

**TEXAS GROUNDWATER PROTECTION COMMITTEE  
RECORD OF MEETING**

First Quarterly Meeting, Fiscal Year 2019

Meeting Date: October 17, 2018  
Meeting No.: 124

Place: TCEQ Campus, Bldg F  
Room: 2210

**TABLE OF CONTENTS**

<b>MEETING HANDOUTS .....</b>	<b>3</b>
<b>MEETING RECORD OF OCTOBER 17, 2018 .....</b>	<b>4</b>
1. CALL TO ORDER AND INTRODUCTIONS .....	4
2. BUSINESS DISCUSSION AND POSSIBLE ACTION.....	4
Proposed <i>Texas Groundwater Protection Strategy</i> Update .....	4
<i>Activities and Recommendations of the Texas Groundwater Protection Committee</i>	
– <i>Report to the 86th Legislature</i> .....	7
<i>TGPC Groundwater Issues Subcommittee Annual Report</i> .....	7
<i>TGPC Public Outreach and Education Subcommittee Annual Report</i> .....	8
Current Groundwater Issues .....	8
Set Future Meeting Date .....	8
3. SUBCOMMITTEE REPORTS.....	8
Groundwater Issues.....	8
Public Outreach and Education.....	10
Legislative Report.....	10
4. PRESENTATION.....	10
5. INFORMATION EXCHANGE FOR GROUNDWATER-RELATED	
ACTIVITIES – STATUS UPDATE .....	11
Groundwater Contamination Notice Coordination (Texas Water Code §26.408) .....	11
Groundwater Management Areas .....	11
Regional Water Planning .....	11
Groundwater Availability Modeling.....	11
Nonpoint Source Pollution.....	12
National Groundwater Initiatives.....	12
Drought Status .....	14
6. ANNOUNCEMENTS.....	14
Rules Update .....	14
New Publications .....	15
Upcoming Conferences.....	15
7. PUBLIC COMMENT .....	15
8. ADJOURN.....	15

## MEETING ATTENDANCE

### Committee Members

Cary L. Betz

Janie Hopkins

Ashley Correll

Emily Hall

David T. Villarreal

David A. Van Dresar

John Tracy

Bridget Scanlon

David Gunn

### Affiliation

Texas Commission on Environmental Quality  
(TCEQ)

Texas Water Development Board (TWDB)

Railroad Commission of Texas (RRC)

Texas Department of State Health Services (DSHS)

Texas Department of Agriculture (TDA)

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)

### Agency Staff

Abiy Berehe

Leon Byrd

Alan Cherepon

Cindy Hooper

Peggy G. Hunka

Jessica Kessinger

Kathy McCormack

Michael Parr

Peter Pope

L. Scott Underwood

### Affiliation

TCEQ

TCEQ

TCEQ

TCEQ

TCEQ

DSHS

TCEQ

TCEQ

RRC

TCEQ

### Program

Water Availability Division

Water Availability Division

Water Availability Division

Water Availability Division

Water Availability Division

Water Availability Division

Environmental Law Division

Oil & Gas Division

Water Availability Division

### Interested Parties

None

### Affiliation

## MEETING HANDOUTS

1. Agenda for Texas Groundwater Protection Committee meeting on October 17, 2018
2. Record for Texas Groundwater Protection Committee meeting on July 18, 2018
3. Summary of Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Meeting, September 5, 2018
4. Summary of Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Meeting, September 2018
5. *Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Annual Report*, October 17, 2018
6. *Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Annual Report*, October 17, 2018
7. Final draft *Activities and Recommendations of the Texas Groundwater Protection Committee – Report to the 86th Legislature* (TGPC members only)
8. Final draft proposed *Texas Groundwater Protection Strategy* (“*Strategy*”) update
9. TGPC responses to public comments regarding the proposed *Strategy* update
10. Drought 2018 – U.S. Drought Monitor, Texas, October 9, 2018; Public Water Supply Systems Affected, October 10, 2018; TCEQ List of Texas PWSs Limiting Water Use to Avoid Shortages, October 10, 2018; U.S. Seasonal Drought Outlook, September – December 2018, September 20, 2018
11. TCEQ Rules Update, 10/17/2018
12. Water Conservation Advisory Council Blue Legacy Awards flyer (TGPC members only)
13. 2018 – 2019 Water-related Conferences in Texas, October 2018

The following item was also on display on the handout table:

1. TGPC Public Information Act Policy

## MEETING RECORD OF OCTOBER 17, 2018

### 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 1:07 PM CDT. TGPC members then introduced themselves. The representative from the Texas State Soil and Water Conservation Board (TSSWCB) was not present at the meeting.

For this meeting, the Business Discussion and Possible Action portion of the agenda was switched with the Subcommittee Reports portion of the meeting. This record is written in the order that agenda items were addressed during the meeting.

### 2. BUSINESS DISCUSSION AND POSSIBLE ACTION

Proposed *Texas Groundwater Protection Strategy* Update

Public comments regarding the proposed update of the *Texas Groundwater Protection Strategy* (“*Strategy*”) had been received from the Sierra Club (Lone Star Chapter), TCEQ’s Water Quality Division, and Gwen Webb (on behalf of the law firm Webb & Webb). Cary Betz (TCEQ) read the TGPC’s responses to the public comments (listed below) and suggested that they also be published in the *Texas Register*.

#### Comment 1:

The Sierra Club commented that it was instrumental in the legislative creation of the Texas Groundwater Protection Committee (TGPC or Committee), which is charged with developing and updating the *Texas Groundwater Protection Strategy* (*Strategy*). The Sierra Club commented also that the proposed update is a useful and digestible overview of the accomplishments of the TGPC since 2003 and that it contains links and contact information for interested Texans to learn more about groundwater protection activities, especially the *Joint Groundwater Monitoring and Contamination Report* (*Joint Report*) prepared annually by TGPC and the biennial TGPC Legislative Reports, the latter of which include legislative recommendations. There are other valuable documents produced by the TGPC Groundwater Issues Subcommittee and a wealth of information available through the TGPC website.

#### Response 1:

The TGPC acknowledges and appreciates the supportive comments from the Sierra Club.

#### Comment 2:

The Sierra Club commented that it is concerned about the length of time that it has taken to produce a new update, as the 2003 *Strategy* included the stated intention that the *Strategy* be updated every six years. The Sierra Club urges TGPC to reaffirm its intention to develop such updates every six years, to reflect the dynamic changes in Texas that are likely to impact the state’s groundwater resources. In addition, the Sierra Club feels that it would be beneficial for TGPC to begin in 2019, following the state

legislative session and the approval of state appropriations for the 2020-2021 biennium, to lay out a process and timetable for preparing the next update.

Response 2:

In preparing the updated *Strategy*, the TGPC recognizes the importance of keeping revisions to the document current, and recognizes the difficulty of reaching a consensus among members once a significant period of time elapses between updates. The TGPC agrees that laying out a specific process and a specific timetable for preparing formal updates to the *Strategy* would be beneficial for the state and envisions that the process will be a standing agenda item for both the Groundwater Issues Subcommittee and the main Committee. The purpose behind having a standing agenda item is to better facilitate a more frequent and formal update cycle. The TGPC will discuss and deliberate the frequency of the update-cycle during near-future meetings.

Comment 3:

The Sierra Club commented that it believes that the next update needs to be much more pro-active and thorough in identifying groundwater protection challenges facing Texas and specifying a path forward to meeting those challenges, including recommended actions by both public and private entities. The Sierra Club commented that the *Strategy* would be potentially more effective by offering specifics on deficiencies in groundwater protection and priority problems with groundwater quality and providing a more detailed game plan on how those should be addressed. The Sierra Club urges the TGPC to adopt the approach described above in developing the next update, which should be completed on schedule. The Sierra Club stated that it stands ready to assist in that effort.

Response 3:

The TGPC appreciates the desire for a more traditional approach in developing a strategic document for groundwater protection. At the same time, rapid advances in groundwater technology, contaminant detection and forecasting, as well as information dissemination, call for changes to the way the state responds to contamination that are not presently documented in traditional strategy documents. This updated version of the *Strategy* represents an initial move toward a dynamic document that is capable of being updated rapidly to respond not only to the changes in groundwater technology and contaminant detection and forecasting, but also to issues that are not anticipated at this time. The TGPC believes that a dynamic strategy, that facilitates addressing not only the “known” groundwater issues, but emerging groundwater issues, is critical to maintaining the protection of the resource.

The *Strategy* is the second document to undergo a “streamlining”, the first being the biennial *Activities and Recommendations of the Texas Groundwater Protection Committee: A Report to the Legislature (Legislative Report)*. By streamlining the documents, the TGPC has sought to reduce redundancy, and increase the inter-dependency between the mandated products of the legislation that created the Committee.

The next document to undergo review and possible revision is the *Joint Report* which is the Committee’s primary “workhorse”, by virtue of being an annual publication. The

TGPC envisions the *Joint Report* as the document that contains comprehensive descriptive details of member agencies' groundwater programs and activities, and the *Strategy* as the high-level guide for groundwater quality protection.

As mentioned above, the three reports are interdependent and integrated to fulfill the TGPC's mandates for groundwater quality protection.

Comment 4:

The Water Quality Division (WQD) of the Texas Commission on Environmental Quality (TCEQ) commented that it seeks clarification of the updated *Strategy*. Specifically, WQD seeks clarification about the continuity and preservation of the groundwater protection measures outlined in the existing *Strategy*, AS-188, that are not included in the updated *Strategy*. The updated *Strategy* does not make clear whether the intention is to carry these measures forward. WQD respectfully requests that the current *Strategy*, AS-188 (published in 2003), remains an active publication until a thorough review can occur to ensure that all relevant components of this document are addressed in the updated *Strategy* or elsewhere.

Response 4:

The updated *Strategy* has been streamlined for better integration into the TGPC's vision for all of the Committee's mandated reports, and it supersedes all previous versions. However, this does not mean, that the principles identified in *Chapter I: The Policy Framework for Groundwater Protection* found in the prior *Texas Groundwater Protection Strategy*, AS-188, February 2003, are in any way invalid, amended, modified or "repealed". Similarly, the mechanisms that characterize groundwater for protection and conservation, as identified in *Chapter II: Characterizing the State's Groundwater Resources* in the prior *Texas Groundwater Protection Strategy*, AS-188, February 2003, remain in effect. No existing groundwater protection measure acquired, adopted, or incurred; nor any rule or order adopted; nor any proceeding instituted by the program areas of any member agency that were pursuant to the prior *Texas Groundwater Protection Strategy*, AS-188, February 2003, are affected by the adoption of the updated *Strategy*.

Some of the roles and responsibilities identified in *Chapter III: Roles and Responsibilities in Protecting Groundwater*, and the implementation measures described in *Chapter IV: Program Implementation*, of the prior *Texas Groundwater Protection Strategy*, AS-188, February 2003, have changed, and these changes have been, and will continue to be, documented in the Committee's annual *Joint Report*.

The updated *Strategy* addresses a new approach to the contents of the remaining chapters in the prior *Texas Groundwater Protection Strategy*, AS-188, February 2003, and, as mentioned above, is the initial framework for a dynamic *Strategy* moving forward.

Comment 5:

Gwen Webb, on behalf of the law firm Webb & Webb, commented that the firm recently tried to find information on a groundwater contamination incident but found that it was

difficult to find information about the incident, who to contact, and the rules and procedures. Ms. Webb commented that she suggests that a clear method on how to address groundwater contamination strategies or responses be provided by the Railroad Commission of Texas (RRC) and the TCEQ in the proposed *Strategy* update for those who represent individuals who are affected by a groundwater contamination incident and operators who discover contamination in their groundwater-based utilities.

Response 5:

As mentioned above, the TGPC will review and revise the *Joint Report* as part of an overhaul of the Committee's documents. During that review and revision process, the TGPC will reexamine Ms. Webb's comment and make every effort to fully address Ms. Webb's concerns.

David Villarreal (TDA) proposed, Bridget Scanlon (UTBEG) seconded, and all remaining TGPC members approved the TGPC's responses to public comments regarding the proposed *Strategy* update, allowing TCEQ staff to make any non-substantive changes required for publication in the *Texas Register*.

In addition, David Van Dresar (TAGD) proposed, David Villarreal (TDA) seconded, and all remaining TGPC members approved the proposed *Strategy* update, allowing TCEQ staff to make any non-substantive changes required for publication on the TCEQ website.

*Activities and Recommendations of the Texas Groundwater Protection Committee – Report to the 86th Legislature*

Abiy Berehe (TCEQ) reported that the Legislative Report Subcommittee last met on September 19, 2018, and members reviewed the process and time line for the completion of the *Activities and Recommendations of the Texas Groundwater Protection Committee – Report to the 86th Legislature* ("Legislative Report"), the statute that created the TGPC, and various Recommendations that pertained to protection of groundwater quality in the state. The final draft *Legislative Report* was sent to TGPC members on October 5, 2018 with a request for review and concurrence from their management.

Bridget Scanlon (UTBEG) proposed, Emily Hall (DSHS) seconded, and all remaining TGPC members approved the TGPC *Legislative Report*, allowing TCEQ staff to make any non-substantive changes required for publication on the TCEQ website. The final report would be distributed to TGPC members and the Texas Legislature in December 2018 before the session begins in January 2019.

David Villarreal (TDA) left at approximately 1:39 PM CDT and was absent for the remainder of the meeting.

*TGPC Groundwater Issues Subcommittee Annual Report*

Kathy McCormack (TCEQ) presented the *TGPC Groundwater Issues (GWI) Subcommittee Annual Report* highlighting Fiscal Year (FY) 2018 results and FY 2019

plans. David Van Dresar (TAGD) proposed, John Tracy (AgriLife Research) 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 Public Outreach and Education (POE) Subcommittee Annual Report* highlighting FY 2018 results and FY 2019 plans. Bridget Scanlon (UTBEG) proposed, Janie Hopkins (TWDB) seconded, and all remaining TGPC members approved the *TGPC POE Subcommittee Annual Report* with the changes discussed at the meeting. The updated report would be posted on the TGPC website.

#### Current Groundwater Issues

There was no discussion of this topic at the meeting.

#### Set Future Meeting Date

The next TGPC quarterly meeting was scheduled for January 16, 2019 at 1:00 PM CST.

### 3. SUBCOMMITTEE REPORTS

#### Groundwater Issues

Kathy McCormack (TCEQ) reported that the TGPC GWI Subcommittee last met on September 5, 2018 and eight state agencies and organizations were represented.

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

- FY 2018 monitoring results included the following:
  - Fifteen spring and water well samples were collected and analyzed by TCEQ, including one duplicate and one blank; all 15 were analyzed by immunoassays for Atrazine, 2,4-D, and Glyphosate; one Atrazine detect at 0.18 ppb, one qualified 2,4-D detection of 1.49 ppb, and one Glyphosate detect at 2.1 ppb;
  - Five of the samples were analyzed by Method 525.2 by the DSHS Lab with one Atrazine detect at 0.12 ppb; and,
  - Cooperative monitoring in FY 2018 began in April, concluded in August, and included primarily samples from the Carrizo-Wilcox Aquifer, Gulf Coast Aquifer, and several minor aquifers; 52 well samples included duplicate and blank samples for immunoassay analyses for Atrazine, 2,4-D, and Glyphosate; no Atrazine detects for the 52 samples analyzed, nine low Glyphosate (< 0.5 ppb) detects out of 28 samples, and no quantifiable detects of 2,4-D out of 19 samples.



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

- *Joint Groundwater Monitoring and Contamination Report – 2017* (“*Joint Report*”, TCEQ publication SFR-056):
  - TCEQ staff had completed the *2017 Joint Report* and publication notices were sent to County Judges, County Health Officials, and to the individual Groundwater Conservation Districts (GCDs).
- *Activities and Recommendations of the Texas Groundwater Protection Committee: Report to the 86th Legislature* (“*Legislative Report*”, TCEQ publication SFR-047):
  - The Legislative Report Subcommittee continued working on the draft report and its recommendations to the 86th Legislature, and the draft report would be sent out to TGPC members for their review and concurrence in the first week of September 2018.
- *Texas Groundwater Protection Strategy* (“*Strategy*”, TCEQ publication AS-188):
  - After all member agency management concurrence letters had been received, an announcement about the proposed *Strategy* update was posted in the *Texas Register* on July 13, 2018 with public comment due by August 13, 2018;
  - On July 13, 2018, the TGPC home page was updated with links to the *Texas Register* announcement, the current *Strategy*, and the proposed *Strategy* update, and a GovDelivery email was sent to the TGPC’s subscribers; and,
  - Public comments were received from 1) a person who attended the TGPC meeting on July 18, 2018, 2) the TCEQ Water Quality Division, and 3) the Lone Star Chapter of the Sierra Club.

The following current groundwater issues were briefly discussed:

- Emerging Contaminants;
- Border Groundwater;
- Abandoned Water Wells; and,
- Others (i.e., using TWDB’s groundwater database for storing bacterial contamination information).

GWJ Subcommittee members approved their draft *Annual Report* with the change discussed at the meeting (i.e., updating the title of the white paper related to Per- and Polyfluoroalkyl Substances (PFAS)). The final draft *Annual Report* would be presented to the TGPC for approval at their October 17, 2018 meeting.

The *How is Groundwater Quality Affected by Failing On-site Sewage Facilities (OSSFs)* ? draft white paper was discussed extensively and an update would be provided at the next meeting.

The *How is Groundwater Quality Affected by Per- and Polyfluoroalkyl Substances (PFAS)* ? draft white paper was presented, the feedback would be forwarded to the author, and an update would be provided at the next meeting.

The next TGPC GWI Subcommittee meeting was scheduled for December 5, 2018.

## Public Outreach and Education

Peggy Hunka (TCEQ) reported that the TGPC POE Subcommittee last met on September 5, 2018 and seven state agencies and organizations were represented.

The current Outreach Events Status Report (available on the POE Subcommittee webpage, <http://tgpc.texas.gov/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
  - Four since the previous POE Subcommittee meeting.
- TGPC Exhibit Booth
  - Two since the previous POE Subcommittee meeting.

Diane Boellstorff (AgriLife Extension) reviewed the Texas Well Owners Network (TWON) schedule of completed, confirmed, obligated, and suggested water well one-day training events and workshops. There had been over 8,465 samples or attendees at TWON events since April 2011.

The Google Analytics activity reports on the TGPC website for June 13, 2018 through September 3, 2018 and FY 2018 were reviewed.

POE Subcommittee members approved their draft *Annual Report*. The final draft *Annual Report* would be presented to the TGPC for approval at their October 17, 2018 meeting.

Two of the four topics in the current *Texas Groundwater Protection Committee Groundwater Educational Outreach Plan* (“Plan”, [http://tgpc.texas.gov/POE/TGPC\\_POE\\_GW\\_EduOutreachPlan10Sep2013.pdf](http://tgpc.texas.gov/POE/TGPC_POE_GW_EduOutreachPlan10Sep2013.pdf)) were discussed.

Diane Boellstorff (AgriLife Extension) presented a draft paper entitled *Before the Next Flood* to the POE Subcommittee for review and edits.

The next TGPC POE Subcommittee meeting was scheduled for December 5, 2018.

## Legislative Report

There was no additional discussion of this topic at the meeting.

## 4. PRESENTATION

There was no presentation at the meeting.

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

### Groundwater Contamination Notice Coordination (Texas Water Code §26.408)

Cary Betz (TCEQ) reported that the Impact Evaluation Team (IET) had met four times since the last TGPC meeting. Seven groundwater contamination cases were reviewed and 21 private water well owners were notified of possible groundwater contamination in their wells.

Cary Betz (TCEQ) added that the Legislative Budget Board (LBB) had recently expressed a lot of interest in the IET, the *Joint Report*, and groundwater contamination. He indicated that he would be sending them the *Strategy* and *Legislative Report* after they were published.

### Groundwater Management Areas

David Van Dresar (TAGD) reported that they were starting the third year of the Desired Future Conditions (DFCs) process and that those efforts were ramping up in each the Groundwater Management Areas (GMAs).

### Regional Water Planning

Janie Hopkins (TWDB) reported that:

- By September 10, 2018, 14 of the 16 Regional Water Planning Groups (RWPGs) had submitted their Technical Memorandums which are a mid-point report on the source availabilities, supplies, demands, and identified needs in the regional water planning areas; Regions F and J had extensions on their reports due to the recent release of GMA 7's Modeled Available Groundwater (MAG);
- They had posted the hydrologic assumptions for each RWPG as requested and approved by their Executive Administrator (<http://www.twdb.texas.gov/waterplanning/rwp/planningdocu/2021/hydroassumption.s.asp>); thus far, these assumptions were largely surface water modeling oriented, but there had been some requested groundwater modifications and approval of one MAG Peak Factor (Region G);
- RWPGs had started scoping their strategy evaluations and would be focused on this work for the remainder of the planning cycle; and,
- Draft plans (i.e., Initially Prepared Plans, or IPPs) were due by March 3, 2020.

### Groundwater Availability Modeling

Janie Hopkins (TWDB) reported on Groundwater Availability Model (GAM) contracts:

- GMA 13 mapping project contract with UTBEG – Updated deliverables were due November 16, 2018 for review before initiating closure of the contract;
- Fault study and update to the central portion of the Carrizo-Wilcox, Queen City, and Sparta Aquifers model with INTERA – Final deliverables had been received except

for a predictive run using the MAG values from the current round of DFCs; this was expected to be submitted October 31, 2018;

- Update of the northern portion of the Carrizo-Wilcox, Queen City, and Sparta Aquifers model with GSI – Reviewed the draft deliverable of the conceptual model; project was on track with the draft final model due June 27, 2019;
- Conceptual model of the Trinity Aquifer – The due date of final deliverables was extended to November 2018; and,
- Their Board approved the GAM Plan on August 14, 2018 and the release of request for qualifications was pending review by the Texas Comptroller of Public Accounts:
  - A conceptual model of the Cross Timbers Aquifer (\$590,000); and,
  - An update of the model of the southern portion of the Carrizo-Wilcox, Queen City, and Sparta Aquifers (\$850,000).

Janie Hopkins (TWDB) also reported that staff were working on a Blossom Aquifer conceptual model, a Northern Segment of the Edwards (Balcones Fault Zone) Aquifer GAM, and a Gulf Coast Aquifer System (GMAs 15 and 16) model.

#### Nonpoint Source Pollution

Cary Betz (TCEQ) reported that they had recently updated the groundwater portion of the *Nonpoint Source Pollution Management in Texas – 2018 Annual Report* (to be published).

#### National Groundwater Initiatives

David Van Dresar (TAGD) reported that the United States Geological Survey (USGS) is undertaking a five-year study to assess groundwater availability for the aquifers proximal to the Gulf of Mexico from the Texas-Mexico border through the panhandle of Florida, known as the Coastal Lowlands Aquifer System (CLAS, <https://www2.usgs.gov/water/lowermississippigulf/lmgweb/clas/index.html>).

Janie Hopkins (TWDB) reported that the National Ground-Water Monitoring Network (NGWMN) wants as much information on the High Plains Aquifer as possible, even if some of the wells did not have all of their metadata.

John Tracy (AgriLife Research) reported that the U.S. State Department had requested a full briefing on the outcomes from the American Water Resources Association (AWRA) 2018 Summer Conference regarding the science, management, and governance of transboundary groundwater that had taken place on July 9 – 11, 2018 in Fort Worth. They were particularly interested in learning more about transboundary groundwater science, management, and treaties. The briefing was scheduled for early November 2018.

Bridget Scanlon (UTBEG) announced that their report on induced seismicity would be published at the end of October 2018, and that the rate, cumulative volume, and depth of produced water injection were important factors.

Abiy Berehe (TCEQ) reported that he and Cary Betz (TCEQ) had attended the Ground Water Protection Council 2018 Annual Forum on September 10 – 12, 2018 in New Orleans, LA. Highlights from a national perspective on groundwater protection policy included:

- U.S. Environmental Protection Agency (EPA):
  - They were supporting innovative technology like Aquifer Storage and Recovery (ASR) projects (e.g., in El Paso, TX and Orange County, CA). This new program was an initiative to address recent flooding and drought in the country.
  - They talked about produced water (i.e., how to operate safely and manage this resource), and how to get the right water treatment for transportation or beneficial use. They said that there was a new Memorandum of Understanding (MOU) with New Mexico for produced water used in recycling or for beneficial use, rather than injecting it and removing it from the water cycle.
  - They were also working on emerging contaminants like PFAS (e.g., developing Maximum Contaminant Levels (MCLs), listing them as hazardous substances, recommending clean up strategies, and investigating their toxicity, bioaccumulation potential, and the technical feasibility of large scale treatments).
- USGS:
  - The NGWMN works in collaboration with state agencies and industries that want to share groundwater data. This network is a model of groundwater data sharing and is also called the “internet of water”. It is mainly used for water level and groundwater quality data, but it also includes lithology and well construction data, and it continues to grow. The NGWMN is a data warehouse for the country, it is publicly accessible, and data owners have authority over their data.
  - The NGWMN 2019 Cooperative Funding Opportunity was open until November 30, 2018. They said that two million dollars of funding was available, and anyone could apply for the grant if they wanted to share their data.
  - The NGWMN portal had a new groundwater toolbox with GIS-based systems built into the network. It could estimate base flow, do groundwater level and batch file analysis, and had the capability of determining groundwater contributions to surface water. They were also integrating a modelling tool that would allow users to see groundwater and surface water interactions, as well as integrated national-scale water predictions.
- Illinois State Water Survey:
  - They facilitate a Private Well Class which is a collaboration between the Rural Community Assistance Partnership and the University of Illinois. This national private water well education program uses a combination of online and in-person methods to increase the knowledge of individual water well owners.
  - On their website (<http://privatewellclass.org/>), they had webinars once a month, self-paced lessons, and YouTube classes.
- National Ground Water Association (NGWA):
  - They were working with the federal government to obtain information on PFAS, an important emerging contaminant. They said that approximately 40 states had locations with PFAS detects. They were concerned about the regulatory uncertainty, as well as issues with clean up and remediation activities for PFAS contamination.

- They were sharing information with private water well owners on how to get their water tested and included in the NGWMN.
- Groundwater recharge was also of interest to the federal government, and they were working on managed recharge projects and trying to promote the opportunity for innovative recharge projects.

Cary Betz (TCEQ) reported that the Advisory Committee on Water Information (ACWI) Subcommittee on Ground Water (SOGW) was under new direction, but its NGWMN product was moving forward under USGS, and that a meeting was scheduled for December 2018 in Las Vegas, NM. In addition, the U.S. EPA would be issuing PFAS MCLs or Health Advisory Levels (HALs) in October 2018 and PFAS cleanup standards in November 2018.

### 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 9, 2018, 31 % of the state was classified as D0 through D3, down from 75 % at the last TGPC meeting, with a U.S. Seasonal Drought Outlook forecast of improving or removal of drought conditions in the central and northern portions of the state through December 31, 2018. As of October 10, 2018, of the 4,649 active community water systems in Texas, 1,084 were affected by drought (either voluntary or mandatory), and 767 of those used groundwater (either partially or exclusively). As of October 10, 2018, six PWSs in the state could be out of water in 180 days or less (an increase of one system since the last TGPC meeting).

## 6. ANNOUNCEMENTS

### Rules Update

Cary Betz (TCEQ) reported on current TCEQ rulemaking that was of interest to the TGPC:

- 2018-033-337-WS – Rule Review of Chapter 337;
- 2018-017-336-WS – Texas Mining and Reclamation Association (TMRA-UC) Petition Follow-up and Federal Cross-Reference Update;
- 2018-009-217-OW – Rule Review of Chapter 217;
- 2018-008-317-OW – Rule Review of Chapter 317;
- 2018-004-344-CE – Landscape Irrigation Backflow Assemblies;
- 2017-037-352-WS – Senate Bill 1 (Rider 31) and Registration Program for Coal Combustion Residuals (CCR) Implementation;
- 2017-014-113-AI – Municipal Solid Waste Landfills §111(d) State Plan and Rule Updates;
- 2017-013-113-AI – New Emission Guidelines and Compliance Timeframes for Commercial and Industrial Solid Waste Incineration (CISWI) Units; and,
- 2016-034-336-WS – Rate Adjustments.

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

#### New Publications

Janie Hopkins (TWDB) reported that they had also been contacted by the LBB recently regarding the feasibility of storing water quality data in their groundwater database, and that the Edwards Aquifer Authority (EAA) had expressed interest in adding their water quality data to the TWDB groundwater database, as well.

#### Upcoming Conferences

Cary Betz (TCEQ) referred TGPC members to the conferences listed in the “2018 – 2019 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.texas.gov/tgpc-subcommittees/tgpc-public-outreach-and-education-subcommittee/> under the “Additional Resources” heading.

#### 7. PUBLIC COMMENT

There was no public comment at the meeting.

#### 8. ADJOURN

Cary Betz (TCEQ) adjourned the meeting at approximately 2:32 PM CDT.