TEXAS GROUNDWATER PROTECTION COMMITTEE
RECORD OF MEETING
First Quarterly Meeting, Fiscal Year 2022

Meeting Date: October 20, 2021  Place: TCEQ Campus, Bldg F
Meeting No.: 135     Room: 3107A

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## MEETING ATTENDANCE

**Committee Members**

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<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Kelly Mills</td>
<td>Texas Commission on Environmental Quality (TCEQ)</td>
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<tr>
<td>Larry French</td>
<td>Texas Water Development Board (TWDB)</td>
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<td>James Harcourt</td>
<td>Railroad Commission of Texas (RRC)</td>
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<td>Eric Lawrence</td>
<td>Texas Department of State Health Services (DSHS)</td>
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<td>David Villarreal</td>
<td>Texas Department of Agriculture (TDA)</td>
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<td>T.J. Helton</td>
<td>Texas State Soil and Water Conservation Board (TSSWCB)</td>
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<td>Leah Martinsson</td>
<td>Texas Alliance of Groundwater Districts (TAGD)</td>
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<td>Bridget Scanlon</td>
<td>Bureau of Economic Geology of The University of Texas at Austin (UTBEG)</td>
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<td>David Gunn</td>
<td>Texas Department of Licensing and Regulation (TDLR)</td>
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**Agency Staff**

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<tr>
<th>Name</th>
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<tr>
<td>Jennifer Allis</td>
<td>TCEQ</td>
<td>Water Availability Division</td>
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<td>Abiy Berehe</td>
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<td>Alan Cherepon</td>
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<td>Lorrie Council</td>
<td>TCEQ</td>
<td>Radioactive Materials Division</td>
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<td>Grant Gibson</td>
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<td>Water Availability Division</td>
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<td>Jason Godeaux</td>
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<td>Christopher Heiligenstein</td>
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<td>Cindy Hooper</td>
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<td>Water Availability Division</td>
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<td>Peggy Hunka</td>
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<td>Kathy McCormack</td>
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<td>Scott Underwood</td>
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<td>Marcia Workman</td>
<td>TCEQ</td>
<td>Water Availability Division</td>
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**Interested Parties**

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Kortney DesCamp</td>
<td>Ashworth Leininger Group</td>
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<tr>
<td>Sarah Fakhreddine</td>
<td>The University of Texas at Austin</td>
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<td>Michael Helfrich</td>
<td>LJA Engineering, Inc.</td>
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<td>Robert Hicks</td>
<td>Corix Utilities</td>
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<td>Monica Jacobs</td>
<td>Kelly Hart &amp; Hallman, LLP</td>
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<td>Olabisi Kenku</td>
<td>BP</td>
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<td>Ken Kramer</td>
<td>Sierra Club – Lone Star Chapter</td>
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<td>Alan Leonard</td>
<td>Texas Sunset Advisory Commission</td>
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<tr>
<td>Christine Santiny</td>
<td>City of Conroe</td>
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MEETING HANDOUTS

1. Agenda for Texas Groundwater Protection Committee meeting on October 20, 2021
2. Record for Texas Groundwater Protection Committee meeting on July 14, 2021
4. Summary of Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Meeting, September 15, 2021
5. TGPC Groundwater Issues Subcommittee Annual Report, October 20, 2021
6. TGPC Public Outreach and Education Subcommittee Annual Report, October 20, 2021
7. TGPC Legislative Report Subcommittee Charge Update mark-up, October 20, 2021
8. TGPC Legislative Report Subcommittee Charge Update TAGD feedback, October 20, 2021
9. TGPC Legislative Report Subcommittee Charge Update clean, October 20, 2021
10. What Do I Need to Know About Preparing a Water Well for Flooding/Storm Events? Frequently Asked Question (FAQ)
11. Cistern vs Large Diameter Water Well FAQ
12. TCEQ Rules Update, 10/20/2021
13. 2021 – 2022 Water-related Conferences in Texas, October 2021
1. PRE-MEETING REMINDERS

Before the meeting started, Kelly Mills (TCEQ) provided the attendees with some tips that would facilitate a productive videoconference option for the meeting.

2. CALL TO ORDER AND INTRODUCTIONS

The member of the TGPC presiding over this meeting was physically present at the location listed on the first page and this meeting location was accessible to the public. Other designated TGPC members and the public were also able attend this meeting via teleconference or videoconference at no cost.

Kelly Mills (TCEQ), Designated Chairman of the Texas Groundwater Protection Committee (TGPC), called the meeting to order at approximately 1:05 PM CDT and called the roll of TGPC members. The representative from and Texas A&M AgriLife Research (AgriLife Research) was not present at the meeting.

3. SUBCOMMITTEE REPORTS

Groundwater Issues

Chris Heiligenstein (RRC) reported that the TGPC GWI Subcommittee last met on September 15, 2021, via videoconference and 12 state and federal agencies and organizations were represented.

The current Agricultural Chemicals Task Force Status Report (available on the TGPC GWI Subcommittee webpage, https://tgpc.texas.gov/tgpc-subcommittees/tgpc-groundwater-issues-subcommittee/, under the “Additional Resources” heading) was reviewed with the following highlights:

- TWDB conducted routine monitoring activities in the Gulf Coast aquifers, the Edwards and Trinity aquifers from several springs in Central Texas, and the Ogallala Aquifer in the Panhandle region, and they also collected 137 well and six spring samples.
- Cooperative Pesticide Groundwater Monitoring results for 205 sample analyses for both atrazine and 2,4-D included six springs, 31 duplicates, and 31 blanks. There were two atrazine detects (high of 0.22 ppb) and one 2,4-D (1.52 ppb) detect.

The current TGPC Publications Status Report (also available on the TGPC GWI Subcommittee webpage) was reviewed with the following highlights:

  - The 2020 *Joint Report* was published and was available at tceq.texas.gov/publications/sfr/056 and on the TGPC Publications webpage. The
case lists from the current report were available in Excel format on the TCEQ webpage.

- Notice of publication letters would be mailed shortly to county judges, local health officials, and Groundwater Conservation Districts (GCDs), and printed copies of the 2020 Joint Report were available upon request.

- Groundwater Assessment for the 2022 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d) (“Texas Integrated Report”)

- TCEQ staff would begin compiling information for this biennial report in September 2021.

The following current groundwater issues were discussed:

- Oil and Gas Produced Water;
- Emerging Contaminants;
- Brackish Groundwater;
- Evapotranspiration Networks; and,
- Others (i.e., the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Water Resources / Source Water Protection Area (SWPA) Task Force was examining groundwater quality issues, specifically nitrate, as one of the criteria they were using to evaluate areas where they might consider doing further study).

As required by the GWI Subcommittee’s current Charge (https://tgpc.texas.gov/wp-content/themes/responsive/subcommittees/gwissues/GWI_SubComm_Charge10Jul2019.pdf), the draft TGPC GWI Subcommittee Fiscal Year (FY) 2021 Annual Report was approved by the GWI Subcommittee. The Annual Report would be presented to the TGPC for approval at their next meeting.

Updated drafts of the Opportunities and Challenges in Aquifer Storage and Recovery and ET Networks and the Protection of Groundwater Supplies and Quality white papers were reviewed, and revised drafts would be provided at the next meeting.

The next TGPC GWI Subcommittee meeting was scheduled for December 15, 2021.

Public Outreach and Education

Peggy Hunka (TCEQ) reported that the TGPC POE Subcommittee last met on September 15, 2021, and nine state agencies and organizations were represented.

The Subcommittee reviewed the current Outreach Events Status Report, which is available on the POE Subcommittee webpage, https://tgpc.texas.gov/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/, under the “Additional Resources” heading:

- Texas A&M AgriLife Extension Service (AgriLife Extension) Water Well Screening Events
  - There were three screening events in the past quarter; and,
  - Four screening events were planned for the spring of 2021 in Falls County.
• TGPC Exhibit Booth
  o A virtual booth was set up at the TGPC Public Drinking Water Conference and 153 attendees visited the booth. A video recording of the Baby Aquifer demonstration was made by TCEQ staff and was shown at the booth.

John Smith (AgriLife Extension) reviewed the Texas Well Owner Network (TWON) schedule of completed, confirmed, water well one-day training events and workshops, which showed that there had been over 10,422 samples or attendees at TWON events since April 2011.

The Google Analytics activity report on the TGPC website was reviewed.

The draft FY 2021 Public Outreach and Education Subcommittee Annual Report was reviewed and approved for presentation to the TGPC at their next meeting.

There were no TGPC Groundwater Educational Outreach Plan topic updates.

FAQs and Fact Sheets:
• Final draft of FAQ entitled What Do I Need to Know About Preparing a Water Well for Flooding/Storm Events?
  o After discussion and minor changes, the document was approved for presentation to the TGPC at their next meeting.
• Update to FAQ entitled What Are the Texas Evapotranspiration (ET) Networks?
  o Guy Fipps (AgriLife Extension) presented the FAQ for review. After discussion, it was decided that the document would be reviewed for plain language by Jessica Price (DSHS) and Julia Stanford (TAGD).
• Draft FAQ entitled Cistern vs Large Diameter Water Well
  o After a discussion and minor changes, the document was approved for presentation to the TGPC at their next meeting.

The next POE Subcommittee meeting was scheduled for December 15, 2021.

4. PRESENTATION

Sarah Fakhreddine (UTBEG) shared information about understanding and mitigating metals mobilization during Aquifer Storage and Recovery (ASR). ASR is an increasingly applied water enhancement strategy, but its success can be threatened by naturally-occurring contaminants. Biogeochemical conditions dictate whether metals will mobilize to groundwater. A document detailing geochemical processes controlling water quality during ASR, a framework for site-specific conceptualization of potential arsenic mobilization, and guidance on monitoring and management would be published upon project completion.

James Harcourt (RRC) arrived at approximately 1:24 PM CDT, Leah Martinsson (TAGD) arrived at approximately 1:28 PM CDT, and they were present for the remainder of the meeting.
5. BUSINESS DISCUSSION AND POSSIBLE ACTION

TGPC Groundwater Issues Subcommittee Annual Report

Chris Heiligenstein (RRC) presented the TGPC GWI Subcommittee Annual Report highlighting FY 2021 results and FY 2022 plans. David Villarreal (TDA) proposed, James Harcourt (RRC) seconded, and all remaining TGPC members approved the TGPC GWI Subcommittee Annual Report. The report would be posted on the TGPC website.

TGPC Public Outreach and Education Subcommittee Annual Report

Peggy Hunka (TCEQ) presented the TGPC POE Subcommittee Annual Report highlighting FY 2021 results and FY 2022 plans. David Gunn (TDLR) proposed, Leah Martinsson (TAGD) seconded, and all remaining TGPC members approved the TGPC POE Subcommittee Annual Report. The report would be posted on the TGPC website.

TGPC Legislative Report Subcommittee Charge Update

Abiy Berehe (TCEQ) presented the TGPC Legislative Report Subcommittee Charge update in a marked-up format. TAGD had provided feedback on the update, and those edits were incorporated into a final, clean version of the document which was also available as one of the handouts. James Harcourt (RRC) proposed, Leah Martinsson (TAGD) seconded, and all remaining TGPC members approved the final, clean version of the TGPC Legislative Report Subcommittee Charge. The Charge would be posted on the TGPC website.

What Do I Need to Know About Preparing a Water Well for Flooding/Storm Events? Frequently Asked Question (FAQ)

Peggy Hunka (TCEQ) presented the What Do I Need to Know About Preparing a Water Well for Flooding/Storm Events? FAQ. Larry French (TWDB) proposed, Bridget Scanlon (UTBEG) seconded, and all remaining TGPC members approved the What Do I Need to Know About Preparing a Water Well for Flooding/Storm Events? FAQ. The FAQ would be posted on the TGPC website.

Cistern vs Large Diameter Water Well FAQ

Peggy Hunka (TCEQ) presented the Cistern vs Large Diameter Water Well FAQ. James Harcourt (RRC) proposed, Bridget Scanlon (UTBEG) seconded, and all remaining TGPC members approved the Cistern vs Large Diameter Water Well FAQ. The FAQ would be posted on the TGPC website.

Set Future Meeting Date

The next TGPC quarterly meeting was scheduled for January 12, 2022, at 1:30 PM CST as a hybrid meeting.
6. INFORMATION EXCHANGE FOR GROUNDWATER-RELATED ACTIVITIES – STATUS UPDATE

Groundwater Contamination Notice Coordination (Texas Water Code §26.408)

Cindy Hooper (TCEQ) reported that, since the last TGPC meeting, their Impact Evaluation Team (IET) had met six times and reviewed eight groundwater contamination cases, and 61 notices had been sent to the potentially affected private water well owners and users.

Groundwater Management Areas

Leah Martinsson (TAGD) reported that the Groundwater Management Area (GMA) joint planning processes were winding down, their Desired Future Conditions (DFCs) were due to TWDB by January 5, 2022, and all of the GMAs should meet this deadline.

Regional Water Planning

Larry French (TWDB) reported that:

• The Regional Water Planning Groups (RWPGs) were meeting to hold their pre-planning public input meetings and to select technical consultants for the 2026 Regional Water Plans;
• The first set of draft water demand projections would be released to the RWPGs in early 2022 (livestock, manufacturing, and steam-electric water use);
• There was an ongoing TWDB contracted study with UTBEG to update mining water use projections for regional water planning with the technical report and data from the study due to TWDB in June 2022, TWDB and UTBEG would coordinate with Groundwater Conservation Districts (GCDs) to contribute data to support the study, and study information was available at https://www.twdb.texas.gov/waterplanning/data/projections/MiningStudy/index.asp;
• The TWDB water planning program would initiate a rulemaking on regional water planning and state water planning rules later in 2021; and,
• The working schedule for the 2026 Regional Water Plans were available at https://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2026/projectdocs/Working_Schedule_2026RWPs.pdf.

Groundwater Availability Modeling

Larry French (TWDB) reported that:

• Cindy Ridgeway, manager of the Groundwater Modeling Department at TWDB, was retiring in December 2021; she had managed the Groundwater Availability Modeling program for more than 20 years;
• The Northern Carrizo-Wilcox Aquifer Groundwater Availability Model upgrade was recently released; and,
• Several groundwater availability models were nearing completion:
The Blossom Aquifer in northeast Texas; this was the first groundwater availability model for this minor aquifer;

The Northern Edwards (Balcones Fault Zone) Aquifer in central Texas; this upgrade added the Trinity Aquifer to the model; and,

The Gulf Coast Aquifer System (central and southern); this upgrade combined two regional existing groundwater availability models and incorporated recent MODFLOW upgrades.

In addition, Larry French (TWDB) reported that several contracted studies for the Brackish Aquifer Characterization program had recently been completed; these studies ranged from detailed analysis of cores for aquifer/rock properties to regional studies evaluating the applicability of seismic data for characterizing deep brackish aquifers.

Nonpoint Source Pollution

T.J. Helton (TSSWCB) reported that they were working with TCEQ to finalize:

• The 2021 *Nonpoint Source Pollution (NPS) Annual Report* which was due to the U.S. Environmental Protection Agency (EPA) by the end of January 2022; and,

• The 2022 update of the *Texas NPS Management Program* which would require approval from both agencies, the Texas Governor, and the U.S. EPA.

National Groundwater Information

Abiy Berehe (TCEQ) reported on the virtual Ground Water Protection Council (GWPC) Annual Forum that was held on September 27 – 29, 2021:

• Source Water Protection programs were highlighted due to the change in regional demographics from people moving to areas where drinking water needs to be protected.

• The U.S. EPA announced that the potential Infrastructure Bill would bring funds to Clean Water Act programs, plugging of abandoned water wells, and drinking water infrastructure projects. They indicated that funds would be directed to those communities that were the most in need, including mapping applications for source water protection programs. They recognized nutrients as one of the challenging environmental problems and planned to continue supporting USDA programs in conservation and forest management to protect drinking water sources. Climate change mitigation efforts were also discussed. The U.S. EPA also announced the availability of *Enhanced Aquifer Recharge of Stormwater in the United States* (600/R-21/037F) and said that they would be engaging in outreach activities on this subject in the coming months.

• The U.S. Department of Energy (DOE) discussed current efforts with regards to clean energy and critical minerals development, as well as reducing methane emissions. They indicated that they planned to expand the efforts done in Port Arthur to produce hydrogen, steam, and power for the community as one of the clean energy initiatives.

• Information was presented on emerging issues, per- and polyfluoroalkyl substances (PFAS), and other trends. The Regrow Act as part of the Stimulus and Job Creation bill would provide funds to plug orphan oil and gas wells on federal, tribal, state, or
private lands. These grants would flow to states to work under the state’s existing oil and gas well plugging programs.

- ASR and Managed Aquifer Recovery (MAR) topics were discussed. A virtual field trip that took viewers to visit two infiltration sites that are part of the City of Provo ASR Program was provided.
- The United States Geological Survey (USGS) announced that the National Cooperative Funding opportunity for states and local agencies who contribute groundwater data was open until January 20, 2022, and that more information was available at https://cida.usgs.gov/ngwmn/splash.jsp and https://cida.usgs.gov/ngwmn/cooperativeagreements.jsp. Information sessions describing this funding opportunity would also be held in the next two months.

Kelly Mills (TCEQ) reported that the U.S. EPA had recently announced their strategy to regulate PFAS (https://www.epa.gov/newsreleases/epa-administrator-regan-announces-comprehensive-national-strategy-confront-pfas). Bridget Scanlon (UTBEG) asked whether TCEQ looked at PFAS in drinking water, and Kelly Mills (TCEQ) indicated that he would provide her with a specific contact to answer that question. David Villarreal (TDA) noted that the USDA NRCS had an active surface water protection and drinking quality group; Bridget Scanlon (UTBEG) agreed that he could let them know of her interest in this subject.

7. ANNOUNCEMENTS

Rules Update

Cindy Hooper (TCEQ) reported on current TCEQ rulemaking that was of interest to the TGPC:
- 2020-018-039-LS – Amend Public Notice & Participation Requirements;
- 2021-004-MIS-NR – Texas Nonpoint Source (NPS) Management Program Update;
- 2020-014-307-OW – Triennial Review of 30 TAC Chapter 307, Texas Surface Water Quality Standards (TSWQS);
- 2020-043-OTH-NR – Renewal with Amendment of General Permit No. TXG870000; and,
- 2021-030-285-CE – On-site Sewage Facility (OSSF) Updates.

Additional information on a specific TCEQ rule can be found at https://www.tceq.texas.gov/rules/whatsnew.html.

New Publications

Kelly Mills (TCEQ) announced the following recent TCEQ publications:
• GI-432 (revised), *Disinfecting Your Private Well*,
• SFR-56/20 (new), *Joint Groundwater Monitoring and Contamination Report 2020*,
• GI-604 (new), *Protect Your Water Source Brochure*,
  https://www.tceq.texas.gov/publications/gi/gi-604; and,
• M-90 (new), *Pull Up Your Water Well Report – Online*,

James Harcourt (RRC) announced that their Groundwater Advisory Unit had posted information regarding their surface casing estimator as an online map at https://coastal.beg.utexas.edu/surfacecasing/#!/. They had worked with UTBEG to translate approximately 20,000 – 25,000 investigation letters per year regarding oil and gas wells.

Upcoming Conferences

Kelly Mills (TCEQ) referred TGPC members to the conferences listed in the “2021 – 2022 Water-related Conferences in Texas” handout – the current version of this handout is always available on the TGPC’s POE Subcommittee webpage at https://tgpc.texas.gov/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/ under the “Additional Resources” heading.

Earlier in the meeting, Leah Martinsson (TAGD) had announced that the Groundwater Management Districts Association (GMDA) Annual Conference would be held in San Antonio on January 18 – 20, 2022.

Kelly Mills (TCEQ) announced that Lynne Fahlquist (USGS) would be retiring at the end of December 2021.

8. PUBLIC COMMENT

There was no public comment at the meeting.

9. ADJOURN

Kelly Mills (TCEQ) adjourned the meeting at approximately 2:22 PM CDT.