

LONE STAR GROUNDWATER CONSERVATION DISTRICT

Monday, March 2, 2015

MINUTES OF THE PLANNING WORKSHOP OF THE FINDINGS AND REVIEW COMMITTEE

PUBLIC WORKSHOP ON WATER PLANNING PROCESSES

The Findings and Review Committee of the Lone Star Groundwater Conservation District hosted a workshop dedicated to providing information to the public on the basics of water planning in Texas, including the groundwater joint planning process and the regional and state water planning processes. The workshop, open to the public, was held at the District offices located at 655 Conroe Park North Drive, Conroe, Texas.

CALL TO ORDER:

President Tramm called the meeting to order at 1:33 p.m. announcing that it was open to the public.

ROLL CALL:

The roll was called of the board members who are members of the committee, to wit:

Richard J. Tramm
Rick J. Moffatt
Jace Houston
John D. Bleyl, PE

Because it was anticipated that a number of other members of the District's Board of Directors would be in attendance at the planning workshop hosted by the Findings and Review Committee, "Notice of Board of Directors Special Meeting" was properly posted in accordance with legal requirements. For the record, President Tramm noted the following board members as present, which meant that there indeed was a quorum of the board in attendance so as to constitute a special meeting of the board of directors.

Sam Baker
Scott Weisinger, PG
W. B. Wood

Also, in attendance at said meeting were: Kathy Turner Jones, General Manager; Mark Lowry, District Engineer; John Seifert and Bill Mullican, technical consultants for the District;

Shauna Fitzsimmons, District Attorney; District staff; and members of the public. *(Copies of the public sign-in sheets are attached hereto as Exhibit "A").*

Director James M. Stinson arrived at 1:53 p.m.

Shauna Fitzsimmons presented on the Joint Planning Process for Groundwater Management: The Basics of How Groundwater Districts Develop Desired Future Conditions. Ms. Fitzsimmons' presentation objectives included:

- Overview of Groundwater Management Areas ("GMA") and Desired Future Conditions ("DFC");
- Status of joint planning in Texas for DFC adoption;
- Changes in the joint planning process from the first round to the current round for DFC adoption;
- Process for considering, proposing, and adopting DFCs; and
- How DFCs play into Groundwater District's Management Plans and Rules.

Ms. Fitzsimmons discussed in her presentation DFCs as being a quantitative statement of what you want the aquifer to look like in fifty (50) years, in terms of water level, spring flows, volume, quality, etc.... She stated that once DFCs are adopted they can be amended at any time, and must be reestablished at least once every five (5) years. Additionally, it is important to note that GMAs must utilize groundwater models approved by the Texas Water Development Board (TWDB) when developing and determining DFCs.

It was noted that since passage of the initial legislation requiring joint planning, there have been rounds two joint planning– the first round took place from September 1, 2005 - September 1, 2010, while the second, and current, round is from September 1, 2010 – May 1, 2016.

In 2001 new requirements were put in place that essentially overhauled the procedures and requiring statutory criteria and a balancing test be considered for the DFC development, proposal, and adoption. In addition, an explanatory report which explains the DFCs adopted, those rejected, supporting documentation, and documents the criteria evaluated during the process must also be included. Proposed adoption of DFCs must take place no later than May 1, 2016.

The new DFC adoption process is as follows:

1. GMA considers statutory criteria and balancing test
2. GMA proposed DFCs for adoption by May 1, 2016 (vote of 2/3 majority of District reps required)
3. 90-day public comment period begins once proposed DFCs are sent to District in GMA
4. Individual Districts hold public hearings within their boundaries
5. Individual Districts prepare summary reports
6. GMA reps meet to consider summary reports, and proposed changes to DFCs, and adopt DFCs by 2/3 vote
7. GMA submits explanatory report to TWDB and to Districts
8. Individual District adopt DFCs

Ms. Fitzsimmons then briefed the committee on the “new” criteria that must be considered in the proposed DFCs and the importance of the explanatory report that is turned in prior to GCDs adopting DFCs. It was pointed out that TWDB takes the adopted DFCs and uses a Groundwater Availability Model (GAM) to provide each GCD with an estimate of the groundwater that can be pumped annually in order to achieve the DFC. That number is referred to as the Modeled Available Groundwater (MAG). The GCDs are then responsible for considering the MAG and other statutory factors in developing their management plan and rules, as well as when issuing permits.

Lastly, Ms. Fitzsimmons described how and why DFCs were important to a District’s management plan and rules. She stated that a District must develop a management plan, which includes goals and performance objectives of the District Board, strategies for achieving DFCs, as well as technical and water planning information. Then a District must adopt rules to implement the management plan, such as establishing a framework on how GCDs will manage and regulate the groundwater resources within the boundaries. The District’s rules must help to achieve DFCs and must be enforced.

Following Ms. Fitzsimmons presentation and comments, President Tramm introduced Dr. Robert E. Mace, Deputy Executive Director for the Water Science and Conservation Department, with the Texas Water Development Board (TWDB). Dr. Mace gave an informative presentation on the nexus between water planning and groundwater planning by going through the history of groundwater management law.

Mr. Mace began by emphasizing that groundwater availability is simply the amount of groundwater available for use and is based on “policy driving science”. He explained that while most believe that available groundwater is based on science, to which he countered was not necessarily correct or true, because imbedded in the decision is a policy goal. He clarified that in order for the scientists to be able to run models and tell how much water can be pumped, they must be told, from a policy standpoint, what the end goal is first, and then they can tell how that goal can be achieved.

Following, Mr. Mace gave a brief history on various groundwater laws in Texas, including:

- the Rule of Capture (1904) which allowed a well owner to pump however much they wanted regardless of the impact on neighbors;
- the Burges-Glasscock Act (1913) which created the Texas Board of Water Engineers, disallowed the waste of groundwater and required that groundwater pulled out of the ground be put to beneficial use, additionally it required well completion standards and well reports to be filed;
- the Conservation Amendment (1917) was approved, due to drought, and gave the legislature authority to regulate natural resources at the State level, including groundwater;
- in 1949, the legislature passed the Texas Underground Water Conservation Act which allowed for the local creation of GCDs, who could adopt rules to conserve, preserve, protect, recharge, and prevent waste of groundwater;

- Friendswood Development Company v. Smith-Southwest Industries, Inc. lawsuit (1978) created case law that if pumping from a well created land subsidence, the well owner could be held liable;
- in 1997, Senate Bill 1 took water planning from a statewide effort to a regional effort with the ability to set the groundwater availability by the various regional planning groups;
- then in 2001, part of Senate Bill 2 gave the TWDB the responsibility of placing all major and minor aquifers into GMAs;
- House Bill 1763 (2005) required joint planning of the GCDs within GMAs, which allowed the GCDs to determine groundwater availability for their area and what would go into the regional water planning;
- Senate Bill 660 (2011) expanded the DFC process to ensure there was participation and clarity by requiring multiple hearings, explanatory report, and submitting additional DFCs not chosen. The bill also allows for a person with a legally defined interest in a regional planning group or a GCD to petition TWDB to challenge the reasonableness of a specific DFC;
- Senate Bill 332 (2011) established groundwater as a private property right; and
- Supreme Court ruled on the EAA v. Day & McDaniel in 2012, which confirmed that it is a private property right and allowed for takings claims to be filed if a property owner believed a GCD's regulations were severely impacting the value of the property.

Dr. Mace explained that groundwater goals were based on DFCs and MAGs, with the DFC being the driving factor. He reiterated that a desired future condition is what you want your aquifer to look like in the future and that modeled available groundwater is the number given by the model which tells a District how much it can pump to achieve the desired condition, which is then included in a District's management plan.

Lastly, Dr. Mace explained the Total Estimated Recoverable Storage (TERS) number that is issued by the TWDB. He stated that by law, the TWDB provides the TERS number to the GCDs for consideration when establishing their DFCs. He defined TERS as the amount of water you can get out of an aquifer if you were to drain it (i.e.: all the water an aquifer can possibly hold). Dr. Mace stressed that those numbers are provided in a range because they are not necessarily practicable because the numbers do not take into consideration the cost for retrieving water, the environmental impacts, the cost or how it relates to managed goals, nor aquifer properties, or water quality. He also stated that it can be more complicated in confined artesian aquifers (such as the Gulf Coast Aquifer) and it is his belief that the value of confined aquifers comes from the artesian pressure rather than storage, therefore the TERS number does not play a major role in DFCs for a confined aquifer. Ultimately, the TERS number depends on the management goals and policy behind the goals as to whether TERS is relevant or not.

Dr. Mace took a question from Director Weisinger on funding by the TWDB. He explained that in order to receive funding from the State Water Implementation Fund for Texas (SWIFT), the project must be included in the state water plan and must have a capital loss associated with it. It was clarified that if a project was specific to an aquifer formation that was

not included in the DFC or MAG, for example the Catahoula aquifer formation, then it is not in the state water plan and therefore would not be eligible for specific funding from SWIFT.

After a short break, the Board received a presentation from Bill Mullican, Mullican & Associates on the status of the current round of joint planning in GMA 14.

Mr. Mullican began by stating that there is a tremendous amount of information that goes into the joint planning process and his presentation will be an overview of the process and will also give a status on the current round of joint planning. He explained that preliminary information for 8 of the 9 factors in the Texas Water Code Section 36.108 (d) (1-9) had been presented and considered by the GCDs and interlocal participants in GMA 14. He advised the committee and Board that the remaining efforts included:

- Adopting proposed statements of desired future conditions by May 1, 2016;
- 90 day public comment period, public hearing, and preparation of summary report in each GCD;
- Final adoption of statements of desired future conditions, preparing and submitting the explanatory report to TWDB; and
- TWDB review and calculation of estimates of modeled available groundwater.

Mr. Mullican then described 8 of the 9 considerations (under Section 36.108 (d) (1-9) of the Texas Water Code) and the data that was considered in order to satisfy each of the criteria. The factors described are:

- Aquifer uses and conditions
- Water supply needs and strategies
- Hydrological conditions
- Other environmental impacts
- Impacts on subsidence
- Socioeconomic impacts
- Impacts on private property
- Feasibility of achieving DFCs
- Other relevant factors

To conclude, Mr. Mullican emphasized that it was important for all to understand that the joint planning process was a balance of (1) the highest practicable level of groundwater production and (2) conservation, preservation, and protection of groundwater resources. The balance of those rested on various factors that needed to be considered, including supply needs and management strategies; private property rights; hydrological conditions; DFC feasibility; aquifer uses or conditions; socioeconomic and environmental impacts; and subsidence impacts.

The next presenter called upon was Jason Afinowicz, Freese and Nichols, Inc, who briefed the committee and board members on water planning in Texas and developing the Region H 2016 Regional Water Plan.

Mr. Afinowicz began by explaining that the authority in water planning in Texas resides with the Texas Water Development Board, who, as mentioned previously, provides water project funding and prepares state water plans. He continued that the planning process for Texas

includes 16 regions based on both natural and political boundaries and are made up of strictly volunteers. The process runs on a five year cycle, with the Regional Water Plans (RWPs) being compiled to create the State Water Plan (SWP). It was explained that the planning process first looks at answering two main questions:

1. Identifying needs/demands – How much water do we need?
2. Identifying supplies – How much water do we have?

Those two questions assist with identifying needs, which then helps to select and recommend water management strategies and projects for the regions. It was noted that other strategies on how to get more water are also considered when selecting and recommending management strategies and/or projects before ultimately being assembled into a final plan or recommendation.

Following, Mr. Afinowicz discussed the current Region H 2016 Regional Water Plan. He stated that the Region H Water Plan included multiple “clients”, including TWDB as the Sponsor and funder, San Jacinto River Authority (SJRA) as the political subdivision/local Sponsor, and the Region H Planning Group comprised of 26 individual organizations. The plan has a budget of \$2,124,601 and commenced work on June 23, 2011 with the anticipation to prepare a draft plan by May 1, 2015 for submittal by December 1, 2015.

With regard to the specifics for Region H, Mr. Afinowicz noted that the first item the planning process looks at is the projected population and water demand data, which was gathered for each county through the Regional Groundwater Update Project, which gave very detailed information. Additionally, the planning committee works with the TWDB to look at demands specific to irrigation, livestock, manufacturing, mining, and steam electric.

The second step in the process is to look at groundwater supplies. Region H includes two major aquifers and four minor aquifers in its region. Availability of those aquifers is determined by TWDB’s estimate of modeled available groundwater, which is based on DFCs set by GMAs 11, 12, and 14 from the last planning cycle in 2010. The planning group also looks at the surface water supplies, which includes three river basins and three major reservoirs, and are evaluated by the planning groups themselves, though they are required to use the TCEQ Water Availability Model “Run 3”.

There are over 700 different units that supplies are allocated to, based on existing contracts, capability of existing infrastructure and what they are able to produce from a reliable groundwater source. Once that data is input, the needs start to evolve. In order to assign projects, the committee must break down the data and find out the specific needs. Currently in the plan they are estimating 1 million acre-feet that will need to be made up by alternative sources in 2070.

At the beginning of the current round of planning the committee put together a process for identifying and determining potential management strategies which helped them to create a timeline for the projects. An example of some of the projects in the planning group range from those currently being created such as the Luce Bayou project, Dow Off-Channel, several reuse

and brackish groundwater projects, as well as those projects being considered for the future such as pipelines from East Texas and seawater desalination.

Currently the committee is finalizing the developing and applying of strategies and will have a draft plan ready for review in May 2015. Following the submittal of the draft plan there is a public comment period before submitting the final plan in December 2015. Mr. Afinowicz stated that they are planning to hold a public meeting mid-June to early-July 2015.

It was stressed that while they are close to the May 2015 deadline and the preliminary draft plan is undergoing internal review, there is still a significant effort remaining, including: planning group, agency and public review; data entry into a database; inclusion of database reports; looking at socioeconomic impacts; infrastructure financing survey; and the implementation survey.

Mr. Afinowicz finished up by summarizing what happens after the plan is adopted – the amendment process. The amendment process allows for the addition of projects not currently in the plan, which in turn does not make the project eligible for funding.

The final presenter was John Seifert, LBG-Guyton, to discuss the Strategic Water Resources Planning Study and how the results will factor into the joint planning process.

Mr. Seifert began by giving a brief overview of the project and each task's current status:

- Task 0 – maintain stakeholder communication and input through meetings, review of draft reports, and direct communication
 - o Kick off meeting was held on January 28, 2015;
 - o Plan to schedule quarterly meeting; and
 - o Provide opportunities for stakeholder input at meeting and review draft reports
- Task 1 – assess current aquifer water levels, potential effects of the initial conversion to Alternative Water Supplies in 2016, and provide recommendations for changes/additions to water level monitoring program and groundwater pumping inventory efforts
 - o Data collection and evaluation is in progress, including groundwater and well water-level data;
 - o Evaluating areal coverage of monitoring wells, available water-level data and production data; and
 - o Begin a review of the impacts of pumping reductions in north Harris County on aquifers in the area
- Task 2 – review TERS data from the TWDB and possible implications for groundwater management and
 - o Have initiated review of procedures and data sources used in TERS estimates; and
 - o Estimating areas of Chicot, Evangeline, Jasper and Catahoula aquifers with fresh and brackish groundwater
- Task 3 – conduct evaluation of potential opportunities for additional groundwater development in various areas of the District while ensuring long-term viability of the aquifers

- Plan to evaluate potential groundwater availability from Chicot, Evangeline, Jasper and Catahoula aquifers in areas outside currently heavily pumped areas with substantial artesian head declines; and
- Give consideration to population and water demand projections in future adopted Region H Regional Water Plan

Currently Tasks 0-2 are underway with Task 3 to be initiated upon completion of Task 1 and 2. It is intended that once Task 3 is finalized the results will be available for the next round of joint planning in GMA 14 and Region H. Mr. Seifert explained that the goal of the study is that it will assist Region H with information on available surface and groundwater supplies which can be evaluated to satisfy future water demands, while also assisting GMA 14 with groundwater availability for the next planning cycle in 2017. Mr. Seifert clarified that the entire project is slated to take approximately 21 months.

President Tramm opened the floor to questions from the Board.

President Tramm first asked Ms. Fitzsimmons to elaborate on the Day case that was referenced in her and Dr. Mace's presentations and how it affects the District. She explained that Day was a landmark case because the Supreme Court established that a landowner possesses the groundwater in place beneath its property. It defined ownership of groundwater and made it known that the groundwater is subject to the rule of capture as well as subject to reasonable groundwater regulation by a GCD. It was further defined that the ownership interest could form the basis of a takings claim. The case was referred back to the lower court for determination as to whether a takings had occurred. The lower court reviewed three factors for deciding what is considered to be a takings claim. The factors studied were: 1) the economic impacts of the regulations, 2) the regulations' impacts to the landowner's investment backed expectations, and 3) the character purpose of the regulations. The case was settled and therefore no decision was made. Ms. Fitzsimmons stated that there has not yet been a case which had ruled that a takings had happened, therefore the District is reviewing terminology that the courts used to amend the District's rules and regulations in order to better protect the District from those claims.

There being no further questions from the Board, President Tramm opened the floor to public questions and comments.

The committee heard Mike Thornhill, Thornhill & Associates. Mr. Thornhill stated that he agreed with Dr. Mace's statement regarding TERS and his reference that storage is irrelevant when it comes to artesian pressure and subsidence. He continued that if that statement is true then recharge as a basis for sustainability of an aquifer within a county boundary is also completely irrelevant. Mr. Thornhill reminded the Board that its whole basis for regulation since 2003 is 64,000 acre-feet of sustainable production based on recharge within the county boundaries. He summarized that statement by repeating that the whole basis of regulation is irrelevant. He continued that this basis of regulation was entered into our DFC, and 64,000 acre-feet was then put into the GAM even though the 64,000 acre-feet was derived well before DFCs were created. Mr. Mullican intervened and stated that there were management goals that were adopted throughout the state before the legislature created the DFC process and that 64,000 acre-feet is a management goal and that it transitioned from a management goal to a DFC. Mr.

Thornhill stated that it is a scientifically irrelevant management goal. He asked that the Board consider this fact in all they do. He then admonished the Board to pay attention to the process, pay attention to what is going on, know the details, know the science, and know the truth as it moves forward. Mr. Wood questioned Mr. Thornhill as to whether he was stating that the Board did not know the truth and was not paying attention, to which Mr. Thornhill stated that he was asking the Board to continue to pay attention.

Next Luine Hancock, Senator Nichols office, asked Mr. Seifert when he would be taking public input and how. Mr. Seifert stated that at any of the progress meetings, the opportunity for public input would be allowed and also when there was a draft report made available. Mr. Seifert clarified that draft reports would be made available to the public by way of the District's website, at which time they could review the draft and either comment in writing or speak at a draft review meeting that may be held. Ms. Hancock stated that the public input process was very important and she hoped the Board would encourage an open forum similar to today's workshop.

The Board then heard Mr. Byron Bevers, City of Shenandoah, who stated that it would be very helpful for a draft explanatory report, which Mr. Mullican discussed in the DFC process, to be made available to the public before the 90-day comment period so it can be reviewed by the public. Mr. Mullican explained that the statute states that everything goes before the District for the District to consider before the explanatory report is written, thus the explanatory report is incomplete until comments from the District and District Board are received. Mr. Mullican clarified that there will be a draft explanatory report written but the explanatory report itself will not be complete until comments are received and all documents are received from all Districts in GMA 14, which will not happen until after the 90-day comment period has closed for everyone. Director Weisinger asked that Mr. Mullican get with District staff on a list of milestones for the process in order for the District to be prepared and know when the "pre-draft" explanatory report needs to be ready for public distribution. Mr. Bevers next question was pertaining to the current DFCs and the proposed DFCs for the Jasper aquifer in Montgomery County found in Mr. Mullican's presentation. He stated that the current DFCs compare 2016 data and show an increase in artesian water levels and the proposed DFCs compare 2009 data and show a decrease in artesian water levels. He stated that the variance has a different basis and is misleading. Mr. Mullican replied that it is based on two different models and time periods and clarified that it was not an apples-to-apples comparison.

Next Mr. Gary Dent stated that he was pleased with the workshop and praised the presenters on the great information presented. He asked if the presentations would be or could be made available for the public. Ms. Jones stated that the presentations would be made available on the District's website.

Mr. Mike Massey, Lake Conroe Community Network, asked for clarification as to whether the presentations would be made available to the public, to which President Tramm stated that they would be. Mr. Massey also agreed with Mr. Bevers that he would like to see the pre-draft explanatory report and anything that the Board will be voting on regarding the DFCs, before the voting takes place for public review. President Tramm stated that the District will present its portion of the data to the public.

Director Bleyl asked Mr. Mullican if he had an idea as to when the Board will meet to take action on the DFCs. Mr. Mullican stated that the GMA is considering rescheduling a meeting for later in May to vote on the 2016 DFCs. Ms. Fitzsimmons stated that the Board will work through Ms. Jones to cast their vote on the DFCs. Ms. Jones then asked for clarification as to whether or not there was still time to change the DFCs for the current round of regional planning and Mr. Mullican confirmed that there was not time to change the DFCs for the current regional water plan. He further explained that as Dr. Mace has stated, a change today would mean they wouldn't have the MAGs for another year and the region water plan has to be approved in May. Therefore, the study currently being performed by LBG-Guyton will be used for the next round of regional planning and GMA 14 effort for 2020. It was further explained by Ms. Fitzsimmons that in order for a new DFC to be considered it would need to be submitted in writing with a request for the GMA to review and consider it. District Consultant, Mark Lowry stated that it was important to note that the GMA process and the regional planning process are out of sync because the five-year period starts when the new plan starts but in reality there is only two years to decide on the DFC because at the end of the planning cycle in 2019 the Districts must have their groundwater availability information ready in order for the regional planning committee to incorporate the numbers into the next plan. He added that currently the District is perfectly positioned with the LBG-Guyton study anticipated to be completed in 2017 and the District will have the building blocks needed to ensure the updated data is included in the regional plan. He continued that it is also important to remember that there are four other GCDs that vote and they have a say, therefore there is always a possibility that Lone Star GCD's vote, whatever it may be, can be overruled.

Lastly, the Board heard from Lance Stahl, HMW SUD, who requested clarification that Mr. Afinowicz and Mr. Seifert's presentations would be made available on the website. Ms. Jones confirmed that all of the presentations would be made available.

There being no further questions from the committee or the public, the meeting was adjourned at 4:55 p.m.

PASSED, APPROVED, AND ADOPTED THIS 14th DAY OF APRIL, 2015.



M. Scott Weisinger, PG, Board Secretary



Findings and Review Committee Workshop

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