

MINUTES

*CAPITAL AREA GROUND WATER
CONSERVATION COMMISSION*

March 15, 2016

The Capital Area Ground Water Conservation Commission met at 9:30 a.m. on March 15, 2016 in the U.S. Geological Survey's auditorium at 3535 S. Sherwood Forest Blvd., Suite 120, Baton Rouge, Louisiana. The meeting was called to order by the Chairman, Mr. John Jennings.

The following members were present: Dale Aucoin, Barry Huggins, John Jennings, Amelia Kent, Jeff Miller, Nelson Morvant, Matthew Reonas, Thomas Stephens, Dan Tomaszewski, and John Westra.

Others attending the meeting were: Anthony Duplechin and Shawn Scallan, Capital Area Ground Water Conservation District; Dennis McGehee, Baton Rouge Water Company; Todd Talbot and Lana Venable, ExxonMobil; Duncan Kemp, Louisiana Attorney General's Office; Roy Waggenpack, Owen & White; John Lovelace and Scott Gain, U.S. Geological Survey; William Fontenot, Sierra Club and Mark Walton, former Commissioner.

Mr. Huggins made a motion that the minutes of the December 8, 2015 meeting be approved. Mr. Aucoin seconded this motion and it passed unanimously.

I. Report from the Administrative Committee

At the request of the Chairman, John Jennings, Dr. Westra reported on the meeting that was held March 15, 2016 at 8:30 a.m. Following is a summary of items discussed at the meeting and further discussion and action at the regular Commission meeting at 9:30 a.m.

1. Copies of the Financial Conditions as of February 29, 2016 were distributed for review and comment. Dr. Westra stated that the large balance in the savings account was due to not renewing one of the Commission's certificate of deposits in December. These funds were deposited into the savings account for upcoming scavenger well expenses.

2. Dr. Westra stated that the Commission needs to discuss the recommendation from the ad-hoc group to add expenses of \$44,100 associated with Phase I saltwater remediation. This involves two wells located at Lafayette Street and Convention Street. Ms. Kent made a motion to add the \$44,100 for saltwater remediation to the current budget for fiscal year 2015-2016. Mr. Huggins seconded that motion and it passed unanimously.

3. Copies of the proposed budget for fiscal year 2016-2017 were distributed for review. Included in the budget is a salary increase for the Administrative Assistant. It was also recommended that \$500 be added for legal fees. Remediation costs were budgeted at \$250,000. Mr. Aucoin questioned Mr. Reonas about any future changes for the brochure that was done for educational outreach. Mr. Reonas stated that Mr. Miller mentioned doing a scaled down version of the brochure more like the size of a flyer. He also stated that Ms. Kent mentioned doing a brochure focused on saltwater intrusion. Mr. Jennings recommended that \$5,000 be included for educational outreach for the 2016-2017 budget. Dr. Westra stated that because expenses will exceed \$500,000 for fiscal year 2016-2017, the Commission will be required to hold a public hearing in order to adopt it. The hearing will be held at 8:30 a.m. on June 21, 2016 at the District

office. The budget will be approved at the June 2016 meeting.

4. The administrative committee discussed the formal communications plan. After discussion, the administrative committee recommended on item 5, the heading read "Communications with Elected or Appointed Officials, News Media, Etc.". They also recommended that in item 5 an additional message be inserted to state, "All communication involving CAGWCC business, including but not limited to communication between Commissioners, and shall be copied to the Director and staff of CAGWCC." Dr. Westra stated that it is incumbent upon all Commissioners to keep the Director and staff apprised of communication between members and other offices. Mr. Reonas stated that he did not like the addition at all. Mr. Reonas stated that he feels like he can contact his fellow Commissioners in his capacity as a Commissioner without the need to copy the Director unless it is involving policy matters. Mr. Reonas stated that the concern of the communications document at the December meeting was making sure the Commissioners had discretion whether or not to contact the Director or Chairman of any communications they have had. Therefore, the wording "at their discretion" was added many times throughout the document. For example in item 5, line 2, "Commissioners shall direct, at their discretion, particular inquires..." Mr. Reonas stated that if he is contacting a fellow Commissioner on business that he feels is important to discuss with them, he stated that he will not copy the Director in this situation. He stated that unless it involves the Director on a specific policy question then he feels no need to include the Director. Mr. Reonas stated that this is not a requirement of him at the Office of Conservation. Ms. Kent stated that the thinking behind this addition to the document was to make sure that the staff was aware of any communication regarding CAGWCC business. Ms. Kent stated that in the past the staff has been put on the spot by not being made aware of certain actions of the Commissioners. Mr. Reonas asked for an example. The Director stated that there had been instances in the past where Commissioners have met with the Office of Conservation to discuss Commission business and the District staff was not made aware of this. Mr. Fontenot commented that the two laws that would aid the Commission in dealing with this situation are the Open Meetings and Public Records. He suggested that the Commission ask for the assistance of the Attorney General's office. Mr. Reonas stated that this issue was not about the two laws mentioned but more about how the Commissioners communicate with the staff. Mr. Reonas stated that after reviewing the document in December, he sent out the edited version in early December and asked for comments by the end of January so that a vote could be taken at this meeting. After discussion, Dr. Westra made a motion to add the word "Etc." in the heading of line 5 and the add the following sentence at the end of item 5, "All communication involving CAGWCC business, including but not limited to relevant conversation between Commissioners, ought to be copied to the Director and staff of CAGWCC". Mr. Huggins seconded this motion and it passed unanimously. Mr. Jennings made a motion to approve the formal communications plan. Ms. Kent seconded it and it passed unanimously.

II. Report from the Technical Committee

At the request of Mr. Jennings, the report of the Technical Committee was made by Director, Anthony Duplechin and minutes of the meetings were distributed (attached). Following is a summary of topics discussed at the meeting on March 8, 2016 further discussion and action at the regular Commission meeting on March 15, 2016.

1. Dr. Frank Tsai, Ph.D., P.E., Director of the Louisiana Water Resources Research Institute and Associate Professor with the Department of Civil and Environmental Engineering at Louisiana State University in Baton Rouge gave an update on the Louisiana Board of Regents Project titled “Conjunctive Management of Baton Rouge Multi-Aquifer System for Saltwater Intrusion Mitigation” (June 1, 2015 – May 31, 2018). Support for this project is from Louisiana Board of Regents (73%) and CAGWCC, ExxonMobil, and Georgia Pacific (27%). The Project was started because of saltwater intrusion in the 1,500-foot and the 2,000-foot sand. The approach in the project is to use several hydraulic controls in managing the withdrawals from the two sands, looking at freshwater injection via connector wells and installation of saltwater scavenger wells. Work has been progressing to build a model which can be used as a measurement tool for specific scenarios that the Commission might like to do. There are 161 pumping wells in the study area, which is bisected by the Baton Rouge Fault and the Tepestate (Denham Springs – Scotlandville) Fault. Three-dimensional models have been developed of the geological structure and used to make a 162-layer groundwater model (MODFLOW) from the Mississippi River Alluvial Aquifer down to the 2,400-foot sand.

The goal is to develop a decision support system:

- Based on Excel-based model
- Allow Commissioners to setup scenarios and run the model
- Visualize results at USGS observation wells, pumping wells, and selected locations/depths.

2. Commissioner Aucoin gave an update on the work that the ad-hoc group had done over the past several months looking at possible locations for an exploratory well or wells to help identify possible location for saltwater scavenger well(s) in the 2,000-foot sand. Former Commissioner McGehee explained that the group has decided to sample two existing water wells owned by Baton Rouge Water Company (commonly referred to as the Lafayette Street well 15 (EB-630) and the Convention Street well 2 (EB-1250)). A cost estimate was solicited from Layne Christensen. The total cost per well is \$22,050, or \$44,100 for both. Work performed for each well would include:

- Mobilize Layne Pump Service Rig, Forman and Crew.
- Pull vertical turbine bowl assembly.
- Set temporary submersible pumping equipment.
- Mobilize Logger with fluid conductivity tool/gamma log; energize pump; measure production at surface with orifice while flowing to waste; record data while raising logging tool past lower and upper screen; de-energize submersible pump; pull fluid connectivity/ gamma logging tool out of well:
- Lower Spinner Log in well to bottom of lower screen; energize pump; pull Spinner Log up-hole to record production of bottom screen; de-energize pump; pull tool to bottom of

upper screen. Run spinner along full length of upper screen to confirm production. Pull spinner log and submersible pump from well.

- Re-install BRWC pumping equipment in well; chlorinate well; return well to service following clear health sample.

Associated activities include:

- Generator Rental; 460 Volt 3-Phase; both wells;
- Furnish Discreet Sampler and Logger; to collect samples from screen
- Hydrologist's Evaluation.

Mr. Reonas commented that the reason for this sampling to help with where an observation well or two would need to be drilled in the "2,000-foot" sand. By this process, a location for the scavenger well would be narrowed down. He stated the Commission would enter into a contract with Layne Christensen to sample two existing Baton Rouge Water Company wells. The Director added that this is not a study rather this is phase one of saltwater remediation by the Commission. Commissioner Reonas made a motion to recommend the sampling the Lafayette and Convention wells for a total of \$44,100. Mr. Aucoin seconded this motion and it passed unanimously. The work is anticipated to begin as early as March 18th and take some two weeks per well to complete.

3. Former Commissioner Walton gave an update on annual pumpage from the "1,500-foot" sand and "2,000-foot" sand. Pumpage in each was below mandated limits. There was some question about having plugged and abandoned wells on the list. Those will be removed.

4. John Lovelace gave a progress report on USGS' Baton Rouge Area groundwater model.

OBJECTIVE: To develop a computer model that can be used as a tool to simulate past, current, and possible future conditions in Baton Rouge area sands.

PROGRESS AND SIGNIFICANT FINDINGS:

- Additional adjustments are being made to the revised model layers. Initial model runs using the revised model layers indicated that the screened intervals of several pumping wells in the model did not completely align with the designated aquifer layers in the model. In some cases, well screens largely fell within layers designated as confining units, resulting in model errors. The tops and bottoms of screened intervals from wells in the model area are now being compared with top and bottoms of model layers representing aquifers and new control points are being added to the structural model as needed. As these new control points are added to the structural dataset and the individual surfaces are recreated, new areas of overlapping layers result and, as before, additional "dummy points" are added to mitigate the problem. Therefore, an iterative process of additions and refinements is being used to adjust the model layers. Also, because of lenticular nature of the sand beds and the complexity of the system, there are areas where different aquifer codes have apparently been assigned to the same sand. These areas further complicate the use of the screen data to adjust model layers.
- Adjustments were also made to the updated multi-node well (MNW) file, which is used to represent pumping wells in the model. When the MNW file was revised with new model cell assignments corresponding to the new model grid, and updated to incorporate 2013-14 pumpage data, a new program was written to create the file, which includes well location and screen interval data for each well as well as historical pumpage. The new program initially incorporated data from a larger population of wells, many of which were outside of the model grid or in the top model layer, and were subsequently

identified and removed from the model. Other minor issues also were addressed. The new MNW file includes data for 678 wells, 42 more wells than in the previous version.

- Work began on a program to update and format the file of water-level observations used to calibrate the model. The head observations (HOB) file previously used in the model included about 4,900 water-level observations collected from 164 wells in the model area between 1994 and 2012. The wells were selected based on the length of the period of record and number of water-level measurements that had been made. However, many measurements are available for additional wells in the study area. As the new HOB file is constructed, these additional data will be evaluated for inclusion. The use of additional observation data would be expected to strengthen the model calibration. The new file will also include data through 2014.
- Abstracts for presentations of the model results were submitted to 2 local conferences, including the Data Flow conference, on May 9-10, and the Louisiana Groundwater, Surface Water, and Water Resources Symposium, on March 24-25.

PLANS FOR NEXT QUARTER:

- Complete adjustments to the tops and bottoms of model layers.
- Complete revisions and updates to the head observation (HOB) file.
- Update the chloride observations file used to calibrate the saltwater transport model.
- Create water-level surfaces of the upper-most aquifers in the model area for 2009 and 2014 to represent specified heads for the upper layer of the model. Potentiometric maps of the “400-foot” sand and upland terrace aquifer from 2009 and 2014 will be enhanced and extended using water-level data from the Mississippi River alluvial aquifer and other near-surface aquifers in the model area to create water-level surfaces extending across the entire model area. The resulting surfaces will be incorporated into the model as specified heads for the upper layer.
- Begin calibrating the model for flow and saltwater transport in the “2,400-foot” and “2,800-foot” sands.

5. Director Duplechin wrapped up the meeting by informing the Committee of several bills introduced for the 2016 Regular Session:

HB 553 by Representative Marcelle - Designates East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana, and Pointe Coupee as a critical ground water area of concern and provides for certain governing bodies and ground water use in critical areas.

HB 526 by Representative Carter - Requires permitting of industrial users that withdraw greater than 100,000 gallons per day (by Office of Conservation)

HB 528y Representative Carter - Prohibits the withdrawal of water from a natural and scenic river or ground water for the purpose of hydraulic fracturing.

The Director will follow these bills through the Legislative process and attend Committee hearings when appropriate to provide information.

III. Director's Report

Director Duplechin stated that the Commission had a public hearing at the end of December to increase water well pumpage fees in the District from \$5.00 per million gallons to \$10.00 per million gallons. Nine people attended the hearing. Comments were given by five individuals including: Office of Conservation. Green Army, Mr. Hays Town, and two comments submitted by LEAN. Reports were submitted to the Senate and House Oversight Committees including those comments. There was no feedback from either committee. The rule was then

delivered to the Louisiana Register. The official rule will be published in the Louisiana Register on March 20, 2016.

The Director helped coordinate ad hoc group meetings. He met with Mr. Duncan Kemp who is the Commission's new liaison with the Attorney General's Office. Mr. Kemp replaced Ms. Megan Terrell. The Director stated that he will be making a presentation at the Ground Water Symposium at LSU dealing with the saltwater intrusion. He attended the Ground Water Management District's Association meeting in January.

IV. Chairman's Report

Mr. Jennings stated that he is happy that the Commission is moving into the actual work phase of saltwater encroachment.

V. Other Business

Mr. Reonas inquired as to whether the Commission wanted to discuss House Bill 553 and the Commission's position on it. HB 553 designates East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana, and Pointe Coupee as a critical ground water area of concern and provides for certain governing bodies and ground water use in critical areas. Mr. Duplechin asked Mr. Reonas to clarify that area of ground water of concern and critical ground water area of concern is an Office of Conservation designation and that the Capital Area Ground Water Conservation Commission does not determine that. Mr. Reonas stated the Office of Conservation must take a neutral stance on bills. Mr. Duplechin stated that the bill deals with two things. First, it states that five parishes, East Baton Rouge, West Baton Rouge, East Feliciana, West Feliciana, and Pointe Coupee would be designated as an area of groundwater concern and a critical area of ground water concern. Second, it deals with the Commission's membership. It states that "(1) no person shall be eligible to serve as a member of the governing body of the political subdivision if either of the following apply: (2) that person has a conflict of interest as provided by R.S. 42:11-1 et seq., (b) that person is employed by, has an ownership interest in, or is a consultant of a private entity that produces or uses ground water in the jurisdiction of the governing body for any beneficial use, in excess of fifty thousand gallons for any day during any calendar year from a well or wells owned or operated by such entity or from a well or wells owned or operated for the production of water used by such entity." Mr. Reonas stated that if this bill passes it would change the makeup of the board. Mr. Reonas urged the Commission to be attentive to this bill and prepare talking points to present to the committee when the bill comes up in legislature. Mr. Duplechin stated that there is a process currently in place to study aquifers and to determine if the aquifer is an area of concern or an area of critical concern. The Director stated that he did extend an invite to Representative Marcelle and members of her staff to attend the meeting today. Mr. Aucoin suggested that the Director along with the Executive Committee reach out to Representative Marcelle and try to meet with her. Mr. Duplechin asked all Commissioners to send their comments concerning the bill. Mr. Reonas

questioned as to whether this violate the Open Meetings Law. Mr. Kemp replied that this request does not violate that law.

V. Public Comment

Mr. Walton commented that the Director cannot make a stand on House Bill 553 that he can only testify for information purposes. Mr. Duplechin stated that he personally feels it is the regulated communities place to have a position on the bill. Mr. Walton asked what card the Director will hand in at the committee hearing. Mr. Duplechin stated a white card.

Mr. Duplechin stated that he hopes with the new administration that things will clear up between the Commission and the Office of Conservation. He stated that the Commission is required to work by statue with the Commissioner of Conservation not for the Commissioner of Conservation. He stated that there were many comments made last year at the Committee hearing that Commissioner Welsh should do this and that. He stated that the Office of Conservation and the Commission were getting mixed up and overlapped. Mr. Duplechin stated that he has already mailed the Commission's new brochure to both Senate and House Natural Resources Committees. Mr. Jennings made a motion to modify the agenda and to authorize the Director to make a presentation the House Natural & Environment and Senate Natural Resources Committee prior to the bill being presented. Mr. Huggins seconded that motion and it passed unanimously. Mr. Morvant made a motion directing Mr. Duplechin to give that presentation. Ms. Kent seconded the motion and it passed unanimously.

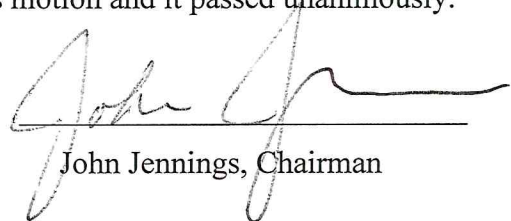
Mr. McGehee commented that the Director needs to contact Layne to get the contract signed and the work scheduled for the sampling of the wells.

VI. Next Meeting

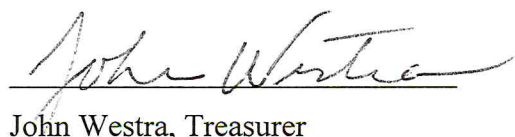
The Chairman reported that the next regular Commission meeting of the Capital Area Ground Water Conservation Commission will be scheduled on Tuesday, June 21, 2016 at 9:30 a.m. in the U.S. Geological Survey's auditorium. The next Technical Committee meeting will be Tuesday, June 14, 2016 at 1:30 p.m.

VII. Adjournment

There being no further business before the Commission, Mr. Huggins made a motion that the meeting be adjourned. Mr. Morvant seconded this motion and it passed unanimously.



John Jennings, Chairman



John Westra, Treasurer

The entire audio recording of this meeting is available for review upon request.