by Bob Kirby

Tri-State Water Resources Coalition to secure area water

As population surges across the United States, one of the foremost concerns heard is water supply. On the evening news, water stories about major metropolitan areas such as Phoenix, Arizona and Las Vegas, Nevada are common. These arid regions face seemingly insurmountable issues to supply the people who live there with adequate water. Right here in Kansas water issues are very prevalent on the minds of the populace, particularly in the western areas. The last few years however that concern has moved a little further east.

New area of concern

Recently, water suppliers in southeastern Kansas have had a heightened awareness of water issues. Deep aquifer water supplies have shown disturbing trends due to increased demands here in Kansas and across state lines in Missouri and Oklahoma. In November 2004, the State of Kansas issued a moratorium on any new appropriations in the Ozark Aquifer in order to study the adequacy of the resource. In Missouri, which is a riparian state, no such orders were made but suppliers there could also see the writing on the wall.

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Suppliers organize

In 2002 area water suppliers from Kansas, Missouri and Oklahoma joined together to form the Tri-State Water Resources Coalition. The goal of the coalition is "to develop a good quality water resource to provide for the area communities and facilitate economic growth of the geographic area."

The towers and state border signs represent water and the geographic relationships in the area. In 2002 water suppliers and other interested parties formed the Tri-State Water Resources Coalition. The group is composed of representatives from Kansas, Missouri and Oklahoma. The goal of the group is to ensure a long-term water resource for the area.

Information and alternatives

The coalition, along with the United States Army Corps of Engineers, hired the firm of Black and Veatch to perform a study to examine area water supply needs to the year 2050 and available water supply options in the area. On September 29 the results of the $200,000 study were revealed to the public during a meeting held on the campus of Missouri Southern State University in Joplin, Missouri.

According to the recently released study, the population of the area is expected to grow from

approximately 300,000 currently to 500,000 by the year 2050. A new water supply source and additional water treatment facilities capable of meeting an additional 66 million gallons per day of demand with the ability to handle peak demands of 132 million gallons per day are projected as needed to accommodate this growth.

Surface rather than ground water

The Coalition felt that area ground water supplies would not likely be able to handle this additional demand so in turn decided to pursue surface water alternatives. Currently utilized surface water supplies in the study area do not have the capacity to meet current demands in some areas during drought periods and certainly would not meet the projected demands. With this information the study focused on the following six alternatives:

- Grand Lake O' the Cherokees, Oklahoma
- Stockton Lake, Missouri
- Truman Lake, Missouri
- Table Rock Lake, Missouri
- Grand Lake, Stockton Lake and Table Rock Lake combined
- New Reservoir

Each of the possibilities has major issues to be resolved. The Grand Lake O' the Cherokees in Oklahoma has an adequate amount of storage available at 181 million gallons per day but the State of Oklahoma has issued a moratorium on the transfer of water across state lines. This option would require the Oklahoma legislature to give approval before the coalition could move forward in obtaining water from this source.

Table Rock Lake in Missouri has 35 million gallons per day of available storage but due to the

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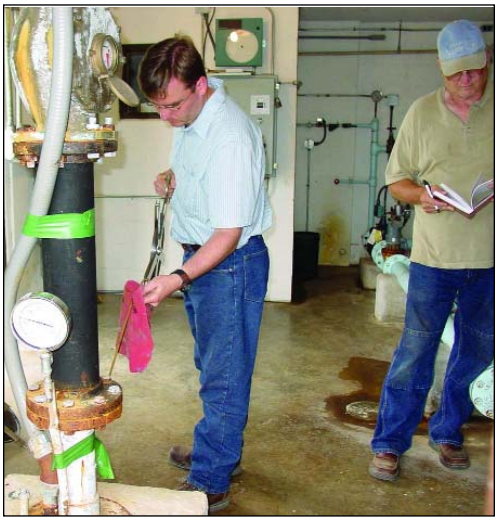
geographic location of the reservoir the water would need to be pumped across a very high ridge to supply the study area. A new reservoir will require further study to determine the size, location, cost and numerous other aspects pertaining to its construction.

Development of any water source is expensive, particularly when developing a source to cover a large geographic area. According to the study, the initial cost of piping water from Grand Lake to the area is estimated to be $1.2 billion. If Table Rock Lake were pursued, the initial cost is estimated to be $1.8 billion.



Above: *The future of any economic development in southeast Kansas will depend on the availability of an adequate water supply. This is an issue in communities in southwest Missouri and northeast Oklahoma as well.*

Above right: *Milton McCabe, environmental scientist with the Kansas Department of Agriculture, Division of Water Resources and J.W. Stephenson, district manager, measure the depth to water in a well at Rural Water District 2 in Cherokee County in June. There is an ongoing study in the area to create a model of the Ozark Aquifer and assist in determining the future viability of the resource.*

With the future of the current water supply in question and the exorbitant cost of developing a new source, the chairman of the coalition, Bob Nichols, stated, "The next water we get is going to be very expensive and we'd be well advised to save some of this cheap water and use it wisely. The fact remains we're going to have to learn what the word (conservation) means." This was one of many frank opinions offered those attending the meeting.

Attendees of the meeting from Kansas included Tim Gintner, chairman of Crawford County Rural Water District Number 1. Gintner, like many representatives from water suppliers in southeast Kansas, has concerns about the proposed project. After hearing

the proposals he had this to offer, "With the many resources available in the region such as the Spring River, Neosho River and Shoal Creek not able to meet demands and having such low stream flows, how will these same resources be able to maintain levels in a new reservoir? With the initial cost on all of the options as high as it is to the consumer, I don't know how a rural water district or city can afford it. The initial costs of the project alone are more than anyone can afford."

In response to the concerns over the declining ground water levels in the Ozark Aquifer, the Kansas Water Office initiated a study to determine the viability of the Aquifer and monitor water levels in the tri-state area. The Kansas Department of Agriculture, Division of Water Resources, the Kansas Geological Survey along with the United States Geological Survey, in cooperation with area stakeholders, have been developing a model to determine water levels and flow patterns throughout the area.

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A total of 251 wells in the study area have been measured and historical water use data has been reviewed. Well water level measurements continue while the development of a model is taking shape. A public meeting was held in Pittsburg on November 8, 2006 at the Pittsburg State University Student Union to release results of the study to date and receive public input. All area suppliers were encouraged to attend.

The future of the tri-state area, like anywhere, depends on the availability of an adequate, clean water supply. Water is a resource that does not recognize political boundaries. In dealing with the issues presented by its limited availability the users of the resource in this area must see past the boundaries presented as well.