot projects can prove that the water can be treated economically and brought up to a healthy standard. However, those pilot projects and the testing needed to examine the Consortium’s theories need funding.

With that in mind, the 2022 report from the Consortium offered policy recommendations to the Texas Legislature, including:

- Establishing a fund for pilot project testing needs;
- Requiring the Texas Produced Water Consortium to submit a report to the Legislature on the status of pilot projects by December 31, 2024;
- Encouraging the TWDB and regional planning groups in oil-producing regions to consider produced water in regional planning water supply projects;
- RRC and TCEQ should consider processes necessary for permitting produced water for beneficial uses.”

Emerging Contaminants

On June 15, 2022, the U.S. EPA:

- Issued nonbinding health advisories that set health risk thresholds for PFOA and PFOS to near zero (<https://www.epa.gov/sdwa/drinking-water-health-advisories-has#published>). The interim updated health advisories for PFOA and PFOS were 0.004 ppt and 0.02 ppt, respectively, replacing the 2016 final health advisories which were both set at 70 ppt. Final health advisories were also issued for HFPO and PFBS which are considered replacements for PFOA and PFOS, respectively.
- Invited states and territories to apply for \$1 billion under the new bipartisan infrastructure law to address PFAS and other contaminants in drinking water (<https://www.epa.gov/newsreleases/epa-announces-new-drinking-water-health-advisories-pfas-chemicals-1-billion-bipartisan>).

On August 26, 2022, the U.S. EPA proposed designating PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – also known as “Superfund” – to protect people’s health

<https://www.epa.gov/newsreleases/epa-proposes-designating-certain-pfas-chemicals-hazardous-substances-under-superfund>). If the proposal is finalized, releases of certain amounts of these chemicals would have to be reported to the government. The U.S. EPA believes this would encourage companies to have better waste management practices at the facilities that handle the chemicals, and the rule could also make the polluter pay fines and cleanup costs. In the future, the U.S. EPA planned to seek public comment on designating other PFAS chemicals as CERCLA hazardous substances.

A recent BBC News article reported a new mechanism to break down one of the classes of PFAS using low temperatures and sodium hydroxide (<https://www.bbc.com/news/science-environment-62561756>). However, the method would need to be modified for other classes of PFAS.

In July 2022, the Interstate Technology and Regulatory Council (ITRC) Microplastics Team (<https://itrcweb.org/teams/active/microplastics>) released their draft guidance for external comments, and Stanley Aniagu (TCEQ) was reviewing the health effects portion (Chapter 5). The document did not have a lot of data on microplastics in groundwater, but it was a very good start to better understanding all aspects of the larger microplastics issue.

David Villarreal (TDA) reported that the U.S. EPA Office of Chemical Safety and Pollution Prevention was holding a national teleconference that day about their PFAS leaching study, as well as their investigations into microbes in wastewater.

Aquifer Storage and Recovery (ASR)

There was no discussion of this topic during the meeting.

Abandoned Water Wells

There was no discussion of this topic during the meeting.

Brackish Groundwater

Natalie Ballew (TWDB) reported that their brackish groundwater study for the Hill Country portion of the Trinity Aquifer (i.e., the southernmost portion of the Trinity Aquifer) was in the final publication process.

Evapotranspiration Networks

Alan Barraza (TCEQ) reported that the TWDB TexMesonet Advisory Committee had vacancies.

David Villarreal (TDA) reported that the Water Conservation Advisory Council (WCAC, <https://savetexaswater.org/>) was meeting that day to discuss their legislative recommendations, including those related to evapotranspiration networks.

Julia Stanford (TAGD) reported that OpenET (<https://openetdata.org/>) gave a presentation at their recent Groundwater Summit about their program which uses publicly available data to

provide satellite-based information on evapotranspiration for improved water management across the western United States.

Others

A recent article about climate-driven flooding posing well water contamination risks (<https://www.claimsjournal.com/news/national/2022/06/09/310887.htm>) noted that roughly 53 million U.S. residents – about 17% of the population – rely on private wells, but the absence of regulation and treatment afforded by larger municipal systems may expose some users to health risks. Risks are elevated after flooding or heavy rainfall, when animal and human feces, dirt, nutrients such as nitrogen and other contaminants can seep into wells. For example, after Hurricane Harvey caused widespread flooding along the Texas coast in 2017, sampling of more than 8,800 wells in 44 counties found that average *E. coli* levels were nearly three times higher than normal. It is estimated that 1.3 million cases of acute gastrointestinal illness in the U.S. are caused annually by drinking untreated water from private wells. Experts say the threat is growing as the warming climate fuels more intense rainstorms and stronger and wetter hurricanes.

6. BUSINESS DISCUSSION AND POSSIBLE ACTION

Draft *TGPC GWI Subcommittee Annual Report*

As required by the GWI Subcommittee's current *Charge* (https://tgpc.texas.gov/wp-content/themes/responsive/subcommittees/gwissues/GWI_SubComm_Charge10Jul2019.pdf), Chris Heiligenstein (RRC) presented a draft *TGPC GWI Subcommittee Fiscal Year 2022 Annual Report*. David Gunn (TDLR) proposed, David Villarreal (TDA) seconded, and all remaining members approved the draft *Annual Report* with the changes discussed at the meeting (i.e., removing the DRAFT watermark and changing the date to October 19, 2022). The *Annual Report* would be presented to the TGPC for approval at their next meeting.

White Paper Outline Update

Kathy McCormack (TCEQ) presented an update to the Subcommittee's white paper outline. TCEQ had changed all of its publication links earlier in 2022, so one of the links in the current white paper outline was now incorrect. In addition, with the increased efforts to improve online accessibility since the white paper outline was last updated in 2019, headings should be tagged as such. The updated link and tagged headings were the only two proposed changes to the white paper outline. Natalie Ballew (TWDB) proposed, Ken Rainwater (TTU) seconded, and all remaining members approved the white paper outline update. The updated white paper outline would be posted on the TGPC website.

Draft *Abandoned Water Wells and the Challenges They Pose* White Paper

There was no update of the *Abandoned Water Wells and the Challenges They Pose* white paper for review at this meeting. It was noted that the draft TGPC *Legislative Report* had a greatly expanded Recommendations section related to abandoned water wells. Julia Stanford (TAGD)

expressed interest in the background information on this subject that could still be provided in the white paper.

Draft *Prioritizing New Drinking Water Infrastructure Funding in Texas* White Paper

Bridget Scanlon (UTBEG) presented the initial draft of the *Prioritizing New Drinking Water Infrastructure Funding in Texas* white paper and requested feedback from Subcommittee members. Texas has the largest number of Community Water Systems (CWSs) in the nation. The dominant water source for CWSs in Texas is groundwater, and the majority of these systems service small populations. Violations of health-based regulations are dominated by those related to the Disinfection By-Products Rule, followed by inorganic (e.g., arsenic and nitrate) and radionuclide violations. Several opportunities associated with the Drinking Water State Revolving Fund were listed, as well as some continuing research needs. An updated draft of the white paper would be presented at the next meeting.

Draft *Potential Impacts of Unregulated Private Water Systems in Child Care Operations* White Paper

Margaret Willis (DSHS) presented an initial outline of the *Potential Impacts of Unregulated Private Water Systems in Child Care Operations* white paper. Groundwater from private water wells may be contaminated, and an unknown number of child care operations may rely on such systems. Currently, there are no regulations in Texas that require child care operations to test their private water systems. A number of potential data sources, continuing research needs, recommendations, benefits, and considerations were listed, and feedback was requested from Subcommittee members. An updated outline or initial draft of the white paper would be presented at the next meeting.

Discussion of White Papers Under Development

Cindy Hooper (TCEQ) reported that staff on their Groundwater Planning and Assessment Team had met several times to discuss focus areas for a *Joint Report* white paper. They were initially looking at challenges encountered during the report's preparation, issues with evaluating the data, and general trends in pollutant categories.

7. ANNOUNCEMENTS

Kathy McCormack (TCEQ) announced that Protect Your Groundwater Day was celebrated the day before the meeting. This annual event is sponsored by the National Ground Water Association and the Groundwater Foundation, and a link to that information would be on the TGPC homepage until the following week.

Linzy Foster (USGS) announced that they had recently published a number of groundwater-related reports, and a file summarizing that information was emailed to Subcommittee members after the meeting. The file also included answers to David Villarreal's (TDA) two questions regarding bacteria and mussels.

8. PUBLIC COMMENT

There was no public comment at the meeting.

9. ADJOURN

Chris Heiligenstein (RRC) adjourned the meeting at approximately 11:04 AM CDT.