

GROUNDWATER RESEARCH SUBCOMMITTEE MEETING RECORD

TIME AND DATE:

9:00 AM, Wednesday January 16, 2008

LOCATION:

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

PURPOSE OF MEETING:

Second quarter regular business meeting

AGENCIES/ENTITIES REPRESENTED:

Bureau of Economic Geology [BEG]
Texas Agricultural Experiment Station [TAES]
Texas Commission on Environmental Quality [TCEQ]
Texas Department of Agriculture [TDA]
Texas State Soil and Water Conservation Board [TSSWCB]
States Geological Service [USGS]

ATTENDEES:

Allan Jones	TAES, Co-chair of the GW Research Subcommittee of the TGPC
Cary Betz	TCEQ
Alan Cherepon	TCEQ
Richard Eyster	TDA
Donna Long	TSSWCB
Marylynn Musgrove	USGS
Joseph L. Peters	TCEQ
Rebecca C. Smith	BEG

MEETING SUMMARY:

I. Call to Order and Introductions

Dr. Allan Jones called the meeting to order at about 9:05 AM. The Co-Chair, Dr. Bridget Scanlon, could not be present but was represented by Ms. Rebecca Smith. The meeting started with self introductions of everyone present. Ms. Donna Long came in at about 9:29 AM.

II. Research Needs for the next Groundwater Protection Strategy

Dr. Jones introduced the first major topic which concerned the updating of the *Texas Groundwater Protection Strategy*. We asked Mr. Cary Betz to email each of us the Research

Needs Section of the document, so that all the members of the subcommittee can read it and propose updates.

Dr. Jones emphasized that by having our groundwater research needs documented in the *Texas Groundwater Protection Strategy* we may then be able to encourage some additional funding through participating agencies from the Legislature. With research needs clearly documented in the *Strategy* it could help prove the case for needed research funds.

Ms. Rebecca C. Smith was asked about BEG's funding. She responded that BEG gets a line item appropriation from the Legislature every two years through the University of Texas. It amounts to about 1 or 2 % of BEG's total budget. BEG does not interact with the Legislature directly.

At this point Mr. Betz elaborated that he will be emailing the Research Needs Section of the *Texas Groundwater Protection Strategy* to each subcommittee member for review and subsequent submission of comments. Comments will then be incorporated to create a draft of the new version of the Research Needs Section. This draft will then be distributed to the subcommittee members before the next meeting.

III. Discussion of Sources of Funding and Current Calls for Proposals

Mr. Betz mentioned that there were a couple of RFPs out and asked Dr. Peters if he had any information on them.

Dr. Peters responded that he had information on one of them, a request for proposals from the TWDB. In 2007, the 80th Legislature appropriated \$600,000 to the TWDB to continue and expand the state's efforts at developing new water supplies through brackish groundwater desalination. The TWDB is requesting proposals for brackish groundwater desalination demonstration projects. More information can be found at http://www.twdb.state.tx.us/iwt/desal/docs/BGWIII_RFP.pdf.

Dr. Jones, for our information, mentioned that Congress had appropriated additional funding in 2008 to the Ogallala Aquifer Water Conservation Initiative that is headed by the USDA ARS and that includes Texas Tech University, West Texas A&M Agricultural Experiment Station, and Extension in Kansas State. The Office of Management and Budget (OMB) hasn't authorized the agencies to proceed yet even though the appropriations budget passed a few weeks ago. But we do know that the research activities on the Ogallala will be moving ahead.

Dr. Jones also explained to us that in 2007 the USDA ARS continued to get funding for the Ogallala Aquifer Water Conservation Initiative because the funding wasn't considered to be an earmark which had all been zeroed out. The funding was considered to be an addition to the USDA ARS budget. The initiative is mostly concerned with water conservation, but there is some minor work on water quality.

In response to a question from Ms Smith, Mr. Betz explained a little about the *Legislative Report (Activities and Recommendations of the Texas Groundwater Protection Committee, Report to the*

80th Legislature) and the *Texas Groundwater Protection Strategy*. The *Strategy* is updated every six years, and the *Legislative Report* every two years. The *Strategy* is more general and is in the process of being updated now. The GWRS was the result of suggestions of the last *Strategy*. Dr Jones suggested that we should make sure that our individual agencies directions and goals in groundwater research be represented in the *Strategy* and in the *Legislative Report*. This would include things such as TWDB's GAMs, fate and transport, arsenic, radio nuclides, groundwater databases, digitization of well logs, interaction of SW and GW, recharge, and spring flows.

IV. Discussion of Progress on Initial White Papers

As an introduction Dr. Jones reminded us of the two white papers that the subcommittee has developed. They were put together primarily by Dr. Ric Jensen and Ms. Mary Ambrose. The first, entitled *Influences of Natural and Man-Made Sources of Contamination on Water Quality Trends in the Seymour Aquifer: A 2007 Status Report*, was completed some time back and is available on the TGPC website. The second entitled *Research into the Characterization of Brackish Water and Disposal of Desalination Reject Water in Saline Aquifers and Depleted Oil and Gas Reservoirs*, is essentially finished and should be available on the TGPC website shortly. Dr. Jones asked if anyone could see any other changes that needed to be made before we publish the second one on the TGPC website.

Ms. Smith suggested that we go ahead and post it. Dr. Jones added that Dr. Jensen is presently working with Ms Lynne Fahlquist, at rather a slow pace, on a summary paper covering research activities related to groundwater in Edwards Aquifer over the last few years.

Ms. Smith suggested that perhaps it would be appropriate to change the author on the *Brackish Water* white paper to indicate that it was compiled by Dr. Ric Jensen. Dr. Jones said that he would check authorship and then send any necessary corrections to Kathy McCormack of TCEQ before she puts the white paper on the TGPC website. He suggested that we might put the name of the Committee and Subcommittee and perhaps Mary Ambrose on the document.

Dr. Jones asked if there were any other white papers that needed to be developed. After glancing at the minutes of the previous meeting we were reminded that we had started work on a third white paper to be entitled *Desalination Research at Texas Universities — A Brief Overview*.

Ms. Donna Long asked if the 319 project on the Seymour Aquifer may not be far from a final report. Dr. Jones responded that it had been completed recently and the report is on the website.

Dr. Jones brought up the subject of arsenic as a possible subject for a white paper and asked if the BEG might not have accumulated a large amount of information on arsenic. Ms. Smith responded that Dr. Bridget Scanlon and Dr. Jean-Philippe Nicot have done considerable work on arsenic at the BEG. Dr. Jones continued and asked Ms Smith if she might suggest to them the possibility of putting together a white paper on arsenic.

Ms. Smith also mentioned that another research activity presently being conducted at the BEG is aimed at carbon sequestration. BEG has some research projects looking into what the problems may be with large scale injection of CO₂. However, she said that these studies are not advanced enough yet to be ready for white papers. She has been working on a project in West Texas

which consists of sampling groundwater over an oil field where there has been injection of CO₂ for 35 years, but only two sets of samples have been collected over two years. So there isn't enough information yet for a white paper.

Dr. Jones suggested that we put some reference in the *Strategy* and *Legislative Report* to the Subcommittee's white papers.

Dr. Jones announced that as of January 1, 2008, Texas Agricultural Experiment Station (TAES) will be called Texas AgriLife Research, and that Texas Cooperative Extension (TCE), which a few years ago was called Texas Agricultural Extension Service (TAEX), will now be called Texas AgriLife Extension Service.

Ms. Long announced that there is a request for proposals (RFP) out for 319 EPA funds that come through the TSSWCB. The RFP is on their website. The request will be out till February 1, 2008. Up to 10% of the funds can be directed toward groundwater issues. Six to 6½ million is available. About three million of it is to be used for base funding and the rest for TMDLs. Base funds could be used for projects concerning surface water-groundwater interactions that cause pollution. There is a parallel program in the TCEQ with about the same amount of money.

After some discussion on surface water-groundwater interactions and the need for further studies, Ms. Long indicated that the TSSWCB would like to start maxing out that part of their 319 funding that can be spent on groundwater each year.

Dr. Jones suggested that a scientifically sound approach would be to link the understanding that the AgriLife Research has accumulated on groundwater responses to near surface phenomenon and vegetation with what BEG has learned about groundwater. With this combined effort we should be able to put together some proposals that would be interesting to the Legislature. This would be a research proposal to be funded by the Legislature as an exceptional item. We might be able to put something together as a cooperative effort. This would be a good time because the two university system's research agencies will be putting together their state exception items in the next six months.

Dr. Jones informed us that the TWRI has been asked to coordinate the drafting of a short white paper that would recommend the most effective use of vegetative control. It would consider what kind of vegetation is most effective for increasing yield to streams under varying conditions in various areas of the state. They are being asked to come up with a group of experts to draft the white paper using existing research and information. The white paper is to be completed in the next six months.

V. Information Exchange

Ms. Marylynn Musgrove reported that the USGS is conducting ongoing work in the Edwards Aquifer looking at the transport of anthropogenic contaminants at a well field in San Antonio. This is part of a nationwide study. They are looking at 10 years of groundwater data so as to be able to determine concentration trends for both contaminants and natural constituents. USGS is also planning to sample in the Edwards-Trinity in the future.

Dr. Jones asked if anyone has looked at what the effects might be of the increase in pumping from the Edwards Aquifer that the Legislature is allowing. An important question is what the effect of the increased pumping might be on the frequency of reaching the trigger level set for the aquifer. Will the users of the aquifer water be put into the Drastic Water Conservation Mode more frequently?

Mr. Betz responded that indeed the Recovery Implementation Plan Committee will be looking at this question. A science committee to study the situation has been named recently. EAA and their consultants will be performing the modeling.

VI. Public Comments

There were no public comments.

VII. Adjourn

The meeting adjourned at 10:04 AM.

Minutes prepared by Joseph L. Peters, March 31, 2008

Action Items:

1. Finalize the white paper *Research into the Characterization of Brackish Water and Disposal of Desalination Reject Water in Saline Aquifers and Depleted Oil and Gas Reservoirs*, and post it on the TGPC website.
2. Continue work on the white paper *Desalination Research at Texas Universities — A Brief Overview*.
3. Initiate work on the planned review paper that would describe to the general public all the groundwater related research activities in and around the Edwards Aquifer.

Cary-Over Action Item:

- * Initiate work on a white paper describing a proposed project to study background heavy metal and radio nuclide presence in certain areas including the use of the resultant data to put together a fact sheet for local residents.

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