by Bob Kirby

Water supply problems challenge extreme southeastern Kansas

If you were to take a picture of the State of Kansas and be asked to sum it up in one word what would that word be? Perhaps if you were to look at the weather patterns, geological formations, elevation changes and environmental conditions the word you might want to choose would be "diverse."

If you were to travel the state from east to west you could go from the edge of the Ozark uplands with rock formations dating back from 360 to 320 million years to the Great Plains where you can see for miles in any direction. You could travel from a seemingly tropical area that receives an annual average rainfall of 45 inches to a semi arid area that receives a scant 15 inches average rainfall annually. You could leave Pittsburg in shorts and tee shirt but need to bundle up for snow when reaching Goodland.

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While this diversity is one of the things that makes Kansas great, it also creates problems that seem to be unique for certain areas. One problem that some regions in Kansas have faced for years is the dwindling availability of water. This problem was generally viewed as an issue only for western Kansas until fairly recently.

Water from Missouri

In extreme southeastern Kansas, Cherokee, Crawford and portions of Labette counties, the primary source of ground water comes from the Ozark Plateau Aquifer. The Ozark Plateau Aquifer originates in Missouri and the water found in southeast Kansas flows in a westerly direction from the Missouri side of the border through the aquifer. Over the years local Kansas water suppliers have seen a steady decrease in water levels of wells drilled into this formation. While the drop in water levels is not easily quantified some systems have reported seeing levels drop almost two feet per year on average.

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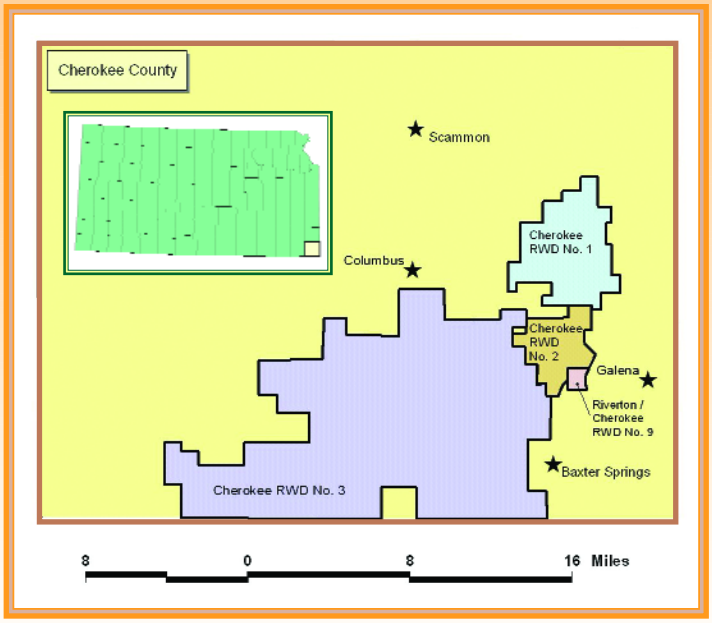
Public Wholesale Water Supply District No. 19



Kansas has a long history of resource management pertaining to water supplies through the appropriation of water rights. Since 1945 the State of Kansas has controlled the use and quantity of water that could be diverted from both ground and surface sources. These steps have helped ensure a viable water supply for generations of Kansas residents. The State of Missouri on the other hand has no water rights program. The lack of control over the use and diversion of water can certainly create problems over time. This problem is accentuated when areas experiencing problems lie in the state's border regions.

An example of problems with declining water levels in southeast Kansas can be found in Cherokee County's city of Galena. For years, Galena has relied on four wells to supply city water. Recently a local power company constructed a new generating station just across the state border in Missouri. Mel Mittag, city superintendent for Galena, sensed there could be problems on the horizon.

"We knew they needed water for the process, but just did not know where it would come from," Mel explained.

Wells in Ozark Plateau decline

A number of wells were drilled on power plant property in order to supply this new facility with water needed for cooling in the industrial process. When the power company's wells were brought on line there was a substantial drop in the static water levels of Galena's wells. A number of shallow wells around the area also went dry. While the power company worked with the owners of the wells to alleviate the problem this incident went a long way towards showing how tenuous the water supply situation had become in this area of the state.

Armed with the knowledge that the water his town utilizes comes from the Missouri side of the border, Mel sums up the water issue when he says, "We would like Missouri to do something (about establishing a water rights program) but we doubt if they will."

Wholesale district seen as option

Another group of southeast Kansas water suppliers has long been on the front lines of ensuring an adequate water supply for their customers. Public Wholesale Water Supply District 19 represents a number of rural water districts and communities in Cherokee County. This group formed in the early 1990's to develop a source of supply because they could see that water levels and contamination issues were going to become a major problem in the area as years passed. Since the initial formation of the district they have gone through a number of changes in membership and have faced numerous hurdles in trying to obtain financing to build a water treatment facility on the Spring

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Mel Mittag, Galena city superintendent, stands in front of a well the city utilizes for its water supply. The well was constructed in 1919 and has been in use since that time. When the new power plant constructed in Missouri came on line, the static water level in the well declined 20 feet. Although the well has recovered it went a long way toward showing how serious the water supply situation in southeast Kansas has become.

Spring River originates in Missouri then flows through Cherokee County in Kansas before emptying into the Grand Lake of the Cherokees in northeast Oklahoma. Baxter Springs presently utilizes Spring River as a water source. Several other Southeast Kansas water suppliers are also exploring the potential use of the river as a water source.

River and a distribution system encompassing Cherokee County. While members have faced frustration numerous times they realize that recent events with a declining water table only heighten the need to see the project through to completion.

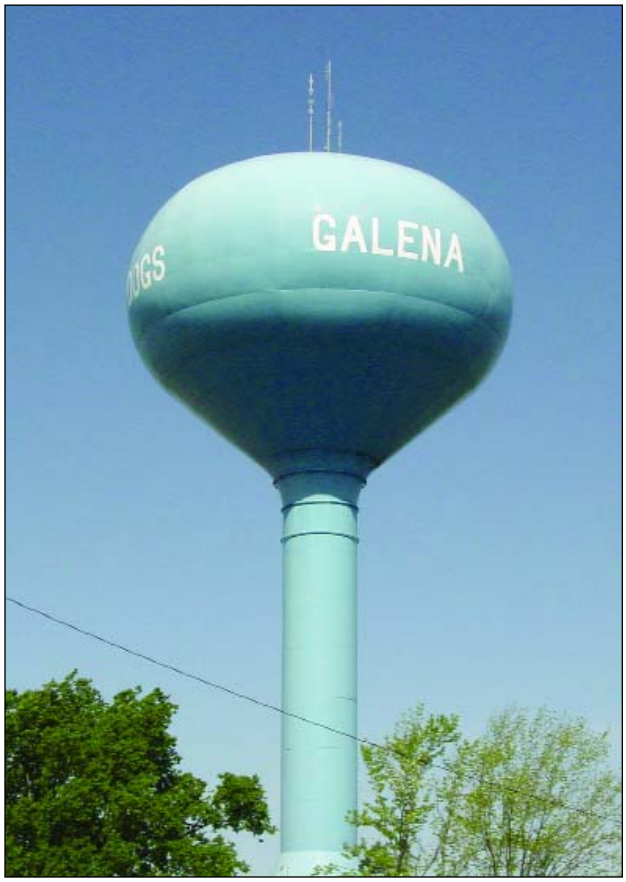
While the water dilemma continues to grow, an effort is underway to bring stakeholders of different states facing this problem together. The recent formation of the Tri State Water Resources Coalition represents a chance for affected parties from Kansas, Missouri and Oklahoma to get together, discuss the issue, and bring about some sort of solution. The goal of the group is to "develop a good quality water resource to ensure

the continued growth of the geographical area". While this effort is voluntary it allows a way to cross the state boundaries for the benefit of the area as a whole.

Moratorium on new wells

For its part in helping to alleviate the situation on the Kansas side, the Kansas Water Office has issued a five-year moratorium on the drilling of new wells in the affected area. In addition to the moratorium there is a strategic plan in place to ensure continued viability of the aquifer system. The Kansas Water Office, along with the United States Geological Survey, the Kansas Geological Survey and the Corps of Engineers are all looking at area future needs and demands to ensure a sustainable water supply. In addition they are working closely with the Tri State Water Resources Coalition as well. For more information regarding the strategic plan for the Ozark Plateau Aquifer you can check out the Kansas Water Office website at: http://www.kwo.org/KWP/Summary_ozark_plateau_aquifer_springriver.pdf.

The future of any area, whether a town, rural water district, county, or even a state depends on the availability of a safe and adequate water supply. Water does not respect political boundaries or recognize a state's rights. It is a resource that even in the wettest part of Kansas has its limits. With the water suppliers of the area working together, understanding consequences, and trying to conserve this precious commodity, future generations will be well served because of actions taken today.



The water tower for Galena, Kansas stands tall on the Cherokee County landscape. The city is currently purchasing water from the Missouri American Water Company in Joplin, Missouri to supplement the supply it has obtained from the Ozark Plateau Aquifer since the early part of the 1900's.