

GROUNDWATER RESEARCH SUBCOMMITTEE MEETING RECORD

TIME AND DATE:

9:00 AM, Wednesday, July 14, 2010

LOCATION:

Texas Commission on Environmental Quality Campus Building F, Room 2210, 12100 Park 35 Circle, Austin, TX 78753

PURPOSE OF MEETING:

Fourth quarter regular business meeting

AGENCIES/ENTITIES REPRESENTED:

Texas AgriLife Research
Texas Commission on Environmental Quality [TCEQ]
Texas Department of Agriculture [TDA]
Texas Groundwater Protection Committee [TGPC]
Texas State Soil and Water Conservation Board [TSSWCB]
Texas Water Development board [TWDB]
United States Geological Survey [USGS]

ATTENDEES:

Kevin Wagner	Texas AgriLife Research
Cary Betz	TCEQ, Chairman of TGPC
Radu Boghici	TWDB
Alan Cherepon	TCEQ
Richard Eyster	TDA
Lynne Fahlquist	USGS
Donna Long	TSSWCB
Kelly Mills	TCEQ
Joseph L. Peters	TCEQ
Leslie Smith	TDA
David Villarreal	TDA

MEETING SUMMARY:

Call to Order and Introductions

Mr. Kevin Wagner, with Texas AgriLife Research, Texas Water Resources Institute (TWRI), was acting as Co-chair at this meeting, sitting in for Dr. B. L. Harris who could not be present. He called the meeting to order at about 9:07 AM. His first order of business was to have everyone introduce themselves. The other Co-chair, Dr. Bridget Scanlon, also could not be present.

Discussion of Sources of Funding and Current Calls for Proposals

Ms. Donna Long reminded everyone that the TCEQ Nonpoint Source Section would have their Request for Grant Application (RFGA) out sometime in late summer. They can be contacted anytime for suggestions or ideas. They are glad to help anyone in going through the RFGA process. Contact Ms. Loren Bilbe or Mr. Kerry Niemann in the Nonpoint Source Team.

Mr. Radu Boghici reported that there was nothing new of which he was aware at the TWDB. There had been some Requests for Qualifications (RFQs) that have already gone through the evaluation process and have been awarded. There were a couple of projects that dealt with determining the affects of water quality on water quantity. Another was a Groundwater Availability Modeling (GAM) project that involved the development of a three dimensional groundwater model. He stated that their agency was at this time occupied in trying to reduce their budget by ten percent.

Discussion of Recommendations for Research Topics for Legislative Report

Mr. Wagner asked if anyone had attended the last meeting of the Legislative Report Subcommittee. Ms. Leslie Smith indicated that she had attended the meeting. She said that it was a very short meeting and that it was just a recap of what had been discussed at the prior meeting, which was the first meeting and where the main topic of discussion was what recommendations should be continued from the previous *Legislative Report*, the *Report to the 81st Legislature*. Mr. Wagner asked what the time line was for completing the recommendation development process. Ms. Smith responded that all recommendations should have been finalized to be presented to the full TGPC meeting in the afternoon for final approval. Mr. Wagner commented that since the state budget has become very tight, the Legislature would probably not be very open to seeing a great number of new recommendations for projects that would need to be funded. Ms. Smith responded that the main focus has been to bring forward the key recommendations that have been made before. Mr. Kelly Mills confirmed that it was Mr. Cary Betz's intent that, after the TGPC meeting in the afternoon, the recommendations should be ready to move forward.

Discussion of Progress on White Papers

After a couple of minutes of discussion it was determined that there were no White Papers in progress at this time and none planned for the immediate future.

Information Exchange

Mr. Wagner informed us that Texas A&M AgriLife Research and Extension and Texas Water Resources Institute (TWRI) were working with the University of Texas Bureau of Economic Geology (BEG), Kansas State University, and New Mexico State University in putting together a proposal for a project to deal with the various challenges of climate change, looking at the Southern area of the High Plains Aquifer (the Ogallala). This area, it is believed, will be greatly affected by climate change. The proposed project will be looking at a wide variety of research topics including the development of new cultivars that can produce more with less water, education programs, new irrigation timing technologies, etc. The application for funding for this project is from the United States Department of Agriculture (USDA), National Institute of Food

and Agriculture (NIFA). The grant will be for twenty million dollars, but it will be split between three states and four universities, and will be spread over a three-year period.

This year NIFA's focus was on funding projects dealing with cereal grains and some animal feeding operations, primarily poultry and swine. Next year they will be focusing on beef cattle, dairy operations, rangeland, and forages. TWRI has already begun talking with New Mexico State University and University of Arizona about doing a research project on rangeland in the Southwest for next year's proposal.

At this point Ms. Lynne Fahlquist gave a summary of some of the groundwater research going on at the USGS. Ms. Fahlquist informed us that she was working on a project dealing with the transport of anthropogenic and natural contaminant to public supply wells. The work is focused on the Edwards Aquifer and is part of the USGS National Water-Quality Assessment (NAWQA) Program. The goal is to understand the processes and well field management practices that affect the transport of contaminants in groundwater. The Edwards Aquifer is just one of the settings that is being studied. They are trying to wrap-up their data collection efforts this fiscal year and will be producing some reports that will be coming out in the next couple of years. Another project which is now under way at the USGS is the Pecos County Project, which Mr. Boghici also mentioned earlier; it is a study of flow paths of water from recharge to discharge and the effects of natural processes as well as anthropogenic processes on water quality. Ms. Fahlquist also reported that the NAWQA program continues to do routine monitoring, in a low intensive phase, which involves doing water level measurements every year in established networks and doing water quality sampling every other year. At present the NAWQA Program is being evaluated for the phase, on how to approach future work and address funding issues. So, the future course of NAWQA is uncertain at this time, but since one of the long term goals is to determine trends, they hope to continue with present sampling efforts. At present they are evaluating the constituent list for which they are sampling to determine whether the list should be updated to target some new constituents, such as emerging contaminants. Another question to be answered is whether this work should be done on a broad scale or just continued on a more narrow research style approach.

Mr. Wagner proceeded with a slide presentation entitled Groundwater Research at Texas A&M. A summary of his presentation follows.

Mr. Wagner is an Associate director of the Texas Water Resources Institute (TWRI). However, his presentation gave an overview of the projects which are taking place at Texas A&M and not necessarily only those with which TWRI is involved. The TWRI is an institute of Texas AgriLife Research (TAR), Texas AgriLife Extension Service (TAES), and the Texas A&M University College of Agriculture and Life Sciences. It is a part of the National Institute of Water Research. Its mission is to serve as a focal point, clearinghouse, and facilitator for water research and water related outreach efforts throughout Texas and beyond.

There are over 30 researchers from 10 different academic departments focusing on some aspect of groundwater research at Texas A&M. These departments and researchers bring in various areas of expertise, some of which include computer simulation, invasive species, groundwater management, hydrogeology, aquifer storage and recovery, solute transport, treatment of brackish and saline water, and GIS. The TWRI Water Resource Specialist Directory can be accessed online at <http://twri.tamu.edu/specialists.php>.

At present there are ten ongoing groundwater projects proceeding in the following areas of inquiry: irrigation water conservation, aquifer characterization, aquifer recharge, policy analysis, water quality, planning, and desalination. A list of the projects follows.

1. U.S./Mexico Transboundary Aquifer Assessment Program (PL 109-448)
2. Integrated Management Strategies to Protect the Shared Surface Water and Groundwater in an Arid Region
3. Deficit Irrigation Management to Conserve Ogallala Aquifer Water
4. Evaluation of Alternative Water Conservation Strategies for the North Plains Groundwater Conservation District
5. Optimization of Crop Water Use Efficiency and Crop Responses to Stress in the Edwards Aquifer Region
6. Support for the Edwards Aquifer Recovery Implementation Program
7. Augmenting Groundwater Recharge through Ashe Juniper Control: A Feasibility Study in the Recharge Zone of the Edwards Aquifer
8. Examination of Groundwater/Surface Water Interactions – Colorado River
9. Groundwater Nitrogen Source Identification and Remediation
10. Brackish Water Advanced Vapor Compression Desalination Pilot Plant

Some areas of future research at Texas A&M under the goal of advancing technology development include the following.

1. Precision Irrigation in Ag & Urban Landscapes
2. Water-Energy Nexus
3. Municipal & Industrial Water Conservation/Usage Systems
4. Drinking Water, Public Health & Water Security

Public Comment

There were no comments from the public.

Adjournment

The meeting adjourned at 9:57 AM.

Minutes prepared by Joseph L. Peters, October 11, 2010

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