

# Osage County Rural Water District No. 6 Expands System

Osage County is located in the eastern part of Kansas about fifty miles from the eastern boundary and about midway across the state, north and south. It extends about twenty four miles east and west and thirty miles north and south and covers a large part of the Kansas prairie. Two federal reservoirs, Melvern and Pomona, and one state lake are located in Osage County giving the county its official nickname “The Water Sports Capital of Kansas”. In fact, when researching Osage County on the internet, the “Network Kansas” Web site identifies Osage County as the only county in the United States that has two federal reservoirs. In addition to the obvious recreational activities at these reservoirs, both federal reservoirs are utilized as water sources in the county.

Much of Osage County is covered by the eight rural water districts that serve its residents. Osage County Rural Water District No. 6, which purchases water from Osage County Rural Water District No. 7, serves primarily the south central part of the county. For the most part, the only unserved area in the county was the east-southeast area. When residents in these areas approached the rural water district requesting water service, the board saw an opportunity to not only accommodate the requests but to also possibly solve a water loss issue. Excessive water loss was determined to be due to leaks on a 3.5-inch PVC line with glued joints. Many of the leaks were found to be at points where the pipe was placed directly on rock.

A project to replace the problem line and to extend water lines into the areas requesting service was started in February, 2011 and completed in December, 2011. The project involved installing about twenty-one miles of 6-inch through 1.5-inch PVC line. Most of the lines were three and two inch, but to increase flow and pressure



Osage RWD 6 constructed this 75,000-gallon storage tank in about 1990. The district serves 196 customers.



**In this photo Gerald McMillin, Board member and Dan Dehn, Operator are pointing out locations of new pipelines and their various sizes. Gerald was one of three board members that provided inspection services on this project.**

throughout the system, about 3.5 miles of 4-inch and 1.75 miles of 6-inch line were installed. Nowak Construction, Goddard, Kansas was the contractor on this project: Bartlett & West Engineers, Topeka, provided engineering services.

A total of thirty-five new customers and twenty pasture connections were added to the distribution system as a result of this project. The district now has about 196 meters using an average of 800,000 gallons per month. Storage is provided by a 75,000-gallon elevated tank which was added about thirteen years ago.



**Dan Dehn is holding a new radio meter similar to those installed in the district. Installing these meters has allowed district staff to read the meters monthly and should provide more accurate information. This information along with the replacement of the problem line should result in less water loss.**

This project also included replacing all service meters with radio read meters. The District chose to use Hershey meters and transmitters (Hot Rod). Both Dan Dehn, Operator/Treasurer and Gerald McMillin, Board Member/Secretary, are very happy with the new meters. They both stated that the old meters were hard to read and the District was only able to read the meters once a year. With customers reading meters, there were often mistakes that resulted in large catch-up bills once per year. Dan noted that with the new meters, he can travel the eighty-five miles necessary to read the meters in about three hours.

This \$990,000.00 project was funded as follows: \$490,000 was obtained from the Kansas Department of Commerce, Community Development Block Grant; \$395,000 was provided through the United States Department of Agriculture / Rural Development, and \$105,000 was the responsibility of the rural water district. Dan stated that after completion of the project, \$35,000 was not used and was returned to the Department of Commerce. Water rates increased from \$20 to \$25 per month (no water included) and from \$6 to \$7 per 1,000 gallons. For 5,000 gallons per month, the cost increased from \$50 to \$60.

It is good to see a water system take on a project to supply water to a new area where people are in need of good water. It is often easier to sit back and not take on such a project due to costs and resultant rate increases. The rural water district board and staff are commended for expanding service.



**This digital map was produced for the district by KRWA. The map was available prior to this project and proved valuable to the district when determining quantities at the end of the project. Rather than paying the contractor plan quantities, the maps were used to confirm the measurements taken by the inspector in the field. The up-to-date digital maps saved the district money when it was determined that actual footage was less than plan quantities.**