BEFORE THE DIVISION OF WATER RESOURCES,
KANSAS DEPARTMENT OF AGRICULTURE

In The Matter of	)
the Designation of the Sheridan 6	)12 WATER 8366
Local Enhanced Management Area (LEMA)	)
	)

Order Finding Satisfaction of the Initial Requirements
of the Sheridan 6 Local Enhanced Management Area (LEMA)

On the 13th day of September 2012, the above-captioned matter came on for hearing before the undersigned Hearing Officer, who was delegated to hear this matter by the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture. The hearing, conducted in the courthouse of the District Court of Sheridan County, Kansas, at Hoxie, Kansas, was called to order at 10:35 a.m.

Procedural Background

The Kansas Legislature passed a bill during the 2012 session governing the designation of any Local Enhanced Management Area (LEMA) in Kansas. (S.B. 310; L. 2012, Ch.6, Sec. 1; upon publication to be designated K.S.A. 82a-1041). Pursuant to Section 1(a) of this bill, whenever a groundwater management district recommends the approval of a LEMA plan within its district, the Chief Engineer of the Division of Water Resources, Kansas Department of Agriculture (DWR) shall review the plan. The Chief Engineer's review is limited to five specific criteria, as set forth in the bill. If the Chief Engineer finds the proposed plan meets these five criteria, he or she shall initiate, as soon as practicable, proceedings to designate a LEMA according to the proposed plan.

On July 16, 2012, the Northwest Kansas Groundwater Management District No. 4 (GMD) submitted to the Chief Engineer, David W. Barfield, a plan for a proposed LEMA. In a letter dated August 3, 2012, Mr. Barfield informed Wayne Bossert, Manager of the GMD, that the proposal meets the requirements of Section 1(a) of Senate Bill 310. The letter further stated that Mr. Barfield was, therefore, initiating proceedings to determine whether a LEMA should be designated as proposed, and, to that end, he had designated a hearing officer to conduct an initial public hearing, in accordance with Senate Bill 310.

Notice of Hearing

According to the record, notice of this hearing was provided to water right holders of record in the area by certified mail, and to associated water use correspondents by first class mail. A copy of the Notice of Hearing was published, on August 9, 2012, in the Hoxie Sentinel, a newspaper of general circulation in the area in question, and in the Kansas Register, at least 30 days prior to the date of the hearing.

Applicable Law

Where proceedings to designate a LEMA are initiated, the LEMA bill requires an initial public hearing on the question of designating such an area as a local enhanced management area according to the local enhanced management plan. "The initial public hearing shall resolve the following findings of fact:

(1) Whether one or more of the circumstances specified in subsection (a) through (d) of K.S.A. 82a-1036, and amendments thereto, exist;

(2) whether the public interest of K.S.A. 82a-1020, and amendments thereto, requires that one or more corrective control provisions be adopted; and

(3) whether the geographic boundaries are reasonable." S.B. 310, Section 1(b).

Public Comments Submitted at the Hearing

At the hearing, oral comments were offered as to whether the proposed LEMA plan meets the three statutory criteria whether the plan should be adopted. These comments have all been taken into account in the preparation of this order and the findings herein.

Wayne Bossert, Manager of the Northwest Kansas Groundwater Management District No. 4 (GMD), summarized the plan and submitted oral and written testimony in support of a finding that the three initial criteria are met.

Harold Murphy spoke, and later provided written comments. He expressed support for efforts to slow depletion of groundwater, but he cited concerns about whether the proposed plan's underlying data was uniform and whether the plan's corrective controls were fair (i.e., imposing additional limits on water use in some areas and not others).

Scott Foote, a livestock producer and purchaser of products grown in the proposed LEMA area and elsewhere, spoke in favor of the proposed LEMA. He stated he has 18 wells in the Sheridan 6 area. He would like to see the entire GMD included in such a proposal, but believes this plan is a good start. Mr. Foote stated that the plan would bring economic benefit over the long term, although it would cause economic harm in the short term.

Roch Meier spoke in favor of the plan. He farms in the GMD and wants water to be available for his grandchildren. He stated the question is not *if* the area will run out of water, but *when*.

Brian Baalman spoke in favor of the plan. He is in favor of locally-driven solutions, not "top-down" solutions.

Stuart Beckman spoke in favor of the LEMA plan. He stated that he grew up in the middle of the Sheridan 6 area. He described the water supply as being plentiful in the 1960's and 1970's, but, after years of widespread use of center pivot systems, his wells are down to thirty-to-forty feet of water and he has to re-nozzle his wells at least once each year. He stated that the decline in water supply needs to slow down.

Lane Letourneau, Program Manager for the DWR Water Appropriations Program, spoke in "full support" of the GMD's proposed LEMA plan. He offered DWR's technical support to help the local water users successfully implement their plan.

Public Comments Submitted in Writing Only

Some members of the public submitted written comments addressing the issues at hand. These comments have all been taken into account in the preparation of this order and the findings herein.

Carol Kliewer of Grainfield, Kansas, stated her support for the plan, but voiced concerns about how much water might potentially be needed by oil and gas operations in the area.

Donald Oelke and Kaylene Oelke wrote in support of the plan. They are fourth generation farmers in Sheridan County. They characterized the LEMA plan as "a very workable plan that was designed by those most affected."

Pat Herl of Hoxie, Kansas, a farmer in the GMD area of Sheridan 6, wrote in support of the LEMA plan. He has observed "significant decline in the amount of gallons per minute in all of our wells." He finds the LEMA plan to be a good start, with boundaries that will need to be expanded as the plan progresses.

Grant Gaede wrote in support of the proposed plan, noting that he was "fully in favor" of the plan and in being able to deal with the issues on a local basis.

David Cooper wrote in support of the plan. He noted that he has seen his wells in the area decline from being able to pump 900 to 1200 gallons per minute (in the 1970's) to a rate of only 200 gallons per minute at the present time. He hopes the plan will be extended in the future to encompass the entire GMD area.

DISCUSSION AND FINDINGS OF FACT

The purpose of this hearing, in accordance with the LEMA statute, is to resolve three factual issues:

(1) Whether one or more of the circumstances specified in subsection (a) through (d) of K.S.A. 82a-1036, and amendments thereto, exist;
(2) whether the public interest of K.S.A. 82a-1020, and amendments thereto, requires that one or more corrective control provisions be adopted; and
(3) whether the geographic boundaries are reasonable." S.B. 310, Section 1(b).

(1) Do one of more of the circumstances specified in subsection (a) through (d) of K.S.A. 82a-1036 exist here?

The statute referenced here, K.S.A. 82a-1036, sets forth circumstances necessary for the designation of an Intensive Groundwater Use Control Area (IGUCA). The LEMA statute has incorporated four of those circumstances, as follows:

(a) Groundwater levels in the area in question are declining or have declined excessively; or
(b) the rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such area; or
(c) preventable waste of water is occurring or may occur within the area in question;
(d) unreasonable deterioration of the quality of water is occurring or may occur within the area in question. K.S.A. 82a-1036.

The GMD contends both of the first two circumstances exist here. More specifically, the GMD states that the groundwater withdrawals exceed natural recharge in this area, causing the groundwater levels to decline excessively. In support, the GMD offers data derived from annual water level measurements collected by the Kansas Geological Survey. These measurements are then used in the Kansas Annual Cooperative Water Level Measurement Program. The GMD identified the eight observation wells, among those KGS uses to gather these measurements, that are located within the Sheridan 6 LEMA area and that have sufficient annual water level measurements. The GMD's written testimony contains specific information identifying these eight wells and graphing the changes in water level measurements taken at these wells from 1965 through 2012. As expressed by the graph, the water level for each of these eight wells showed a decline during that period, some as much as 60 to 70 feet. The GMD states, "Only when withdrawals exceed recharge do these kind of negative changes in groundwater levels, and consequently aquifer storage, occur over a long period of time."

One of the public comments questioned the selection of observation wells used to analyze the water level declines, because areas with clusters of wells would suffer a greater decline than areas where wells are spaced farther apart. According to the description provided by the GMD, the specific wells were chosen because they have been used by the Kansas Geological Survey for annual water level data collection, and these wells showed sufficient annual water level measurements. According to Graph 1 in the GMD's written comments, the water level measurements from most of these wells date back as far as the mid-1960's. The decision to use the data from these wells appears to have been based on the data's high level of credibility over time, a reason that adequately justifies the chosen methodology.

The GMD testimony also includes data from the updated computer model used by the Republican River Compact Administration (RRCA). This model was created in cooperation with DWR, the Kansas Water Office and the federal Bureau of Reclamation. This model was designed to predict future trends in water levels in the High Priority Areas within the GMD, based on continued water use consistent with current use. For the Sheridan 6, High Priority Area, the model indicates a clear decline since the year 1948, with one of the most severe declines in water levels between 2005 and 2070.

Most of the public comments, oral and written, personally corroborated the fact that water levels in the area had declined excessively or that withdrawals exceed the rate of recharge.

The two studies cited by the GMD, comprised of credible and relevant data, corroborate the GMD's conclusion that water levels in the area of the proposed Sheridan 6 LEMA are declining and have declined excessively, and that the excessive decline is due to withdrawals in the area exceeding the rate of recharge.

(2) Does the public interest of K.S.A. 82a-1020 require that one or more corrective control provisions be adopted?

The public interest standard referenced here is the statutory declaration of the policy and purpose of the Groundwater Management District Act, as follows:

> "It is hereby recognized that a need exists for the creation of special districts for the proper management of the groundwater resources of the state; for the conservation of groundwater resources; for the prevention of economic deterioration; for associated endeavors within the state of Kansas through the stabilization of agriculture; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets. It is the policy of this act to preserve basic water use doctrine and to establish the right of local water users to determine their destiny with respect to the use of the groundwater

insofar as it does not conflict with the basic laws and policies of the state of Kansas. It is, therefore, declared that in the public interest it is necessary and advisable to permit the establishment of groundwater management districts."

Thus, in order for a LEMA plan to be considered in the public interest, it must seek to further conservation and protection of groundwater resources, in harmony with state law and policy, and it must preserve the right of local water users to "determine their destiny" regarding the management of said groundwater resources. The GMD written testimony details the extensive public process employed to communicate with the public over a period of several years. A key presentation to the public was a model showing how different levels of reduced use in the Sheridan 6 High Priority Area would impact the local water level declines. The fundamental premise underlying this set of facts is that larger reductions in use will more effectively slow water level declines, and that no reduction at all will result in extreme declines in water levels.

As noted in the GMD testimony, the GMD held eleven public meetings and two subcommittee work sessions in Hoxie, Kansas, between November 10, 2008 and May 9, 2012, involving the stakeholders in this area. The attachments, including minutes of GMD meetings and "question and answer" information sheets disseminated by the GMD, evidence numerous opportunities for public awareness and participation in this process. The GMD kept the public informed as the process evolved and meaningfully responded to public comments and concerns. The record from the GMD demonstrates a local realization of excessive water level declines, a local desire to address these declines, and a locally-generated proposal for corrective control provisions.

Most of the public comments, oral and written, acknowledged a need to slow water level declines and applauded the fact that this process was generated by local stakeholders and would be controlled locally, as well.

The proposed Sheridan 6 LEMA plan arises from the need for corrective control provisions to conserve and protect the groundwater resources in the area and is a locally-generated proposal by which those in the affected GMD area seek to "determine their destiny." Therefore, the proposed Sheridan 6 LEMA plan satisfies the public interest component described in K.S.A. 82a-1020.

(3) Are the geographic boundaries reasonable?

In the written testimony, the GMD explains the need for a LEMA boundary, prior to addressing the reasonableness of the chosen boundary. As detailed in the testimony, the Kansas Legislature charged the Kansas Water Authority (KWA) in early 1999 with the task of studying and making recommendations on a number of issues, including the study of aquifer resources, recharge rates and the long term prospects related to any dryland farming, to maintain sustainable yield and minimum streamflow levels. The

KWA responded with reports in 2001, one of which recommended the aquifer be classified into subunits, based on hydrogeologic characteristics, and that the subunits be studied to identify which subunits most needed additional management in order to sustain the life of the aquifer.

In October of that same year, 2001, two advisory committees appointed by the Kansas Water Authority and the Kansas Water Office issued a joint report which included recommendations for further research into the subunits of the Ogallala Aquifer and how to extend the life of the aquifer, based on subunit priorities, goals and programs. The report suggested roles for the DWR and the GMDs in executing these recommendations.

The Northwest Kansas GMD No. 4 began to take action within two months of this report. The ultimate outcome was the 2006 addition to the GMD's Revised Management Program of a section requiring the identification of high-priority subunits and the slowing of groundwater level declines in those areas, a section which has remained in the management program since then. Thus the GMD has taken proactive steps in compliance with state policy directing groundwater management strategies based on aquifer subunits.

The GMD testimony then describes why the boundaries are reasonable, that is, why the process of delineating the boundaries was reasonable. The testimony explains how the GMD's most fundamental data source is the data compiled in the Kansas Cooperative Annual Water Level Measurement Program, mentioned above, based on KGS water level measurement data. The KGS, at the GMD's request, developed section-specific data points, allowing for analysis based on numerous different attributes. The testimony then explains the process by which section-specific hydrologic, geologic and geographic information was compiled, including KGS's triangulation method for determining a water level value for each section.

The GMD chose to analyze the data relative to the six-year period of 1996 through 2002, because that period contained the most recent example of two wet years, two years of average precipitation, and two dry years. In addition to this, the GMD applied parameters of percent decline and reported water use density. Finally, to identify high priority areas, the GMD took into account areas of "strong and defined" local support for enhanced management. The comments spell out the final criteria for designation as a High Priority Area, allowing for three alternative options for designation.

The GMD explanation articulates a rational, data-based process by which the boundary for this proposed LEMA was derived. Credible scientific location-specific information was collected and analyzed, in accordance with state policy to manage groundwater supplies on a subunit basis.

The public comments largely supported the designated boundary for this LEMA, many characterizing it as a good first step in addressing water level declines throughout the GMD. One commenter seems to argue that water users in the proposed LEMA area

will be disadvantaged by additional limitations in water use, in comparison to those not within the LEMA. However, this argument would seem to apply no matter what the LEMA boundaries may ultimately be, and, therefore, is, in essence, an argument against the corrective controls proposed by the LEMA plan. As such, the argument is beyond the scope of this decision.

SUMMARY OF FACTUAL FINDINGS per S.B. 310(b)

Based on substantial competent evidence, as provided by the testimony and comments offered at, or in relation to, the initial public hearing, the following facts are found to be true:

(1) one or more of the circumstances specified in subsection (a) through (d) of K.S.A. 82a-1036, and amendments thereto, exist, specifically that groundwater levels in the area in question are declining and have declined excessively and the rate of withdrawals within the area in question exceeds the rate of recharge in the area; and

(2) the public interest of K.S.A. 82a-1020, and amendments thereto, requires that one or more corrective control provisions be adopted; and

(3) the geographic boundaries are reasonable, pursuant to S.B. 310, Section 1(b).

THEREFORE, the Sheridan 6 Local Enhanced Management Area proposal satisfies the three initial requirements for approval as set forth in S.B. 310, Sec. 1(b).

ENTERED THIS 4th DAY OF OCTOBER 2012.

Constance C. Owen

Constance C. Owen, Hearing Officer

CERTIFICATE OF SERVICE

On this 4th day of October 2012, I hereby certify that a true and correct copy of the foregoing Order Finding Satisfaction of the Initial Requirements of the Sheridan 6 Local Enhanced Management Area (LEMA) was sent, postage prepaid, U.S. First Class Mail, to:

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Constance C. Owen

Constance C. Owen, Hearing Officer