City of La Cygne and USDA Rural Development Celebrate Earth Day

he city of La Cygne, located approximately 60 miles south of Kansas City, Kansas on US Highway 69 and four miles west on KS Highway 152 in northern Linn County recently celebrated the announcement of a water system improvement project. The city's sole source of water is surface water from the Marais des Cygnes River, which runs through the far southwest portion of the city. The term "marais des cygnes" originate from the French language and means "marsh of the swans". It is presumed that trumpeter swans, which were historically common in the Midwest, used the wetlands adjacent to the Marais des Cygnes River during spring and fall migration. The swan is a significant mascot of the city of La Cygne.

The reason that the city is embarking on the project is to enable the transfer of water between the city's north and south water storage tanks. BG Consultants was hired to model the water distribution system. Most of the valves in the distribution system are inoperable. Anyone working with a water system knows that inoperable valves hinder routine maintenance as well as limiting service outages during emergency situations.

The bulk of the city's distribution system has been in operation for approximately 70 years. The system was largely ductile iron pipe. Common repairs to ductile iron pipe in La Cygne include pipe shear failures and pinhole leaks. Pipe shear failure is generally caused by shifting ground that results in a complete radial fracture. Corrosion and rusting of the metal pipe material contributes to other

City Attorney John Sutherland, County Commissioner Rick James, Council Members Skip Williams and J. K. Fleming, former Mayor Terry Weitman, (holding diagram) Public Works Superintendent Jim Johnson, Mayor Bob Sullivan, Sháne Hastings – USDA Rural Development, Brian Kingsley with BG Consultants, Mike Billings – USDA Rural Development, City Clerk Devona Herring, Council Member Esther Shields and the children from La Cygne Elementary 3rd grade classes join in the celebration of Earth Day.

leaks within the system. Encrustation on the interior of the pipe due to minerals in the water also limit flow capacity.

La Cygne utility staff has maintained a detailed record of the repairs made to the distribution system over the last five years. From January 2010 to August 2014, the city made 73 repairs to the system. The city estimated that each of these repairs cost approximately \$3,500 in equipment, lost water, overtime wages and sub-contracting. Before embarking on the replacement project, the city estimated that a 75 percent reduction in repair costs, or approximately \$40,000 annually.

In 1995-96, the city replaced a portion of the 2-inch lines in the southern part of the system with 6-inch PVC. Several new valves and fire hydrants were also installed as part of the project. Water mains less than four inches in diameter still accounted for about two-thirds of the entire distribution system.

La Cygne's project

USDA Rural Development has approved funding of both phases of the project for a total of \$5.672 million. USDA funds will be used to repair the water distribution controls,

electrical, plumbing and mechanical systems at the water treatment plant. The project includes replacement of approximately 64,100 linear feet of water distribution lines, 400 meters, and installation of 65 fire hydrants. The La Cygne water system serves 1,152 residents.

In addition, the project will include the replacement of all 4-inch and small pipelines with 6-inch PVC pipe.

The project will include the construction of approximately 6,600 linear feet of 10-inch PVC waterline. This larger line will connect the treatment plant with the north storage tank, resulting in less head loss and improved flow throughout the northern section of the system. In addition, the project will include the replacement of all 4-inch and small pipelines with 6-inch PVC pipe. All residential meters will be replaced with remote-read meters. An alternate also includes an additional crossing under the railroad to provide a redundant route for water to reach the western section of the system. A new telemetry system will be installed on the north tank as well as an electronic monitoring and control package for the entire system. Improvements to the city's water storage tanks are being further investigated and will potentially be done as part of this project.

USDA funding approved

As previously mentioned, the project is being funded in two phases but constructed in one project. Phase 1 funding

includes a Community Development Block Grant from the Kansas Department of Commerce in the amount of \$500,000. USDA Rural Development will fund Phase 1 with a \$374,000 loan and \$668,000 grant and Phase 2 funding will consist of a \$2,603,000 loan and \$2,054,000 grant. USDA was able to seek the additional funding from the USDA Rural Development National Funding Pool to enable both phases of the project to be bid and constructed at the same time. Without the financial assistance of the federal government, residents in La Cygne would be paying nearly \$25 more per month on their water bill. The project consultant is Brian Kingsley with BG Consultants, Lawrence. Susan Galemore with the Southeast Regional Planning Commission in Chanute is the grant administrator.

Former La Cygne Mayor Terry Weitman comments that the city thanks USDA Rural Development for their financial and technical assistance that will give residents the best water distribution system available to help provide safe, affordable water for many years.

La Cygne project recognized on Earth Day

At a group gathering on Earth Day, USDA Rural Development Community Programs Director Sháne Hastings commented, "As we celebrate Earth Day, many small communities are dealing with combined effects of drought and declining tax revenues. There is no better time than Earth

Day to begin working cooperatively to talk about ways to conserve water to ensure that all Kansans have access to safe drinking water," Hastings stated, adding that USDA Rural Development continues to provide leadership and financial assistance to rural communities that are looking to improve their water and wastewater infrastructure.

Earth Day is observed annually on April 22 to raise awareness about what individuals can do to protect vital natural resources and safeguard the environment. Since the first Earth Day celebration in 1970, the event has greatly expanded. Today, citizens and governments in more than 195 countries participate in Earth Day events.

Rita has extensive municipal experience with the city of Troy, KS for eleven years. She was a certified EMT and served as the Ambulance Director for two years and supervised the volunteer staff. Rita also worked on or completed most water and wastewater utility reporting requirements. Her focus at KRWA is to provide assistance with applications for funding for cities and rural water districts.





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