

GROUNDWATER ISSUES SUBCOMMITTEE
OF THE
TEXAS GROUNDWATER PROTECTION COMMITTEE
RECORD OF MEETING
First Quarter Meeting, Fiscal Year 2022

Meeting Date: September 15, 2021
Meeting No.: 27

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

Maria D. (Rosario) Sanchez Flores
Sarah Fakhreddine

David Gunn
Ken Rainwater
Guy Fipps

Lynne Fahlquist

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 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

Stanley Aniagu
Paul Askenasy
Abiy Berehe
Alan Cherepon
Lorrie Council
Kristin DeBone
Patricia Ging
Jason Godeaux
Grant Gibson
Cindy Hooper
Peggy Hunka
Scott Underwood

Affiliation

TCEQ
TCEQ
TCEQ
TCEQ
TCEQ
TCEQ
USGS
TCEQ
TCEQ
TCEQ
TCEQ
TCEQ

Program

Toxicology Division
Water Quality Division
Water Availability Division
Water Availability Division
Radioactive Materials Division
Water Quality Planning Division

Water Availability Division
Water Availability Division
Water Availability Division
Water Availability Division
Water Availability Division

Interested Parties

Margaret Cook

Affiliation

Houston Advanced Research Center (HARC)

MEETING HANDOUTS

1. Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Meeting Agenda, September 15, 2021
2. TGPC GWI Subcommittee Meeting Record, June 2, 2021
3. TGPC Agricultural Chemicals (AgChem) Task Force (TF) Status Report, September 15, 2021
4. TGPC Publications Status Report, September 15, 2021
5. Draft TGPC GWI Subcommittee Fiscal Year 2021 *Annual Report*
6. Draft *Opportunities and Challenges in Aquifer Storage and Recovery* White Paper
7. Draft *ET Networks and the Protection of Groundwater Supplies and Quality* white paper

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

1. N/A

MEETING RECORD OF SEPTEMBER 15, 2021

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 teleconference or videoconference at no cost.

Chris Heiligenstein (RRC), Co-Chair of the GWI Subcommittee, called the meeting to order at approximately 9:36 AM CDT and then called the roll of GWI Subcommittee members. The representative from the Texas Alliance of Groundwater Districts (TAGD) was not present at the meeting.

Rosario Sanchez (AgriLife Research) joined the meeting at approximately 9:40 AM CDT and was present for the remainder of the meeting.

3. STATUS REPORTS

Agricultural Chemicals Task Force

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

- 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:
 - 205 sample analyses for atrazine and 2,4-D which included six springs, 31 duplicates, and 31 blanks.
 - Two atrazine detects (high of 0.22 ppb) and one 2,4-D (1.52 ppb) detect.
 - The spectrophotometer took a long time to get repaired and the new atrazine kits were not delivered until late August, which resulted in numerous samples exceeding their holding times and three analyses conducted with expired kits (two exceeded this by only one day); however, since all but one analysis calibrated in range and there were no detects, the results were qualified.
- Due to a delay in spectrophotometer repairs and the delayed delivery of atrazine kits, updates to the TCEQ Interagency Pesticide Database (IPD) were pending.
- The next Region 6 U.S. Environmental Protection Agency (EPA)/States/Tribes pesticide Fall meeting was scheduled for October 2021, and it was typically hosted by Region 6 U.S. EPA in Dallas, but no specific date had been set. It was anticipated to be conducted virtually.

TGPC Publications

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

- *Joint Groundwater Monitoring and Contamination Report – 2020* (“*Joint Report*”, SFR-056)
 - 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.

4. SET FUTURE MEETING DATE

The next TGPC GWI Subcommittee meeting was scheduled for Wednesday, December 15, 2021, at 9:30 AM CST and it was planned as a videoconference.

5. DISCUSS CURRENT GROUNDWATER ISSUES

Oil and Gas Produced Water

Ken Rainwater (TTU) reported that Dr. Marshall Watson (Petroleum Engineering), Dr. Venki Uddameri (Water Resources Center), and Professor Eric Bernard (Landscape Architecture) were coordinating the Texas Produced Water Consortium at TTU. The Consortium began its work on September 1, 2021 with \$1,000,000, and it would investigate the safe and economical use of produced water. The Consortium was tasked with publishing a report on this subject by September 1, 2022. Natalie Ballew (TWDB) reported that Dr. Uddameri (TTU) gave a presentation on the Texas Produced Water Consortium at the 10th Annual Texas Groundwater Summit (hosted by TAGD) on August 31 – September 2, 2021. Lynne Fahlquist (USGS) asked if the Texas Produced Water Consortium would be looking at water quality issues; Ken Rainwater (TTU) indicated that the legislation was not specific.

Emerging Contaminants

David Villarreal (TDA) reported that the cyclospora parasite cyst can survive for weeks in water, so there was some possibility that it could survive in groundwater, including Aquifer Storage and Recovery (ASR) environments. Produce can be exposed to cyclospora when it is irrigated with groundwater. TDA is a member of the DSHS Rapid Response Team that is investigating this issue.

Aquifer Storage and Recovery (ASR)

Discussion of this topic occurred during the Business portion of the meeting.

Abandoned Water Wells

Discussion of this topic occurred during the Business portion of the meeting.

Margaret Cook (HARC) left the meeting at approximately 10:05 AM CDT and was absent for the remainder of the meeting.

Brackish Groundwater

Natalie Ballew (TWDB) reported that Alysa Suydam (TWDB) was their new Brackish Resources Aquifer Characterization System (BRACS) Manager.

Evapotranspiration Networks

David Villarreal (TDA) reported that the Water Conservation Advisory Council (WCAC) Agricultural Workgroup would probably include a recommendation on evapotranspiration in their next legislative report.

Others

Lynne Fahlquist (USGS) reported that 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.

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), Kathy McCormack (TCEQ) presented a draft TGPC GWI Subcommittee Fiscal Year 2021 *Annual Report*. David Gunn (TDLR) proposed, Natalie Ballew (TWDB) 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 20, 2021). The *Annual Report* would be presented to the TGPC for approval at their next meeting.

Draft *Opportunities and Challenges in Aquifer Storage and Recovery* White Paper

Lorrie Council (TCEQ) presented the initial draft of the *Opportunities and Challenges in Aquifer Storage and Recovery* white paper which was intended to be an unbiased look at ASR by an engineering student. The author, a TCEQ summer intern from TTU, met with several Subject Matter Experts (SMEs) and visited an ASR project site. The initial draft summarized regulatory terminology and guidance, authorization information, recoverability of stored water, Texas ASR projects, and geochemistry issues. Ken Rainwater (TTU) indicated that the white paper was still a work in progress and that an updated draft would be available at the next meeting.

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

David Gunn (TDLR) reported that, due to the COVID-19 pandemic, additional work load due to loss of staff, and involvement in their Weather Modification Program, the white paper's author did not have an update of the *Abandoned Water Wells and the Challenges They Pose* white paper for review at this meeting.

Draft *ET Networks and the Protection of Groundwater Supplies and Quality* White Paper

Guy Fipps (AgriLife Extension) reviewed an updated draft of the *ET Networks and the Protection of Groundwater Supplies and Quality* white paper. Natalie Ballew (TWDB) reported that they had recently published their 2021 TWDB Self-Evaluation Report (https://www.twdb.texas.gov/publications/reports/SER_Documents/index.asp#ser2021) as required for their current Sunset review, and it suggested on page 254 that the TexMesonet “would benefit from more clearly defined statutory authority and purpose.” David Villarreal (TDA) noted that John Sutton (TWDB) was assembling a TexMesonet Advisory Committee to address this issue, and that WCAC would probably be including a recommendation related to evapotranspiration (ET) networks in their next legislative report. An updated draft of the white paper would be provided at the next meeting.

Discussion of White Papers Under Development

Kathy McCormack (TCEQ) reported that HARC staff may be developing a white paper on emerging contaminants some time in 2022.

7. ANNOUNCEMENTS

Kristin DeBone (TCEQ) announced that the application period for Fiscal Year (FY) 2022 Clean Water Act (CWA) Section 319(h) Nonpoint Source Pollution (NPS) Grants closed on July 16, 2021 and that submitted projects were being ranked. TCEQ anticipated posting its Request for Grant Applications (RFGA) for FY 2023 NPS projects in June 2022.

8. PUBLIC COMMENT

There was no public comment at the meeting.

9. ADJOURN

Chris Heiligenstein (RRC) adjourned the meeting at approximately 10:53 AM CDT.