Office of Conservation Evaluation of Report Submitted by the Capital Area Ground Water Conservation District (CAGWCD) in Fulfillment of Act 425 of 2017, November 1, 2017

Overview

This report represents a good faith effort by the CAGWCD to meet its obligations as mandated by Act 425 of 2017. The Office of Conservation has completed an evaluation of the report and recommends certain improvements for the next report, due May 1, 2018. General recommendations are listed below, followed by more specific ones listed with the appropriate reporting item.

- 1. The Office of Conservation recommends that the report be tailored more specifically for the intended audiences outlined in Act 425. Reports such as this should be brief, precise, and edited closely to meet the needs of the oversight authorities, including legislative committees. The goal should be to provide readily accessible information in the form of succinct but sufficient summaries. Large amounts of the information provided in this report easily and more profitably could have been summarized, with the relevant spreadsheets and other data moved into appropriately labeled appendices at the back of the report (or even placed on-line) for those persons desirous of a more detailed review. A good example of such a treatment is the 2012 report to the legislature by the then Ground Water Resources Commission; the printed version featured only the major findings and summaries relevant to specific issues, with an extensive set of appendices located in an on-line location.
- 2. To meet the broad goal identified above, the report should include a short executive summary on important developments in CAGWCD management, operations, and goals that occurred within the reporting period. This should be a concise review of the *most important* matters handled by the CAGWCD board that state legislators, members of water resource management bodies, other decision-makers in state or local government, and the general public ought to know about groundwater management in the district.
- 3. A table of contents (TOC) should be provided at the beginning of the report, clearly identifying what information is provided and on what page.
- 4. The report should be properly paginated (numbered).
- **5.** While hard copies are appreciated—though not required—the report also should be submitted in electronic format for upload and general distribution purposes.

Comments Specific to Individual Reporting Items	
A.	A list showing members and officers of the board of commissioners ("Board") of the Capital Area Ground Water Conservation District ("CAGWCD"), including the bodies that such members represent and any changes in Board membership over the preceding six (6) months.
	The report provides detailed biographies of individual members, including the body or organization represented, employer, background, and years of service on the CAGWCD board. For future reports, a simple list of names and the body/organization represented on a single page is sufficient. The biographies may be included as an appendix if desired or may be indicated as available for review through a website link.
	The report does not provide a list of officers for the commission. This should be included in future reports.
	The report does not identify any changes, if any, in board membership over the previous six months. If none, a simple note to the effect that there were no changes will suffice.
В.	Copies of the agendas and minutes and/or summaries of all Board meetings and any public hearings conducted by the Board, including a list of submissions to the Board, for the preceding $\sin(6)$ months.
	The report includes copies of the agendas and minutes and/or summaries for regular board, committee, and subcommittee meetings as well as public hearings. These are a useful record but may be committed to an appropriately labeled and numbered appendix in future submissions to clean up the flow of the report. Again, the <i>most important</i> matters considered by the CAGWCD board should be identified in the suggested executive summary.
	Once committed to an appendix, the agendas and minutes and/or summaries should be clearly identified in the TOC by date and type of meeting (regular board, committee, subcommittee, or public hearing) for the convenience of the intended audience.
	The report does not include a list of submissions to the commission, if any, over the reporting period. If none, a simple note to that effect will suffice.
C.	A brief summary of the (1) scope, (2) term, and (3) cost of any cooperative agreements and/or contracts, including funding of scientific investigations, entered into by the Board over the preceding six (6) months, such agreements and/or contracts being relative to the study and/or survey of the groundwater resources in the CAGWCD, including:
	1) Recommendations for conservation of groundwater resources within the CAGWCD;

2) Prevention and/or alleviation of damaging/potentially damaging groundwater level drawdowns within the CAGWCD; 3) Prevention and/or alleviation of damaging/potentially damaging land surface subsidence within the CAGWCD; and 4) Prevention and/or alleviation of damaging/potentially damaging groundwater quality degradation, including saltwater encroachment, within the CAGWCD. The report includes information on contracts entered into by the CAGWCD board, although not in the form of brief summaries, which might have been more helpful to the intended audience. Detailed draft contract proposals, executed contracts, budgets, etc., should be placed more properly in an appropriately labeled and numbered appendix. D. A narrative description and status update of actual and projected saltwater intrusion/encroachment within the groundwater systems of the CAGWCD. The report does not include the narrative description and status update. The reason given for not including this information was the assertion that such a narrative description would "only serve to confuse non-technical readers." This statement appears unnecessarily presumptive. Moreover, the decision to then include highly technical US Geological Survey (USGS) modeling reports as a substitute for a more reader-friendly narrative description appears as counter-intuitive.

While the USGS modeling reports for groundwater and chloride flows in the 1200-, 1500-, and 2000-foot sands beneath Baton Rouge contain very useful information (and might have been summarized to good effect), previous scientific studies also have identified saltwater encroachment in at least <u>seven</u> of the sands beneath Baton Rouge. No information is given on the status of saltwater encroachment in these other sands. If no new information is available, that should be stated.

This reporting item contains perhaps some of the most important information for both state policy makers and the general public in forming a complete understanding of the current groundwater management situation in the Baton Rouge area. The CAGWCD board should find a way to communicate this information to such readers in a concise and definite manner, such as through a narrative description and status update as noted.

___E. A narrative description and status update of any actual and projected land surface subsidence within the CAGWCD.

The report does not include a narrative description and status update.

The report did include the conclusions section from a 1978 report along with data collected by the USGS from three sites in Baton Rouge's "industrial district" up to 2015. The CAGWCD board again should consider the intended audience and find a way to communicate this information in a concise and definite manner, particularly if the presumption is that this audience is "non-technical."

F. Copies of updated CAGWCD management plans and/or other strategy documents adopted by the Board relative to the study, mitigation, and/or general management of groundwater resources, saltwater intrusion, and land subsidence within the CAGWCD. After the first report submission, such documents may be submitted once annually at the discretion of the Board.

The report includes updated CAGWCD board planning documents.

G. A narrative summary and scientific analysis (if available) detailing the operational status and effectiveness of any structures installed within the groundwater systems of the CAGWCD to mitigate and/or otherwise manage actual and projected saltwater intrusion/encroachment.

The report includes information on a "connector well" installed by the CAGWCD board in the 1990s but does not provide indications of its effectiveness. If there are no scientific reviews available as to its effectiveness, this should be stated.

The report also includes a description of the Baton Rouge Water Co.'s "scavenger well" along with data on water production in gallons (whether fresh groundwater, brackish groundwater, or both is unclear) and a graph showing chloride levels against groundwater production amounts. For future reports, a narrative summary of this data should be provided along with a review of whether the "scavenger well" project is meeting expectations for effectiveness based on scientific analysis. The data itself may be placed more properly in an appropriately labeled and numbered appendix.

H. A brief summary of the findings of any scientific investigations relative to the study and/or survey of groundwater resources and land subsidence in the CAGWCD released over the preceding six (6) months, such investigations having been funded in whole or in part by the Board. Copies of abstracts and links to full reports on-line are acceptable substitutions.

The report identifies that no such findings have been released over the reporting period.

I. A description of existing groundwater production limits within the CAGWCD as authorized by the Board, identifying (1) the date such limits were adopted, (2) the reason(s) for adoption of such limits, (3) the production limits by aquifer, and (4) the production limits by regulated user. Here and hereinafter, "user" as defined by R.S. 38:3073.

	The report identifies information for sub-items 1), 2), and 3), but does not identify production limits by regulated user (sub-item 4).
J.	A list of existing regulated users within the CAGWCD.
	The report identifies regulated users within the CAGWCD. This is certainly a very useful listing for a non-technical audience.
K.	The total regulated groundwater pumping volume for each regulated user within the CAGWCD over the preceding six (6) months. This list should show for each regulated user: (1) the total regulated groundwater pumping volume; (2) the classification by use (according to CAGWCD statutes and rules) of this pumping volume; (3) the parish location of this regulated groundwater production; and (4) the source, by aquifer(s), of this regulated groundwater production.
	The report provides information on regulated users' total groundwater pumpage, classification of use, pumpage by aquifer, and parish of production.
	However, this information is spread across numerous spreadsheets covering more than 30 pages (front and back); again, the commission should consider the intended audience and find a more concise way to communicate this information in aggregate rather than listing information for every well, and for each quarter. Such exceedingly detailed information as provided in the current report should be considered for inclusion in an appendix, if absolutely necessary, or persons seeking such detailed information <i>on each well</i> may be directed to the CAGWCC website or office.
	Based on the nature of the board's quarterly pumpage recaps, for future reports it would be appropriate to report 2 nd and 3 rd quarter (April-September) recaps on the November 1 report and 4 th and 1 st quarter (October-March) recaps on the May 1 report.
L.	The current charge or fee assessed on regulated groundwater use within the CAGWCD.
	This information is provided.
M.	The total groundwater use assessment (fee) imposed on each regulated user over the preceding six (6) months.
	This information is provided. Based on the nature of the board's quarterly pumpage recaps, for future reports it would be appropriate to report 2 nd and 3 rd quarter (April-September) recaps on the November 1 report and 4 th and 1 st quarter (October-March) recaps on the May 1 report.
N.	A list identifying new wells permitted and/or installed within the CAGWCD according to its statutes and rules over the preceding six (6) months, showing for each new well: (1) its owner; (2) its classification by use; (3) its location by parish;

(4) its location by aquifer; and (5) its actual and/or projected annual groundwater pumping volume.

This information is provided.

O. A list identifying permitted wells plugged and abandoned (P&A) according to CAGWCD statutes and rules over the preceding six (6) months, showing for each P&A well: (1) its owner; (2) its classification by use; (3) its location by parish; (4) its location by aquifer; and (5) its former annual groundwater pumping volume.

It is unclear if accurate information is provided.

The CAGWCD board states that it has "experienced difficulty [in] collecting this information" since the transfer of the state's water well registration program from the Department of Transportation and Development (DOTD) to the Office of Conservation in 2010, i.e., "Where previously there was a free flow of information from DOTD, the Office of Conservation seems to rely on the 'check our website approach."

Agency Response: After consulting with water well compliance staff on the nature and substance of the above assertions, it appears in fact that the Office of Conservation has consistently and efficiently responded to numerous requests from the CAGWCD for information regarding water well registrations, notifications, and plug-and-abandonments. Thus, the agency objects strongly to the characterization that there has not been a "free flow of information" with regards to such data.

It is true that much, if not all, of the relevant data regarding water wells falling under the purview of the CAGWCD is on-line and available by electronic means, ready for public inspection. The Department of Natural Resources' SONRIS system was developed for just such a purpose to provide nearly real-time data to interested parties. Indeed, CAGWCD staff appear to have embraced such technological advances by signing up for regular notice by email on water well installation notifications and evaluations handled by the agency for the five-parish CAGWCD. Certainly, education of CAGWCD staff on available electronic resources does not in any way constitute an adoption of such a casual and ultimately unresponsive "check our website approach" by the agency.

It does appear that in the past, previous administrative authorities provided such information by paper to the CAGWCD. The CAGWCD regulations for water well plug-and-abandonment notifications, found in La. Administrative Code Title 56, Part V, Ch. 3, Sec. 311 (p. 79), read in part that:

"The contractor who plugs an abandoned well or hole after October 1, 1975, shall complete Louisiana Department of Public Works Water Well Abandonment and Plugging Form (LDPW-GW-2) within 30 days after the completion of the work and submit the form (LDPW-GW-2) to the Louisiana Department of Public

Works, who will record and transmit a copy to the commission [CAGWCD board]."

The Office of Conservation will simply note that in its own statutory law and regulations regarding the water well program, there is no reference to a mandate for the agency to transmit copies of water well information of any kind to the CAGWCD. However, the agency will continue to efficiently provide this information, as it has done in the past, upon request, should the convenience of obtaining relevant water well information through the on-line SONRIS system or other electronic means not suit the needs of the CAGWCD.

A review of its rules and regulations does appear to confirm that the CAGWCD board has the authority to collect water well registration, notification, and plug-and-abandonment data in its own right and/or "in conjunction with the commissioner of conservation" (R.S. 38:3076). However, these rules and regulations appear exceedingly out-of-date and in need of comprehensive revision, as references to the Louisiana Department of Public Works (long subsumed within the organization of the DOTD) and other administrative inconsistencies illustrate. The CAGWCD board therefore should consider revising its regulations accordingly to provide for other suitable means to collect and receive this data from its regulated users, water well owners, and/or water well drillers in the district, if so desired, and especially if it is determined that the CAGWCD's timelines for such information, as an entity collecting a groundwater use assessment (or "pumpage fee"), may differ from those established by the Office of Conservation.

P. A summary of any out-of-state groundwater sales from the CAGWCD over the preceding six (6) months, showing: (1) vendor; (2) volumes of groundwater produced and sold; (3) parishes of production; (4) out-of-state entity or entities to which groundwater was sold; and (3) the price paid for this groundwater. The Office of Conservation interprets the intent to be limited to out-of-state groundwater sales for the primary purpose of being a source of water for beneficial use (bulk water) and not to include groundwater utilized within the CAGWCD or the State of Louisiana in the production of manufactured goods for commercial and/or industrial use or sale, such as beverages, solvents, gasoline, or other processed items.

This information is provided; there were no known sales in the reporting period.

Q. A summary of volumes of groundwater pumped from within the CAGWCD during the preceding six (6) months and transported out-of-district as part of a public supply or industrial distribution system. For each regulated user thus engaged, indicate: (1) total volume of groundwater produced for out-of-district distribution; (2) parish of production; and (3) end distribution point, by parish.

This information is provided, excepting information from the Baton Rouge Water Co., which has been subpoenaed according to documents included with the report.

R. A summary of volumes of groundwater used for (1) residential, (2) commercial or industrial, and (3) agricultural purposes within the CAGWCD during the preceding six (6) months. The amounts used for industrial and agricultural purposes may be estimated. For residential volumes, the Office of Conservation will accept numbers generated utilizing standard U.S. Geological Survey formulas for individual consumption.

This information has been provided in a good faith effort to the best of the board's present abilities to collect such data for the first half of 2017.