

**TEXAS GROUNDWATER PROTECTION COMMITTEE  
RECORD OF MEETING**

Third Quarterly Meeting, Fiscal Year 2009

Meeting Date: April 15, 2009  
Meeting No.: 81

Place: TCEQ Campus, Bldg F  
Room: 2210

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**MEETING ATTENDANCE**

Committee Members

Cary Betz

Janie Hopkins

Ken Ofunrein

David Villarreal

Donna Long

David Van Dresar

B.L. Harris

Bridget Scanlon

Lee Parham

Affiliation

Texas Commission on Environmental Quality (TCEQ)

Texas Water Development Board (TWDB)

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 AgriLife Research (TAR)

University of Texas Bureau of Economic Geology (UTBEG)

Texas Department of Licensing and Regulation (TDLR)

Agency Staff

Lauren Bilbe

Leon Byrd

Alan Cherepon

Matt Court

Kathy McCormack

Mark Mikol

Affiliation

TCEQ

TCEQ

TCEQ

TCEQ

TCEQ

TCEQ

Program

Water Quality Planning Division

Water Supply Division

Interested Parties

Jim O'Connor

Monty McGuffin

Eileen McPhee

Brian McKethan

Ann Ardis

Jennifer Guerrero

Affiliation

San Antonio Water System (SAWS)

SAWS

Carls, McDonald & Dalrymple, L.L.P.

TCOR Insurance Management

United States Geological Survey (USGS)

University of Texas at San Antonio

## MEETING HANDOUTS

1. Agenda for Texas Groundwater Protection Committee meeting on April 15, 2009
2. Record for Texas Groundwater Protection Committee meeting on January 21, 2009
3. Summary of Texas Groundwater Protection Committee (TGPC) Public Outreach and Education (POE) Subcommittee Meeting on March 10, 2009
4. USGS Circular 1332, *Quality of Water from Domestic Wells in Principal Aquifers of the United States, 1991 – 2004: Overview of Major Findings*, <http://pubs.er.usgs.gov/usgspubs/cir/cir1332> (TGPC members only)
5. Drought 2009 – Public Water Supply Systems Affected as of April 1, 2009, U.S. Drought Monitor, Texas as of April 7, 2009
6. Recent Updates to TCEQ Rules
7. Karst Horizons 2009, 15th International Congress of Speleology, third circular
8. TCEQ Environmental Trade Fair and Conference brochure
9. 2009 Water-related Conferences in Texas
10. TGPC refrigerator magnets

## **MEETING RECORD OF APRIL 15, 2009**

### **1. CALL TO ORDER AND INTRODUCTIONS**

Cary Betz (TCEQ), Designated Chair of the Texas Groundwater Protection Committee (TGPC), called the meeting to order at approximately 1:05 PM CDT and then TGPC members introduced themselves. Representatives from the Railroad Commission of Texas (RRC), DSHS, TAGD, and TSSWCB were not present at the beginning of the meeting.

### **2. SUBCOMMITTEE REPORTS**

#### **Agricultural Chemicals**

Joe Peters (TCEQ) reported that the Agricultural Chemicals Subcommittee met for their Fiscal Year 2009 Third Quarter meeting that morning.

For the Site Selection Task Force, Janie Hopkins (TWDB) reported that TWDB sampling was proceeding at full pace and more information would be available at the next meeting. There was no Educational Task Force report, and the Pesticide Management Plan Subcommittee did not meet during the last quarter.

Alan Cherepon (TCEQ) gave a presentation on the history of groundwater monitoring for pesticides by TCEQ and other entities (e.g., TDA, Ciba Geigy, and TWDB) after the establishment of the TGPC and its Agricultural Chemicals Subcommittee (1989 – present). Various types of monitoring (e.g., special projects, vulnerable area monitoring, investigative monitoring, follow-up monitoring, and cooperative monitoring) were included, and there was considerable discussion after the presentation.

Alan Cherepon (TCEQ) also gave an update on TCEQ's planned monitoring activities in the Panhandle (April 20 – 24, 2009) and the Austin area (May 4 – 8, 2009).

#### **Data Management**

Cary Betz (TCEQ) reported that the Data Management Subcommittee had not met since the last TGPC meeting.

#### **Public Outreach and Education**

Kathy McCormack (TCEQ) reported that the Public Outreach and Education (POE) Subcommittee last met on March 10, 2009 and six agencies and organizations were represented.

The status report on recent and upcoming outreach events

([http://www.tgpc.state.tx.us/subcommittees/POE/WellScreening\\_Closure\\_TGPCboothEvents10Mar2009.pdf](http://www.tgpc.state.tx.us/subcommittees/POE/WellScreening_Closure_TGPCboothEvents10Mar2009.pdf)) was reviewed:

- Texas AgriLife Extension Service (TAES) Water Well Screening Events
  - Two since the previous POE Subcommittee meeting (128 samples)
  - Four planned through May 2009
- TAES Abandoned Water Well Closures
  - One since the previous POE Subcommittee meeting (14 attendees)
  - None planned at this time
- TGPC Booth
  - Four since the previous POE Subcommittee meeting (89 attendees)
  - Two planned through May 2009

The TAES Fact Sheet, *Drinking Water Problems: Benzene*, was approved with publication expected by June 1, 2009. Two Frequently Asked Questions (FAQs) were approved and subsequently posted on the TGPC website

(<http://www.tgpc.state.tx.us/FAQs.htm>):

- What Did TCEQ's Monitoring Program in Urban Areas Find in the Groundwater ?
- What is the State Water Plan ?

Publications and FAQs on the following topics are in various stages of revision:

- Oil and Gas Waste Disposal Wells and Water Quality
  - How are Oil and Gas Waste Disposal Wells Regulated ?
  - What are the Construction Standards for an Oil and Gas Waste Disposal Well ?
  - What is the Permitting Process for an Oil and Gas Waste Disposal Well ?
- Plugging Abandoned Water Wells (TAES L-5413)
- Landowner's Guide to Plugging Abandoned Water Wells (TCEQ RG-347)
- What is the *Joint Groundwater Monitoring and Contamination Report* ?
- What is the Effect of In-Situ Uranium Mining on Groundwater Quality ?

The next POE Subcommittee meeting is scheduled for June 11, 2009.

## Groundwater Research

Bridget Scanlon (UTBEG) reported that the Groundwater Research Subcommittee met that morning and discussed a number of different issues, including:

- The Nonpoint Source (NPS) program which still doesn't seem to incorporate groundwater due to separate review criteria – the Groundwater Research Subcommittee may develop review criteria related to groundwater, as well as a review sheet to rank proposals related to groundwater in agricultural and urban settings, in order to move this activity forward;
- Development of programs to assist rural people with water quality issues, considering these as community systems with multiple wells in a single aquifer, and provide treatment alternatives to them within their homes for different contaminants; and,

- Emerging contaminants (e.g., pharmaceuticals, endocrine disruptors, etc.) and the difficulties (i.e., sufficiently reliable methods) with analyzing samples for these constituents.

B.L. Harris (TAR) added that TSSWCB and TCEQ NPS coordinators, and well as a U.S. Environmental Protection Agency (EPA) Region 6 (AR, LA, NM, OK, and TX) representative, will be invited to the next Groundwater Research Subcommittee meeting in order to discuss the NPS set-aside funds for groundwater issues in Texas.

Donna Long (TSSWCB) arrived at approximately 1:13 PM CDT, Ken Ofunrein (DSHS) arrived at approximately 1:16 PM CDT, David Van Dresar (TAGD) arrived at approximately 1:24 PM CDT, and all were present for the remainder of the meeting.

### 3. PRESENTATION

#### Groundwater Source Sampling

Matt Court (TCEQ) spoke about the purpose of source monitoring of Public Water Supply (PWS) wells – to protect human health. If a PWS is required to sample wells for exceptions or the Ground Water Rule and multiple positives are collected, TCEQ will investigate the source of the contamination. The presentation included information on triggered source monitoring plans, representative wells, and the importance of well logs.

### 4. BUSINESS DISCUSSION AND POSSIBLE ACTION

#### Texas Groundwater Protection Strategy – Continue Discussion of the Update

At the January 21, 2009 TGPC meeting, Cary Betz (TCEQ) noted that the *Texas Groundwater Protection Strategy* (“*Strategy*”, AS-188, February 2003, [http://www.tceq.state.tx.us/assets/public/comm\\_exec/pubs/as/188.pdf](http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/as/188.pdf)) update had been started a year earlier, and most of the update portions are complete, but additional information was desired from TGPC member management. In order to address the *Strategy*’s second paragraph on page 90 (related to an analysis of groundwater quality threats), TGPC members were asked to poll their agency or organization and bring a list of perceived threats to groundwater to the next TGPC meeting so that they, and their possible prevention/recovery actions, could be ranked. Below is a summary of the feedback received before, during, and after this TGPC meeting.

#### TCEQ

A cross-functional meeting of TCEQ program areas that deal with groundwater took place on April 6, 2009 and identified the following concerns:

- Lack of knowledge about private water wells (i.e., location, other details) for House Bill 3030 notifications;
- Groundwater Conservation District (GCD) water well databases – post them online and make them searchable;

- Properties not receiving a municipal water source – e.g., a private water well that’s being used to fill a swimming pool, for landscape irrigation, etc;
- Large landowners receiving municipal water, but during a drought wanting to drill their own private water well;
- Only 60 – 70 % of the Water Well Drillers Reports (which require lat/long information) are submitted electronically to TDLR;
- Uranium mining and exploration;
- Definitions (from TDLR, TCEQ Field Operations Division, GCDs, and consultants) and identification of abandoned water wells;
- Groundwater monitoring for endocrine-disrupting chemicals, pharmaceuticals, and personal care products (or surrogate/companion chemicals);
  - Screening and test methods;
  - Inability of wastewater treatment plant operations to remove these compounds;
  - Sludge sites and surface water discharge as possible release points for these compounds;
- TWDB’s ambient groundwater monitoring program and its information (e.g., organics, metals, alpha radiation) in relation to TCEQ programs; and,
- Synthetic organic chemicals not included in Public Drinking Water state-wide monitoring.

#### TWDB

- Abandoned, unplugged, and improperly cased wells throughout the state;
- Urban development over karstic aquifers and their catchment areas, particularly the Edwards Aquifer (Balcones Fault Zone) in San Antonio and Austin;
- Pesticides and other organic compounds introduced by human activities (such as Methyl Tertiary Butyl Ether (MTBE), perchlorate, and polyaromatic hydrocarbons), subranked by specific areas where these compounds are used; where plumes from projected spills might intersect with water produced for public supply; and in aquifers with highest vulnerabilities based on DRASTIC rankings (e.g., from TCEQ’s *Texas Nonpoint Source Management Program*, SFR-68/04, [http://www.tceq.state.tx.us/assets/public/comm\\_exec/pubs/sfr/nonpointsource/068\\_04.pdf](http://www.tceq.state.tx.us/assets/public/comm_exec/pubs/sfr/nonpointsource/068_04.pdf));
- Over-pumping with respect to land subsidence and poor quality water encroachment; and,
- Naturally occurring dissolved constituents in excess of their primary standards in specific aquifers and geographic areas (e.g., arsenic in the southern High Plains or in southwestern Gulf Coast Aquifer counties, high radionuclides in the Hill Country Aquifers and the Dockum Aquifer, and nitrate in the Seymour Aquifer).
  - These relatively excessive constituents are more properly considered as known problems rather than threats (which imply a sense of imminent danger); the water quality problems in these areas have been well documented.

#### RRC

No feedback.

## DSHS

- Long-term effects of groundwater contaminants should be investigated.
  - An epidemiologist would be needed.
  - DSHS advanced laboratory services are still available.

## TDA

### *Perceived risks:*

- The presence of Pharmaceuticals and Personal Care Products (PPCPs) in groundwater needs to be explored and monitoring needs to be done;
  - This includes looking for degradates of these chemicals as these PPCPs are the contaminant of the future, while pesticide monitoring might not be a priority based on the monitoring data that is currently available.
- Contribution of contaminants from across the Mexican border with any shared water sources; and,
- Microbial contamination with viruses, protozoan cysts, and other microbial dormant stages as well as any indicator species.
  - This is a potential homeland security issue and is overlooked, but it is also a general public health issue.

### *Other groundwater issues:*

- Brush control and invasive species, the effects on quantity and quality of water supplies;
- Mass mortality issues (e.g., avian influenza, foot and mouth disease, terrorist attack) and water contamination after mass burial is a homeland security issue for TDA;
- Quality and quantity of rural water supplies with population growth;
- Standards for contaminants in groundwater that are needed from U.S. EPA for risk assessment (e.g., Health Advisory Levels (HALs), Maximum Contaminant Levels (MCLs), aquatic benchmarks, etc.) are slow in coming; and,
- As we draw down our groundwater supplies, we may run into salinity issues.
  - How this will affect crop irrigation as well as the aquaculture industry is of concern.

## TSSWCB

- Agricultural issues;
- Well maintenance;
- Land fragmentation – forgetting about older wells on the property;
- Water well screening for landowners;
- Tex\*A\*Syst need to be updated or supplemented, especially now that we have a more extensive TAGD to work with and through;
- More public outreach and education paired with the water well screening and education about on-site sewage facilities (OSSFs);
- Septic system proximity to water wells;
- Wellhead protection; and,
- Collaboration of TSSWCB districts with TAES districts, GCDs, and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

## TAGD

- Abandoned and/or improperly plugged Oil and Gas (O&G) wells;
- Deteriorated injection wells;
- Injection wells pressurizing injection zones and the injection fluids escaping through old sites;
- Unlined O&G pits;
- Improperly closed O&G pits;
- Improperly treated wastewater treatment plant discharges in the contributing zones just upstream from the recharge zones (mainly for karst aquifers);
- Nonpoint source pollutants due to urbanization near the contributing and recharge zones (mainly for karst aquifers);
- Legislation affecting GCDs and/or the Desired Future Condition (DFC) planning process;
- Groundwater Availability Modeling (GAM) accuracy;
- Entities not promptly reporting injection well integrity failure to the local GCD;
- Brine Wells;
- Fracturing of wells;
- Water Export;
- Lack of O&G drilling logs available to the GCDs;
- Open and abandoned water wells;
- All injection wells (e.g., Aquifer Storage Recovery (ASR), O&G, etc.);
- Litigation;
- In-situ mining operations; and,
- Use of groundwater to fracture wells.

## TAR

- Groundwater marketing, inter-basin transfers, and their impacts;
- Overdrafting of aquifers (pumping well beyond the recharge rate and subsequent aquifer degradation);
- Water quality deterioration in heavily pumped aquifers, such as increasing salinity in the High Plains;
- Lack of planning for use of multiple aquifers overlying one another;
- Brackish groundwater as a resource for desalination; more precise information is needed regarding quantity, quality, location, etc.;
- Unplugged and abandoned wells (water and O&G wells);
- Contamination of aquifers from oil recovery;
- Continued support and expansion of general groundwater monitoring programs;
- Protection of aquifers from surface pollution of all sorts, particularly recharge zones;
- General monitoring needed for groundwater;
- Definition of a “community water system” – a paradigm shift is needed so that federal funds could be directed to more water well owners (i.e., multiple individual users over a common aquifer could be considered a “community” similar to way that a few wells supply a community via a distribution system);
- Refinement of Aquifer Storage and Recovery (ASR) standards; and,

- Establish a systematic, state-wide, routine, rural water testing program to assist with management (possibly subsidized or in collaboration with community events), including bacteriological testing.

#### UTBEG

- Working on informing and assisting rural water well owners with water quality problems (inorganics and pathogens);
- Addressing groundwater quality issues (primarily inorganic chemicals, nitrate, and microbial contaminants) in domestic wells outlined in the USGS Circular 1332, *Quality of Water from Domestic Wells in Principal Aquifers of the United States, 1991 – 2004: Overview of Major Findings* (<http://pubs.er.usgs.gov/usgspubs/cir/cir1332>);
- Groundwater under the influence of surface water (i.e., pathogens);
  - Develop approaches to ensure the safety of drinking water supplies and minimize the risk of pathogen outbreaks.
- Assess emerging contaminants (e.g., personal care products, etc.) and the reliability of analyses; and,
- Understand linkages between agricultural practices and groundwater contamination to develop practices that minimize groundwater contamination.

#### TDLR

- Unlicensed water well driller and pump installer activities;
- Abandoned water wells;
- Improperly plugging and capping water wells;
- Improperly completed water wells;
- Deteriorated water wells; and,
- Improperly completed closed-loop geothermal heating and cooling wells.
  - A 30% tax credit is driving an increase in popularity (e.g., school districts, larger residential homes, Austin Community College).

Cary Betz (TCEQ) then distributed copies of USGS Circular 1332 to the TGPC. Cary Betz indicated that there may be some concerns with the report's ranking of various issues. Ann Ardis (USGS) requested feedback from the TGPC on this report.

Cary Betz (TCEQ) indicated that he would compile all of the discussed threats to groundwater and forward them to the TGPC so that they can be ranked at the next TGPC meeting. Cary Betz noted that recommendations (even those that would require funding) should also be provided for each concern listed in the *Strategy* update.

Donna Long (TSSWCB) observed that this list of groundwater concerns and recommendations would be a good addition to the five-year *Texas NPS Management Program* now under development.

Set Future Meeting Dates

The next TGPC quarterly meeting is scheduled for July 15, 2009 at 1:00 PM CDT.

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

### Groundwater Contamination Notice Coordination (HB 3030, 78th Legislature)

Cary Betz (TCEQ) reported that approximately two dozen letters had been mailed to water well owners over the last quarter.

### Groundwater Management Areas

Janie Hopkins (TWDB) reported:

- There are now established Desired Future Conditions (DFCs) for Groundwater Management Areas (GMAs) 8 and 9;
- TWDB has released Managed Available Groundwater (MAG) permitting values for four of the aquifers in GMA 8;
- Some of the GMAs are waiting until the end of the Legislative session to request model runs; and,
- TWDB has developed a description of the DFC petition process (<http://www.twdb.state.tx.us/publications/shells/DFCpetition.pdf>).

### Regional Water Planning

Janie Hopkins (TWDB) reported that the planning groups have submitted their region-specific reports, most of which have been reviewed, and comment letters have been distributed. The planning groups are being asked to include the results of these studies in their 2011 regional water plans. Contracts to complete Phase 2 of the current five-year cycle of regional water plans are in the process of being executed – Phase 1 was the region-specific studies, and Phase 2 fulfills all of the other requirements to produce the 2011 regional water plans. The 2011 regional water plans will not update the population and water demand projections except where documented, changed conditions exist – these initially-prepared draft plans are due on March 1, 2010 and final plans are due on September 1, 2010.

David Van Dresar (TAGD) noted the current challenges in regional water planning (e.g., 2010 census data availability, MAG adjustments, DFCs also being due in 2010).

### Groundwater Availability Modeling

Janie Hopkins (TWDB) reported that contracts are being finalized with six external groups to run models and URS Corporation is recalibrating the Edwards – Trinity Plateau Aquifer model. Three Requests For Proposals (RFPs) will be requested by TWDB in April 2009:

- A Gulf Coast Aquifer structure study from the Rio Grande River to the Brazos River;
- A recharge study for the above area; and,
- Model development for the Rustler Aquifer.

Janie Hopkins (TWDB) also noted that the field for the state well number in the TWDB Groundwater Database is being changed and detailed depth and location information will be requested from the GCDs.

### Nonpoint Source Pollution

Donna Long (TSSWCB) reported that the *Texas NPS Management Program* is a five-year plan required of the states in order to receive funding for NPS projects through the U.S. Clean Water Act – the next *Program* is due by December 2010. Fiscal Year 2009 success stories for the *NPS Annual Report* are also being accepted through September 30, 2009.

Lauren Bilbe (TCEQ) also noted the acceptance of a groundwater-related NPS project application from UTBEG and Texas Water Resources Institute (TWRI) concerning pathogen risk to human health in potable water.

### National Groundwater Initiatives

Cary Betz (TCEQ) reported:

- The Omnibus Public Land Management Act of 2009 (H.R. 146, <http://thomas.loc.gov/>) passed in March 2009;
  - Title IX, Subtitle F – Secure Water, Section 9507 – Water Data Enhancement by the United States Geological Survey provides for monitoring national groundwater resources and conducting a brackish groundwater assessment.
- The latest version of the Clean Water Restoration Act (CWRA) acknowledges that groundwater is neither “navigable” nor “a water of the U.S.,” but it still seeks to extend some U.S. EPA authority to groundwater related to permitting issues;
- The Ground Water Protection Council (GWPC, [http://www.gwpc.org/home/GWPC\\_Home.dwt](http://www.gwpc.org/home/GWPC_Home.dwt)) has reorganized itself into Water/Energy, Water Availability and Sustainability, and Water Quality Divisions; Cary Betz is a representative to the Water Quality Division, and there will be a joint GWPC meeting and National Ground Water Association Summit in April 2009 in Tucson, AZ; and,
- U.S. Department of the Interior’s Advisory Committee on Water Information (ACWI, <http://acwi.gov/>) Groundwater Subcommittee (<http://acwi.gov/sogw/index.html>) has developed its *National Groundwater Monitoring Program – Draft Framework Document* and is looking for pilot program funding.

### Drought Status

Cary Betz (TCEQ) referred the TGPC to the most recent TCEQ drought-affected Public Water Supply Systems and U.S. Drought Monitor maps – both the number of affected systems and the exceptional drought affected area in the state have increased since the last TGPC meeting.

Lee Parham (TDLR) reported that TDRL's weather modification program meteorologists indicate that no long-term improvement in the drought is anticipated.

David Van Dresar (TAGD) noted that the governor of Texas has assembled a Task Force within the Drought Preparedness Council and has requested federal disaster declarations for most of the state in order to provide relief funding to agriculture.

## 6. ANNOUNCEMENTS

### Rules Update

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

- Repeal of De Minimus Permits by Rule
- Remediation of Leaking Petroleum Storage Tank (LPST) Sites
- Phase 2 of Implementation of Radioactive Material Disposal and Source Material Recovery Requirements
- Revisions to certain Subchapters of 30 TAC Chapter 321 related to revised EPA CAFO rules
- Bacteria Effluent Limitations and Monitoring in Domestic Water Quality Permits
- Financial Assurance for Class B Sewage Sludge Land Application Units
- RCRA Authorization for parts of Federal Rule Clusters XV – XVII
- House Bill 3 / Senate Bill 3: Environmental Flow Standards
- Compliance History

Additional information on a specific rule can be found at [http://www.tceq.state.tx.us/nav/rules/propose\\_adopt.html](http://www.tceq.state.tx.us/nav/rules/propose_adopt.html).

### New Publications

Cary Betz (TCEQ) announced several recent TCEQ publications:

- Financial Reporting Requirements for Water Districts in Texas, RG-378
- Activities and Recommendations of the Texas Groundwater Protection Committee, Report to the 81st Legislature, SFR-047/06
- Landscape Irrigation: A Consumer's Guide to Landscape Irrigation in Texas, GI-390 (in English and Spanish)
- Landscape Irrigation Program: Implementation, RG-466
- On-Site Sewage Facility Rules Compilation, RG-472
- Priority Groundwater Management Areas and Groundwater Conservation Districts, Report to the 81st Legislature, SFR-053/06
- Rainwater Harvesting with Rain Barrels, GI-383
- Soil and Groundwater Response Objectives, RG-366/TRRP-29
- Conserve Water; Reuse the Rain (coloring sheet), M-035
- Rights to Surface Water in Texas, GI-228

Janie Hopkins (TWDB) announced a revised explanation of the Groundwater Database (User Manual 50, *Explanation of the Groundwater Database and Data Entry*, <http://www.twdb.state.tx.us/publications/manuals/UM50%20Data%20Dictionary/um50.pdf>). Cary Betz (TCEQ) suggested that the TGPC now revise its *Texas Ground-Water Data Dictionary* (<http://www.tgpc.state.tx.us/gi-272.pdf>). In addition, the publication of a description of the DFC petition process (<http://www.twdb.state.tx.us/publications/shells/DFCpetition.pdf>) was mentioned earlier in the meeting.

Donna Long (TSSWCB) anticipated that the *NPS Annual Report* would be available at the next TGPC meeting.

#### Upcoming Conferences

Cary Betz (TCEQ) referred members to the handout on the 15th International Congress of Speleology and had requested support for a TGPC exhibitor booth at this year's TCEQ Environmental Trade Fair and Conference earlier in the meeting. Details regarding additional upcoming conferences were listed in the "2009 Water-related Conferences in Texas" handout.

#### 7. PUBLIC COMMENT

Jennifer Guerrero, a student at the University of Texas at San Antonio, asked if there were any long-term plans to protect groundwater (e.g., limiting growth over the Edwards Aquifer recharge zone). Cary Betz (TCEQ) replied that:

- The TGPC is not authorized to regulate this, and even GCDs are restricted by state law in how much they can limit growth;
- Legislation is currently proposed which would limit the state's ability to impose impervious cover restrictions;
- The U.S. Fish & Wildlife Service requires habitat conservation plans for development over the Edwards Aquifer recharge and contributing zones;
- Senate Bill 3 authorized the creation of the Edwards Aquifer Recovery Implementation Program which seeks to maintain flows at San Marcos and Comal Springs in the event of a drought of record for the protection of their endangered species (a habitat conservation plan due in 2012 would most likely restrict the Edwards Aquifer Authority's pumping limits); and,
- TCEQ has various water quality protection rules that apply to the Edwards Aquifer.

#### 8. ADJOURN

Cary Betz (TCEQ) adjourned the meeting at approximately 4:04 PM CDT.