

*MINUTES*

***CAPITAL AREA GROUND WATER  
CONSERVATION COMMISSION***

*September 20, 2016*

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The Capital Area Ground Water Conservation Commission met at 9:30 a.m. on September 20, 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 Acting Chairman, Mr. Barry Huggins.

The following members were present: Ronnie Albritton, Dale Aucoin, Johan Forsman, Barry Huggins, John Jennings, 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; Eugene Owen and Dennis McGehee, Baton Rouge Water Company; Todd Talbot, ExxonMobil; Roy Waggenpack, Owen & White Engineers; Joey Hebert, Georgia-Pacific; John Lovelace and Max Lindaman, U.S. Geological Survey; Harry Vorhoff, Louisiana Attorney General's Office; Frank Tsai, LSU; Amy Wold, The Advocate; Bruce Duhe, Layne Christensen; and Mark Walton, former Commissioner.

Mr. Jennings made a motion that the minutes of the June 28, 2016 meeting be approved. Mr. Morvant seconded this motion and it passed unanimously.

**I. Report from the Administrative Committee**

At the request of the Acting Chairman, Barry Huggins, Dr. Westra reported on the meeting that was held September 20, 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 on September 20, 2016 at 9:30 a.m.

1. Copies of the Financial Conditions as of August 31, 2016 were distributed for review and comment. Mr. Aucoin made a motion that the certificate of deposit that matured on September 20, 2016 not be renewed and transferred into the Commission's savings account due to the anticipation of needed funds for the drilling of a test well. Mr. Morvant seconded this motion and it passed unanimously.

2. Dr. Tsai made a presentation on a new Board of Regents proposal titled "Development An Integrated Framework For Managing Sole Source Aquifer, Southeastern Louisiana". The study area would be the Southern Hills regional aquifer system with a focus on Capital Area. Dr. Tsai requested funding from the Commission for this project. The concerns are groundwater depletion, saltwater intrusion and land subsidence. The goal of this project is to develop an integrated framework that couples surface water and groundwater systems to address future groundwater sustainability and resilience. The expected outcomes for this project are stratigraphy for the Southern Hills Aquifer, groundwater water budget for the Southern Hills Aquifers, information of groundwater availability and recommend strategies to manager ground water depletion, saltwater intrusion and land subsidence. The project length is three years, 2017-2020. Dr. Tsai stated that he is seeking a cost match of \$60,000 (\$20,000 per year) from the Commission and industrial partners. Mr. Aucoin asked from the Board of Regent's stand point

does industrial include public water suppliers. Dr. Tsai replied that yes the term industrial partners does include private companies. Dr. Tsai stated that the deadline for the proposal and cost match letters is October 31, 2016; therefore, he would need letters of support by October 21, 2016. Proposal recommendations would be decided by April 2017 with project execution on June 1, 2017. Dr. Westra made a motion to support Dr. Tsai's Board of Regents proposal up to the \$20,000 per year for three years minus any support from industry and private companies along with a letter of support for the project. Mr. Tomaszewski seconded this motion. Mr. Aucoin commented that a meeting was held on September 19 with industrial users to hear Dr. Tsai's project proposal. The industrial representatives were asked to speak with their management about contributing financially to this project. Mr. Aucoin is hoping to have some feedback by the end of the week. The motion passed unanimously.

Dr. Tsai gave an update on the project "Conjunctive Management of Baton Rouge Multi-Aquifer System for Saltwater Intrusion Mitigation". The following progress has been done:

- Completed a Baton Rouge groundwater model including "400-foot" sand and "2,800-foot" sand
- Presented results to USACE ERCDC and 2016 SSCET Conference
- Technical manuscript was submitted for publication and is currently under revision
- Completed estimation of flow rate across the Baton Rouge fault
- Completed estimation of groundwater storage changes w.r.t 1975
- Working on a saltwater intrusion model
- Working on saltwater intrusion mitigation methods using hydraulic controls

## **II. Report from the Technical Committee**

The report of the Technical Committee was made by Johan Forsman. Minutes of the meeting were distributed (attached). Following is a summary of topics discussed at the meeting on September 13, 2016 further discussion and action at the regular Commission meeting on September 20, 2016.

1. Commissioner Reonas gave an overview of the duties and responsibilities of the Office of Conservation with respect to groundwater management.

- Commissioner of Conservation
  - a. Responsible for "administration of all matters relating to the State's groundwater resources."
  - b. Make any reasonable rules and regulations necessary
  - c. Prevent waste water resources
  - d. Prevent water level decline, saltwater movement, water level decline and subsidence
  - e. Require registration of all new water wells
  - f. Determine areas of groundwater concern and designate critical areas of groundwater concern
  - g. Collect groundwater data
  - h. Continue development of a statewide groundwater management plan.
  - i. Issue compliance orders and issue civil penalties
- Sustainability of water resources, many definitions going back several decades.

DNR's definition is:

“... the development and use of ground water in a manner that can be maintained for the present and future time without causing unacceptable environmental, economic, social or health consequences.”

- Addressed Sparta Commission questions of why hasn't Southern Hills been designated as a, "Area of Groundwater Concern."
- In addition to normal duties staff serves the Water Resources Commission and Water Resources Advisory Task Force, license drillers and handle research matters.
- Spoke on overlap of CAGWCC and DNR overlap.
- Gave an overview of DNR's prior notification requirements.
- Short discussion of creation of other conservation districts based on the general location of Louisiana's aquifers.

2. Commissioner Aucoin gave an update on work that the ad-hoc group has been doing.

- The Ad hoc Group met several times during 3<sup>rd</sup> quarter, 2016
- Main topic of discussion was location of a test well. The test well is necessary to determine chloride levels, degree of stratification between fresh and salt water, sand thickness and verification of previous modeling efforts
- Funding of test wells will be from the recent 2016 pumping fee increase
- The ad hoc group with support from John Lovelace of USGS, Dr. Frank Tsai of LSU's school of engineering and input from Layne Drilling is being used to identify promising test well locations. We have verbally secured one location for the first test well. However, two other sites further northwest are being considered. Securing properties for these potential well locations is under discussion.

It was then discussed that in accordance with the Commission's management plan, the next step is to identify future locations of scavenger wells. Mr. Aucoin stated that presently there is not enough data available to know exactly where to place a scavenger well; therefore, test wells will need to be drilled. Mr. Tomaszewski stated that he wanted to be able to write a formal proposal addressing the proposed location of the well. Mr. Tomaszewski agreed to write a draft and have it ready for review by the ad-hoc group within the next month. It will then be presented to the board members at their December meeting. Mr. Owen wanted to share a problem that Baton Rouge Water Company encountered with the Progress Park well with respect to the ownership of the land. He stated that BREC ruled that they could not allow the test well to be pumped because the funds were in part due to a federal grant. Mr. Owen stated that it may be different for a public entity, but wanted to alert the Commission of this potential problem. Mr. Aucoin stated that along with the formal proposal that the ad hoc group will prepare bid specifications for the test well to be presented at the next meeting.

3. Mr. 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.

4. John Lovelace gave a report on the progress of the USGS' Baton Round Area groundwater model.

#### PROGRESS AND SIGNIFICANT FINDINGS:

- A preliminary calibration of the constant-density MODFLOW model to 54,013 water levels measured in 811 wells between 1905 and 2016 estimated hydraulic conductivity, storage, and fault-conductance parameters for initial use in the variable density SEAWAT flow and transport simulation.
- A chloride observations file used to calibrate the saltwater transport model was updated with data collected through 2015.
- SEAWAT was used to simulate saltwater transport within the 1500-ft, 2400-ft, and 2800-ft sands. Simulated concentrations were compared with measured concentrations at wells within those sands for preliminary calibration of aquifer dispersivities, effective porosities, and refinement of the simulated hydraulic conductance in different portions of the Baton Rouge fault.

#### PLANS FOR NEXT QUARTER:

- A website depicting the hydrogeologic framework data will be created that enables users to query aquifer and confining-unit thicknesses at arbitrary locations within the model domain. Vertical hydrogeologic cross sections between selected locations can also be created and viewed.
- Water-level surfaces of the upper-most aquifers in the model area for 2009 and 2014 will be created 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 that include the entire model area. The resulting surfaces will be incorporated into the model as specified heads for the upper layer.
- Calibration of transport-model parameters to chloride observations in the "1,500-foot", "2,400-foot" and "2,800-foot" sands will continue.

### **III. Director's Report**

The Director reported that he participated in a meeting of the Louisiana Water Resources Commission, of which he is a member. Mr. Duplechin also attended a meeting on water use in the Capital Area which was arranged by the Louisiana Mid Continent Oil & Gas Association. Presentations were given by ExxonMobil and Georgia Pacific. The Director arranged meetings for the ad hoc group. He spoke with Todd Dunmeyer with the Louisiana Department of Transportation and Development about the proposed locations for the test well. Mr. Duplechin attended the Capital Region Planning Commission meeting with Commissioner Huggins. He also met with the industrial users and gave a presentation on the work of the Commission. Mr. Duplechin stated that he attended former director George Cardwell's funeral service in New Orleans. The Director reported that he attended the Ground Water Management District's Association (GMDA) annual conference. Mr. Duplechin gave a presentation at the conference on the District's efforts to address saltwater encroachment in the "2,000-foot" sand. Mr. Reonas requested that a copy of the Director's presentation be emailed to the Commissioners.

#### **IV. Chairman's Report**

Mr. Huggins reported that he attended the Capital Region Planning Commission meeting with the Director. Mr. Huggins stated that Commissioner Rosemary Rummler has not been in attendance to the Commission meetings in some time. They met with Cornell Dukes who is the Pointe Coupee Parish Police Jury Chairman. Mr. Dukes stated that he will address this problem of Ms. Rummler's attendance. Mr. Huggins reported that they met with Jamie Setze who is the director of the Capital Region Planning Commission and explained to him the works of the Commission concerning saltwater encroachment. Mr. Setze stated that they will do all they can to support finding locations for test wells and scavenger wells.

Mr. Huggins presented John Jennings with a plaque of appreciation for serving as chairman of the Commission, 2015-2016. Mr. Huggins then presented the 2016 Leo Bankston Award to Baton Rouge Water Company. Mr. Huggins then read the following inscription on the plaque, "In recognition of the innovative use of technology in groundwater protection and/or conservation. In particular, the commission is recognizing the work of Baton Rouge Water Company in the planning, design, and installation of the "scavenger" well system in the 1500-foot sand of the Baton Rouge Aquifer System intended to protect the large public supply center at the Lula Street Pumping Station from further saltwater encroachment". Mr. Gene Owen and Mr. Dennis McGehee accepted the award.

#### **V. Other Business**

Mr. Jennings reported on the 2017 officers. He stated that the Nominating Committee recommended Mr. Barry Huggins for the office of Chairman; Mr. Nelson Morvant for the office of Vice-Chairman; and Mr. Tom Stephens for the office of Treasurer. There being no further nominees from the floor, Mr. Jennings made a motion to accept the nominees. Mr. Aucoin seconded the motion and it passed unanimously.

Mr. Huggins stated that Mr. Dan Tomaszewski's term as board nominee will expire December 1, 2016. Mr. Tomaszewski stated that he is not interested in seeking another term. Mr. Tomaszewski stated that he prefers to help the Commission with technical issues and is willing to serve on committees. He stated that he would continue to serve if needed, but would miss meetings. Mr. Reonas stated that he would like to keep Mr. Tomaszewski on board because he has been a real asset to the Commission. After discussion, Mr. Huggins requested that the nominating committee make a recommendation for a board nominee at the December meeting. Mr. Jennings requested that board members send any recommendations for board nominee to the committee.

Mr. Reonas brought up the water leadership award that was initially discussed at the June 2016 meeting. Mr. Reonas stated that it was discussed at the June meeting as to whether or not a prize could be given. He stated that previous legal counsel, Duncan Kemp, stated that the Commission could not give a prize which is fine with him. He stated that this award would

coincide with the Leo Bankston Award which he perceives as more institutional. He asked if the Commission wanted to pursue this or not. Mr. Reonas then made a motion that the Capital Area Ground Water Conservation Commission create the water leadership award that recognizes an individual that has demonstrated long term exemplary service to conservation of ground water within the District that could be through scientific research, advocacy, education and general service. Dr. Westra seconded the motion. Mr. Tomaszewski asked if the purpose of the award is just to bring light to people who have done great things. Mr. Reonas stated yes and that it is more recognition of individual service as well as public relations for the Commission. Mr. Huggins requested if the motion is adopted if Mr. Reonas would set the criteria for the award. Mr. Reonas agreed. Mr. Jennings stated that there were a few public comments at the June meeting that the Commission is possibly veering off of the purpose and scope of the Commission and that the Commission needs to focus on their duties. Mr. Jennings stated that he is for recognizing people but not sure if the Commission should be seeking out individuals for an award. Mr. Miller asked if the board could see the criteria for this award before voting on it. Mr. Reonas stated that that is not a problem at all. Mr. Reonas tabled his motion until the December 2016 meeting. Mr. Morvant seconded the motion and it passed unanimously.

Mr. Reonas inquired as to when the next GMDA conference will be held. The Director stated in January 2017 in Fort Worth, Texas. Mr. Reonas asked when Louisiana is responsible to host the GMDA conference. Mr. Duplechin stated he thought in two years. Mr. Reonas inquired about the process in selecting a venue. Mr. Duplechin reported that the person in charge of the local committee selects a town and visits that town for prices of hotel rooms and venues along with meal prices. Mr. Reonas asked if the convention is always held in the host state. Mr. Duplechin stated that it is not necessarily held in the host state. Mr. Reonas suggested that the Commission try to host the convention in Baton Rouge that way they can highlight what they are doing. Mr. Reonas stated that he is sure that the Baton Rouge Convention and Visitor's Bureau would be very attentive to our needs in hosting a convention. Mr. Duplechin stated that the last time he helped host the convention that he hosted it in Biloxi, MS.

Mr. Tomaszewski stated that the handout addressing the well testing by Layne Christensen did not include page 7 which is very important. He said that page 7 shows the fluid conductivity log of Lafayette Well-15. The staff will email the Commissioners the complete handout.

## **V. Public Comment**

There was no public comment.

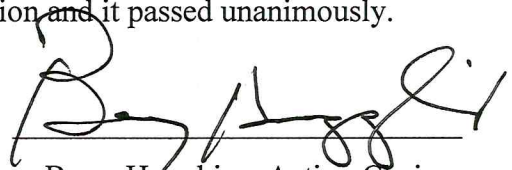
## **VI. Next Meeting**

The Chairman reported that the next regular Commission meeting of the Capital Area Ground Water Conservation Commission will be scheduled on Tuesday, December 13, 2016 at

9:30 a.m... The next Technical Committee meeting will be Tuesday, December 6, 2016 at 1:30 p.m.

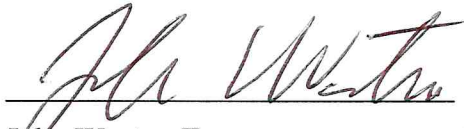
**VII. Adjournment**

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



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Barry Huggins, Acting Chairman



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John Westra, Treasurer