# MEETING ATTENDANCE

<table>
<thead>
<tr>
<th>Committee Members</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Cary Betz</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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<tr>
<td>Peter Pope</td>
<td>Railroad Commission of Texas (RRC)</td>
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<td>Deba Duttta</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>Thomas Helton</td>
<td>Texas State Soil and Water Conservation Board (TSSWCB)</td>
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<td>David Gunn</td>
<td>Texas Department of Licensing and Regulation (TDLR)</td>
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<tr>
<th>Agency Staff</th>
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<tr>
<td>Abiy Berehe</td>
<td>TCEQ Water Availability Division</td>
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<td>Leon Byrd</td>
<td>TCEQ Water Availability Division</td>
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<td>Alan Cherepon</td>
<td>TCEQ Water Availability Division</td>
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<td>Cindy Hooper</td>
<td>TCEQ Water Availability Division</td>
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<td>Peggy Hunka</td>
<td>TCEQ Water Availability Division</td>
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<td>Kathy McCormack</td>
<td>TCEQ Water Availability Division</td>
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<td>Dan Robicheaux</td>
<td>TCEQ Budget and Planning Division</td>
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<td>L. Scott Underwood</td>
<td>TCEQ Water Availability Division</td>
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<th>Interested Parties</th>
<th>Affiliation</th>
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<tr>
<td>Jeff C. Fox</td>
<td>Austin Water</td>
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<td>Vicky Kennedy</td>
<td>Travis County</td>
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# MEETING HANDOUTS

1. Agenda for Texas Groundwater Protection Committee meeting on October 18, 2017
2. Record for Texas Groundwater Protection Committee meeting on July 19, 2017
4. Summary of Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Meeting, September 2017
5. Draft TGPC-sponsored National Groundwater Awareness Week poster (example handout; TGPC members only)
The following items were also on display on the handout table:
1. TGPC Public Information Act Policy
MEETING RECORD OF OCTOBER 18, 2017

1. CALL TO ORDER AND INTRODUCTIONS

Cary Betz (TCEQ), Designated Chairman of the Texas Groundwater Protection Committee (TGPC), called the meeting to order at approximately 1:05 PM CDT. TGPC members then introduced themselves. The representatives from the Texas Alliance of Groundwater Districts (TAGD), Texas A&M AgriLife Research (AgriLife Research), and Bureau of Economic Geology of The University of Texas at Austin (UTBEG) were not present at the meeting.

2. SUBCOMMITTEE REPORTS

Groundwater Issues

Peter Pope (RRC) reported that the TGPC GWI Subcommittee last met on September 13, 2017 and 12 state and federal agencies and organizations were represented.

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

- Fiscal Year 2017 results:
  - Cooperative monitoring immunoassay (IA) screening: 74 wells, 28 QA samples = 102 total samples in the Gulf Coastal Plain aquifers.
    - 102 Atrazine, no detects
  - TCEQ on-going monitoring: 21 samples from 19 wells and 2 QA samples from Public Water Supply wells in the Panhandle that had previous high atrazine detections.
    - All 21 samples analyzed for triazines as atrazine by IA, with five non-detects, and a high of 0.41 parts per billion (ppb)
    - 12 samples analyzed at DSHS laboratory by Methods 525.2 and 515.4; the only detect was for picloram (0.4 ppb in Kress #3 well)
- 2017 cooperative and on-going monitoring results had been entered into the TCEQ Interagency Pesticide Database (IPD) and would be sent to U.S. Environmental Protection Agency (EPA) and Region 6 U.S. EPA; and,
- The revised Quality Assurance Project Plan (QAPP) was undergoing internal review and would be sent to Region 6 U.S. EPA prior to the expiration date of October 24, 2017.

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

- Groundwater Assessment for the 2018 Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d) (“Texas Integrated Report”):
  - The 2018 report preparation would be initiated in the first quarter of Fiscal Year 2018.
  - Texas Commission on Environmental Quality (TCEQ) staff completed the 2016 Joint Report, publication notices were sent to county judges, county health officials, and Groundwater Conservation Districts (GCDs), and a link to the publication was also posted on the TGPC website.

The current *Texas Groundwater Protection Strategy* (“Strategy”) Update Task Force Status Report (also available on the GWI Subcommittee webpage) was reviewed with the following highlight:
- An initial draft Strategy update was prepared after the first Task Force meeting and subsequently revised based on discussion during the second Task Force meeting.

Bridget Scanlon (UTBEG) gave GWI Subcommittee members a presentation on “Water Budget of the Permian Basin: Implications for Groundwater Quality” based on a recently published paper in *Environmental Science & Technology* ([http://pubs.acs.org/doi/full/10.1021/acs.est.7b02185](http://pubs.acs.org/doi/full/10.1021/acs.est.7b02185)).

The following current groundwater issues were briefly discussed:
- Water Supply Enhancement Program;
- Emerging Contaminants;
- Border Groundwater;
- Aquifer Storage and Recovery;
- Failing Septic Systems; and,
- Others (i.e., groundwater declines in the Great Plains and associated reductions in fish populations).

The draft of the *Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Fiscal Year 2017 Annual Report* (“Annual Report”) was approved by the GWI Subcommittee. The Annual Report would be presented to the TGPC for approval at their October 18, 2017 meeting.

After extensive discussion of the draft Strategy update, GWI Subcommittee members agreed that the Strategy Update Task Force should meet again, incorporate all of the feedback received at the meeting, and bring an updated version to the next meeting.

The next GWI Subcommittee meeting was scheduled for December 13, 2017.
Public Outreach and Education

Peggy Hunka (TCEQ) reported that the TGPC POE Subcommittee last met on September 13, 2017 and eight state agencies and organizations were represented.

The current Outreach Events Status Report (available on the POE Subcommittee webpage, http://tgpc.state.tx.us/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/, under the “Additional Resources” heading) was reviewed:

- Texas A&M AgriLife Extension Service (AgriLife Extension) Water Well Screening Events
  - Three since the previous POE Subcommittee meeting; and,
  - Two were planned through October 2017.
- TGPC Exhibit Booth
  - Two since the previous POE Subcommittee meeting.

Diane Boellstorff (AgriLife Extension) reviewed the TWON schedule of completed, confirmed, obligated, and suggested water well one-day training events and workshops. There had been over 7,742 samples or attendees at TWON events since April 2011.

The Google Analytics activity report on the TGPC website for June 7, 2017 through September 13, 2017 was reviewed.

Three of the four topics in the current Texas Groundwater Protection Committee Groundwater Educational Outreach Plan (“Plan”, http://tgpc.state.tx.us/POE/TGPC_POE_GW_EduOutreachPlan10Sep2013.pdf) were briefly discussed:

- It was announced that the TSSWCB Water Supply Enhancement Program (WSEP) was not funded during the last legislative session and would no longer be an area of focus for this Subcommittee. A suggestion was made that septic systems may be an issue that the Subcommittee can work on.
- Albert Jimenez (TDLR) discussed reports of abandoned water wells and stated that they get about one notification per month with a recent report in west Texas.
- Guy Fipps (AgriLife Extension) led a discussion on the status of the TexMesonet (https://www.texmesonet.org/) and mentioned a report that would be going out for comment in November 2017 on the feasibility of an Evapotranspiration (ET) Network.

Peggy Hunka (TCEQ) presented two possible TGPC-sponsored National Groundwater Awareness Week posters for the Subcommittee to review and several suggestions for changes were made.

Diane Boellstorff (AgriLife Extension) requested that reprints of a shock chlorination fact sheet be funded by the TCEQ POE contract with AgriLife Extension. The proposal was approved by the POE Subcommittee.

The next POE Subcommittee meeting was scheduled for December 13, 2017.
3. PRESENTATION

There was no presentation at the meeting.

4. BUSINESS DISCUSSION AND POSSIBLE ACTION

National Groundwater Awareness Week Poster Update

Peggy Hunka (TCEQ) presented drafts of the next TGPC-sponsored National Groundwater Awareness Week poster and TGPC members selected one of the four options.

TGPC GWI Subcommittee Annual Report

Peter Pope (RRC) presented the Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Annual Report. David Villarreal (TDA) suggested that a list of the Subcommittee members be included in the report next time. David Gunn (TDLR) proposed, Deba Dutta (DSHS) seconded, and all remaining TGPC members approved the report. The report would be posted on the TGPC website (http://tgpc.state.tx.us/tgpc-subcommittees/tgpc-groundwater-issues-subcommittee/#Resources).

TGPC POE Subcommittee Annual Report

Peggy Hunka (TCEQ) presented the Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Annual Report. David Villarreal (TDA) proposed, T.J. Helton (TSSWCB) seconded, and all remaining TGPC members approved the report. The report would be posted on the TGPC website (http://tgpc.state.tx.us/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/#Resources).

Current Groundwater Issues

As provided by the Federal Emergency Management Agency (FEMA) and other Federal and State partners operating from the Joint Field Office for Hurricane Harvey Response, Cary Betz (TCEQ) presented a new consensus trifold brochure, How to Disinfect a Private Well System in 7 Steps (http://tgpc.state.tx.us/POE/HowToDisinfectAPrivateWellSystem), which detailed the disinfection process for private water wells. This publication would be translated into seven additional languages and distributed through AgriLife Extension agents in the 41 designated Texas counties affected by Hurricane Harvey, but it was not meant to apply to a damaged water well (in that case, a water well pump installer should be contacted). Initial AgriLife Extension water well sampling in the hurricane-affected areas indicated higher than normal levels of E. coli and total coliform, and a schedule for additional test kit distribution was expected shortly. It was noted that state regulations related to the use of Licensed Water Treatment Specialists did not apply to private water wells.
Peter Pope (RRC) asked about the required concentration of the “household bleach” mentioned in the new trifold brochure. Cary Betz (TCEQ) indicated that whatever bleach that can be bought in the grocery store is adequate, but the industrial chlorine product sold for swimming pools should not be used.

David Villarreal (TDA) added that the role of antimicrobial disinfection compounds like bleach were discussed at a recent U.S. EPA water quality training session in Minnesota.

Cary Betz (TCEQ) also commented on a recent report by the Environmental Working Group about high levels of nitrates and trihalomethanes in drinking water supplies found in rural areas (https://www.ewg.org/tapwater/trouble-in-farm-country.php#.WfjV-e-nFaQ). This study was referenced in an Austin newspaper which reported that the 2014 – 2015 trihalomethanes average for two local water systems exceeded the federal limit (http://www.mystatesman.com/news/state–regional/report-texas-water-supplies-farm-country-posses-cancer-risks/bnGRmRQUhYEPPhDQVgcZFDO/). Cary Betz noted that Bridget Scanlon (UTBEG) had done numerous studies on groundwater and nitrates, and that trihalomethanes are formed when chlorine products combine with Total Organic Compounds (TOCs) from any source (including coal) in public drinking water treatment systems.

Set Future Meeting Date

The next TGPC quarterly meeting was scheduled for January 10, 2018 at 1:00 PM CST.

5. INFORMATION EXCHANGE FOR GROUNDWATER-RELATED ACTIVITIES – STATUS UPDATE

Groundwater Contamination Notice Coordination (Texas Water Code §26.408)

Peggy Hunka (TCEQ) reported that the Impact Evaluation Team (IET) had met six times since the last TGPC meeting and seven groundwater contamination cases were reviewed resulting in 27 letters mailed to private water well owners (including the letters for the July 11, 2017 meeting). Also, approximately 24 letters for the four most recent cases had not yet been mailed, but they were still within the 30-day notification window and would be reported at the next TGPC meeting.

Groundwater Management Areas

There was no discussion of this topic at the meeting.

Regional Water Planning

Larry French (TWDB) reported that:

- Their Board had a work session on October 17, 2017 with Regional Water Planning Group (RWPG) Chairs in order to receive input on changes from the 85th Legislative Session. Senate Bill (SB) 1511 contained requirements that RWPGs amend their
plans to exclude infeasible projects and allow for simplified planning in every other planning cycle (i.e., every 10 years). They anticipated taking draft rules for approval to their Board in December 2017.

- RWPGs were reviewing draft water demand projections and final requests for revisions to the draft projections were due to TWDB by January 12, 2018.
- There had been a lot of recent activity related to an interactive comparison chart tool that compared past State Water Plan (SWP) projections and historic reported use estimates (see http://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2021/current_docs.asp under the Task 2 heading).

Groundwater Availability Modeling

Larry French (TWDB) reported that they had continued their work on developing Modeled Available Groundwater (MAG) values for the Desired Future Conditions (DFCs) process – they had completed eight of the 15 models (for Groundwater Management Areas (GMAs) 1, 2, 6, 9, 11, 14, 15, and 16), three of the models (for GMAs 4, 12, and 13) would be completed soon, and the remainder would be completed by early 2018. Three in-house Groundwater Availability Modeling (GAM) models were in progress:

- Blossom Aquifer;
- Northern Segment of the Edwards (Balcones Fault Zone) Aquifer; and,
- Central and Southern Gulf Coast Aquifer System (GMAs 15 and 16); some studies done by the Goliad County and Brush Country GCDs would be incorporated into these models.

In addition, Larry French (TWDB) reported on the status of six research contract GAMs:

- The final deliverable for the Rio Grande Valley Transport contract was due by October 31, 2017;
- The final deliverable for the GMA 13 mapping project contract was due by December 29, 2017;
- The draft final deliverable for the fault study and update to GMA 12 was due in early 2018;
- The conceptual model to update the GAM for the northern Carrizo-Wilcox, Queen City, and Sparta Aquifers was due by mid-2018;
- The conceptual model for the Trinity Aquifer was in progress; and,
- The draft final deliverable for the subsidence contract was due by the end of 2017.

Nonpoint Source Pollution

There was no discussion of this topic at the meeting.
National Groundwater Initiatives

Cary Betz (TCEQ) reported on a number of national groundwater initiatives:

- He had attended the Ground Water Protection Council’s (GWPC’s) Annual Forum on September 27-29, 2017 in Boston, Massachusetts.
  - Updates were provided by the U.S. Department of Energy (DOE), Office of Oil and Natural Gas, and the U.S. EPA, Office of Ground Water and Drinking Water.
  - Presentations included those on Natural Gas Storage, Stormwater Management and Groundwater Protection, Groundwater Protection and Brownfields, and Private Well Vulnerability and Assessment, as well as a presentation on Produced Water provided by the U.S. DOE National Energy Technology Laboratory.
  - There was a meeting on the National Ground Water Monitoring Network and an Underground Injection Control (UIC) Class V Roundtable.
  - The Groundwater State Issues and Priorities segment of the Ground Water Research and Education Foundation Spotlight Series included a presentation by Kevin McRae, retiring CEO of the National Ground Water Association (NGWA), on the NGWA’s publication regarding per- and polyfluoroalkyls (PFAs):
    - In October 2016, NGWA issued a call for volunteers to draft a guidance document related to groundwater and PFAs. One purpose of the document was to provide groundwater professionals with a technically defensible guide for defining an appropriate path forward for a client, water resource, or regulatory action.
    - Thirty-six volunteers drafted eight sections (including Human and Ecological Impacts, Fate and Transport, Field Sampling and Analysis, Legal and Regulatory Framework, Risk Communication, and Remediation and Treatment) which were posted on the NGWA website for a 60-day public comment period that concluded July 31, 2017.
    - Each section was intended to be able to stand on its own, or it could be considered a part of a total work. The publication was not yet available through NGWA.
  - Brandon Kernen (New Hampshire Department of Environmental Services) gave a presentation on Per- and Polyfluoroalkyl Substances (PFASs) in Drinking Water and Groundwater in New Hampshire Sites. PFASs above their 70 parts per trillion (ppt) action level had been detected in drinking water and groundwater at multiple sites across 40 square miles contaminating hundreds of private drinking water wells and several public water supply sources. The release mechanism for these compounds was airborne (i.e., an incinerator at a plastics plant).
- The U.S. Department of the Interior had given the Advisory Committee on Water Information (ACWI) permission to resume all Subcommittee activities, including the Subcommittee on Ground Water (SOGW, http://acwi.gov/sogw/), and there was a SOGW teleconference on September 18, 2017. The United States Geological Survey (USGS) announced that their 2018 National Ground-Water Monitoring Network Program (NGWMNP) grant was open until November 30, 2017, and the program was dependent upon strong collaboration among the Nation’s groundwater data providers. The NGWMN Program Board would be meeting at the USGS offices in Austin.
during the week of January 21, 2018, and ACWI would also be holding a meeting in mid-January 2018 in Reston, Virginia.

Drought Status

Cary Betz (TCEQ) referred TGPC members to the most recent U.S. Drought Monitor and TCEQ drought-affected Public Water Systems (PWSs) maps, as well as the TCEQ List of PWSs Limiting Water Use to Avoid Shortages (aka, the “180-day list”). As of October 10, 2017, 13 % of the state was classified as D0 through D1, down 11 % from the last TGPC meeting, and the U.S. Seasonal Drought Outlook continued to forecast mostly drought-free conditions across the state through December 31, 2017. As of October 4, 2017, of the 4,658 active community water systems in Texas, 1,096 were affected by drought (either voluntary or mandatory), and 739 of those used groundwater (either partially or exclusively). As of July 13, 2017, seven PWSs in the state could be out of water in 180 days or less (two systems less than at the last TGPC meeting).

6. ANNOUNCEMENTS

Cary Betz (TCEQ) reminded some TGPC members that their designation letters needed to be updated.

Rules Update

Cary Betz (TCEQ) reported on current TCEQ rulemaking that was of interest to the TGPC:
- 2018-001-305-WS – Modification of Municipal Solid Waste (MSW) Landfill Permits for Vertical Expansion to Dispose of Waste from Hurricane Harvey;
- 2017-026-342-OW – House Bill (HB) 2582: Exemption for Certain Quarries from the Aggregate Production Operation Registration Requirements of Texas Water Code, Chapter 28A;
- 2017-008-007-LS – Texas Department of Transportation (TxDOT) and TCEQ Memorandum of Understanding (MOU): Environmental Reviews;
- 2016-042-309-OW – Amendment of Chapters 222 and 309 Relating to Beneficial Reuse Credits; and,

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

Larry French (TWDB) announced that they would be holding a public hearing to possibly amend the SWP in order to recognize a new minor aquifer in north central Texas – the proposed name would be the “Cross Timbers Aquifer”. In 2016, the Upper Trinity GCD had requested that TWDB do a study to see if those four Paleozoic-age formations met
the criteria for a minor aquifer. If it is designated as such, this new minor aquifer would then be included in the joint planning process.

David Gunn (TDLR) announced that they would be updating some of their rules, including the allowance of new casing material (i.e., fiberglass).

New Publications

Cary Betz (TCEQ) referred TGPC members to the 13 new and revised TCEQ publications on display on the handout table (see page 3 for the complete list).

Upcoming Conferences

Cary Betz (TCEQ) referred TGPC members to the conferences listed in the “2017 – 2018 Water-related Conferences in Texas” handout – the current version of this handout is always available on the TGPC’s POE Subcommittee webpage at http://tgpc.state.tx.us/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/ under the “Additional Resources” heading.

Cary Betz (TCEQ) also announced a Texas Freshwater Mussel Conservation and Stakeholder Summit on November 14 – 15, 2017 in Austin.

7. PUBLIC COMMENT

There was no public comment.

8. ADJOURN

Cary Betz (TCEQ) adjourned the meeting at approximately 2:27 PM CDT.