

GROUNDWATER ISSUES SUBCOMMITTEE
OF THE
TEXAS GROUNDWATER PROTECTION COMMITTEE
RECORD OF MEETING
First Quarter Meeting, Fiscal Year 2021

Meeting Date: September 9, 2020
Meeting No.: 23

Place: videoconference
Room: N/A

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MEETING ATTENDANCE

Subcommittee Members

Kathy McCormack (Co-Chair)
Leslie Bruce (Co-Chair)
Natalie Ballew
Evelyn Reátegui-Zirena
David Villarreal
T.J. Helton

David A. Van Dresar
Maria D. Sanchez Flores
Bridget Scanlon

Adam Foster
Ken Rainwater
Diane Boellstorff

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 Alliance of Groundwater Districts (TAGD)
Texas A&M AgriLife Research (AgriLife Research)
Bureau of Economic Geology of The University of Texas at Austin (UTBEG)
Texas Department of Licensing and Regulation (TDLR)
Texas Tech University (TTU)
Texas A&M AgriLife Extension Service (AgriLife Extension)
United States Geological Survey (USGS)

Agency Staff

Abiy Berehe
Alan Cherepon
Grant Gibson
Dan Hannah
James Harcourt
Christopher Heiligenstein
Cindy Hooper
Peggy Hunka
Samantha Litchke
Leah Martinsson
L. Scott Underwood
Rebecca Storms

Affiliation

TCEQ
TCEQ
TCEQ
TCEQ
RRC
RRC
TCEQ
TCEQ
TCEQ
TAGD
TCEQ
TWDB

Program

Water Availability Division
Water Availability Division
Water Availability Division
Radioactive Materials Division

Water Availability Division
Water Availability Division
Water Quality Planning Division

Water Availability Division

Interested Parties

N/A

Affiliation

MEETING HANDOUTS

1. Texas Groundwater Protection Committee (TGPC) Groundwater Issues (GWI) Subcommittee Meeting Agenda, September 9, 2020
2. TGPC GWI Subcommittee Meeting Record, June 10, 2020
3. TGPC Agricultural Chemicals (AgChem) Task Force (TF) Status Report, September 9, 2020
4. TGPC Publications Status Report, September 9, 2020
5. Revised Memorandum of Understanding Brings Further TCEQ Oversight to the Texas Oil Patch, TCEQ e-clip, July 15, 2020
6. City could store three Lake Austin'' worth of water underground by 2040, TCEQ e-clip, August 31, 2020
7. Draft TGPC GWI Subcommittee Fiscal Year 2020 Annual Report, September 9, 2020
8. Draft update of *How is Groundwater Quality Affected by Wellhead Impacts from Flooding during Natural Disasters?* white paper

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

1. N/A

MEETING RECORD OF SEPTEMBER 9, 2020

1. PRE-MEETING REMINDERS

Before the meeting started, Leslie Bruce (RRC) provided the attendees with some tips that would facilitate a productive videoconference.

2. CALL TO ORDER AND INTRODUCTIONS

Due to the COVID-19 pandemic, on March 16, 2020, in accordance with section 418.016 of the Texas Government Code, Governor Abbott suspended various provisions of the Open Meetings Act that require government officials and members of the public to be physically present at a specified meeting location. Pursuant to that suspension, the public was not be able to attend this meeting in person but was able to attend via videoconference at no cost, and this was the first time that the TGPC GWI Subcommittee had met via videoconference.

Leslie Bruce (RRC), Co-Chair of the GWI Subcommittee, called the meeting to order at approximately 1:09 PM CDT and then called the roll of GWI Subcommittee members. The representative from the Texas Parks and Wildlife Department (TPWD) was not present at 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 Trinity, Gulf Coast, Carrizo-Wilcox, and Yegua Aquifers, several minor aquifers, and 11 springs in Central Texas, as well as collected 48 water well samples;
- Cooperative Pesticide Groundwater Monitoring Results:
 - 85 sample analyses for atrazine which included 11 springs, 13 duplicates, and 13 blanks
 - Three atrazine detects, with a high of 0.47 parts per billion (ppb)
 - For 2,4-D, only 32 samples were analyzed as the 2,4-D reagents were limited to one kit which was used up when the first set of samples had to be re-run due to calibrators being out of range
 - No 2,4-D detects*
 - *Control above range, high bias; Correlation Factor off by 0.001
- The TCEQ Interagency Pesticide Database (IPD) had been updated with the Cooperative data through 2020; the USGS data through 2020 would be added in 2021;
- The scheduled U.S. Environmental Protection Agency (EPA) Region 6 pesticide meeting in October 2020 would likely be held virtually; and,
- A Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Technical Amendment had been completed and provided to TCEQ's Federal Grants budget analyst for review and approval; upon approval and opening of Revision 2.0, the Grant Budget Spreadsheet could then be corrected to indicate these changes in the budget; major items included correcting the budget to show the \$6,000 U.S. EPA reduction over 2020 and 2021.

David Villarreal (TDA) joined the meeting at approximately 1:23 PM CDT and was present for the remainder of the meeting.

TGPC Publications

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

- *Joint Groundwater Monitoring and Contamination Report – 2019* (“*Joint Report*”, SFR-056)
 - The 2019 *Joint Report* was recently published and available on the TGPC Publications webpage (<https://tgpc.texas.gov/tgpc-publications/#Current>) as well as the TCEQ website (<https://www.tceq.texas.gov/publications/sfr/056>); and,
 - Notification of the availability of the 2019 *Joint Report* would be mailed to county judges, county health officials, and Groundwater Conservation Districts (GCDs).
- *Activities and Recommendations of the Texas Groundwater Protection Committee: Report to the 87th Legislature* (“*Legislative Report*”, SFR-047)
 - The draft 87th *Legislative Report* was routed to TGPC members for their respective agencies’ management review and concurrence, and the report was anticipated to be approved by the TGPC at their meeting on October 21, 2020; and,
 - The 87th *Legislative Report* was anticipated to be published and distributed to the Texas Legislature by December 2020.
- *Landowner’s Guide to Plugging Abandoned Water Wells* (“*Plugging document*”, RG-347)
 - The TGPC Public Outreach and Education (POE) Subcommittee updated the links in the Plugging document in April 2020 and the updated publication was available online at: https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-347.pdf; and,
 - The POE Subcommittee was reviewing the Plugging document for possible substantive updates.

4. SET FUTURE MEETING DATE

The next TGPC GWI Subcommittee meeting was scheduled for Wednesday, December 9, 2020, at 9:30 AM CST and it was planned as a videoconference.

5. DISCUSS CURRENT GROUNDWATER ISSUES

Hydraulic Fracturing

There was no discussion of this topic at the meeting.

Oil and Gas Produced Water

Kathy McCormack (TCEQ) reviewed a recent article about the revised Memorandum of Understanding (MOU) between TCEQ and RRC regarding the division of responsibility for wastewater discharge that was effective July 15, 2020. The revised MOU included the transfer of responsibilities from RRC to TCEQ relating to the regulation of produced water, hydrostatic test water, and gas plant effluent from various oil and gas activities, along with the dual authorization of Class II and Class V injection wells. The transfer would occur upon approval by the U.S. EPA to amend/supplement TCEQ’s Texas Pollutant Discharge Elimination System

(TPDES) program, and TCEQ was directed by Texas House Bill 2771 to make this request of the U.S. EPA no later than September 1, 2021.

Emerging Contaminants

David Villarreal (TDA) reported that the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Water Resources Subcommittee was looking at possible source water contaminants in reservoirs (e.g., from sediment and microbials). Additional emerging contaminants being discussed in other recent meetings included parasites affecting domestic waterways, disinfectants, antimicrobials, pharmaceuticals, and zebra mussels.

Aquifer Storage and Recovery (ASR)

Kathy McCormack (TCEQ) reviewed a recent article about Austin's City Council recently approving a \$6 million contract with an engineering firm to find the best aquifer for its ASR project. A likely candidate was the Carrizo-Wilcox Aquifer. If all went according to plan, Austin could be storing 60,000 acre-feet of water in its ASR system by 2040.

James Harcourt (RRC) added that they were discussing ASR in relation to their models and permits. Alan Cherepon (TCEQ) was curious about where the Austin ASR project would be located and the depth of the well(s). Bridget Scanlon (UTBEG) reported that they were doing a study for TCEQ regarding arsenic mobilization due to ASR activities, and that there had been a recent presentation about an Idaho ASR project storing half a million acre-feet/year from the Snake River in the Eastern Snake Plain Aquifer.

Dan Hannah (TCEQ) noted that:

- San Antonio Water Systems (SAWS) already uses the Carrizo Aquifer to store minimally-treated or untreated Edwards Aquifer water, and they dispose of the residuals from desalinated Wilcox Aquifer water into the saline portion of the Edwards Aquifer;
- Except in special circumstances, only untreated Edwards Aquifer water can be injected into or through the Edwards Aquifer in areas regulated by the Edwards Aquifer Authority (EAA);
- GCDs may become involved in ASR issues in areas that are not regulated by the EAA;
- The City of Buda had just installed an ASR well; and,
- The City of New Braunfels was working on an ASR project.

Natalie Ballew (TWDB) said that their ASR Statewide Suitability Survey was complete and under internal review, and it would be available in December 2020 with some helpful online resources.

Abandoned Water Wells

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

Wellhead Impacts After Natural Disasters

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

Brackish Groundwater

There was no discussion of this topic at the meeting.

Desalination

Dan Hannah (TCEQ) reported that they had a program which allowed them to dually authorize a Class V injection well with a RRC Class II disposal well to accept non-hazardous drinking water treatment residuals and reverse osmosis desalination brine concentrate, but no one had yet participated in this program.

Endangered Species

David Villarreal (TDA) suggested that a representative from the Texas Comptroller of Public Accounts be invited to future meetings due to their Interagency Task Force on Economic Growth and Endangered Species and its study of freshwater mussels.

Coal Ash from Power Plants

There was no discussion of this topic at the meeting.

Anthropogenic Mixing of Groundwater

There was no discussion of this topic at the meeting.

Others

There was no discussion of other topics at the meeting.

6. BUSINESS DISCUSSION AND POSSIBLE ACTION

Draft TGPC GWI Subcommittee Fiscal Year 2020 *Annual Report*

As required by the GWI Subcommittee's *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 2020 *Annual Report*. Natalie Ballew (TWDB) proposed, Evelyn Reátegui-Zirena (DSHS) seconded, and all remaining members approved the draft *Annual Report* with the changes discussed at the meeting (i.e., removing the DRAFT watermark, changing the date to October 21, 2020, and adding a note that the meeting on June 10, 2020 was held via teleconference). The *Annual Report* would be presented to the TGPC for approval at their next meeting.

Dan Hannah (TCEQ) and Natalie Ballew (TWDB) left the meeting at approximately 1:58 PM CDT and 2:00 PM CDT, respectively, and were absent for the remainder of the meeting.

Draft Opportunities and Challenges in Aquifer Storage and Recovery White Paper

Ken Rainwater (TTU) indicated that he hoped to have an initial draft of the *Opportunities and Challenges in Aquifer Storage and Recovery* white paper for the next GWI Subcommittee meeting. There was a substantial amount of material to review and synthesize from different sources, and Ken Rainwater (TTU) planned to follow up with Dan Hannah (TCEQ) and Natalie Ballew (TWDB) after the meeting.

Draft How is Groundwater Quality Affected by Wellhead Impacts from Flooding during Natural Disasters? White Paper

Diane Boellstorff (AgriLife Extension) reviewed an updated draft of the *How is Groundwater Quality Affected by Wellhead Impacts from Flooding during Natural Disasters?* white paper. GWI Subcommittee members were invited to provide feedback to Diane Boellstorff (AgriLife Extension) via email after the meeting, and an updated draft of the white paper would be presented at the next meeting.

Ken Rainwater (TTU) left the meeting at approximately 2:13 PM CDT and was absent for the remainder of the meeting.

Discussion of White Papers Under Development

Adam Foster (TDLR) indicated that he hoped to have an initial draft of the white paper related to Abandoned Water Wells for the next GWI Subcommittee meeting.

7. ANNOUNCEMENTS

Leslie Bruce (RRC) announced that this was her last meeting as GWI Subcommittee Co-Chair and that Chris Heiligenstein (RRC) would be taking over that responsibility. Kathy McCormack (TCEQ) thanked Leslie Bruce (RRC) for her support and assistance over the past several years and welcomed Chris Heiligenstein (RRC) as the new Co-Chair.

8. PUBLIC COMMENT

There was no public comment at the meeting.

9. ADJOURN

Leslie Bruce (RRC) adjourned the meeting at approximately 2:22 PM CDT.