

Paola-Louisburg completing new treatment facility

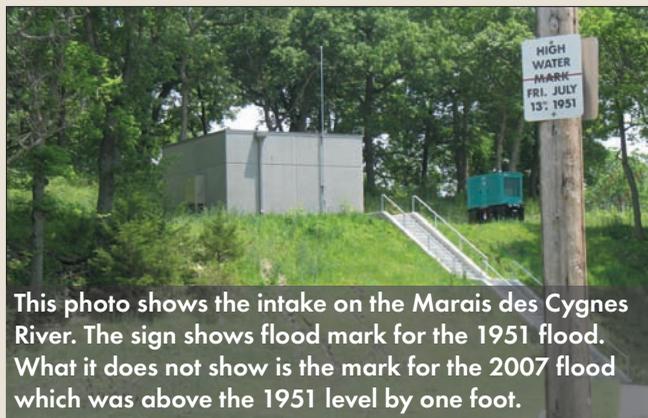
A new surface water treatment plant that will provide water for the cities of Paola and Louisburg is nearing completion. The \$32-million project was financed through a bond issue by the Marais des Cygnes Public Utility Authority (PUA), which was formed by the two cities. The new plant is near the Marais des Cygnes River southeast of Paola.

The PUA recently also finalized an agreement with the Kansas Water Office and the Marais des Cygnes Water Assurance District No. 2 to ensure the cities will have access to a reserve supply of water during times of low flow in the Marais des Cygnes River.

The plant capacity will be five million gallons per day. It is presently anticipated that the plant will only produce approximately one million gallons per day. The present cost of water from the PUA to the cities is \$4.37 per thousand.

The two cities have a total of 3,500 meters and also provide water to two rural water districts. Staff suggests that with the amount of storage at the plant, combined with a 750,000 elevated tank for each of the cities, they will be able to fill storage on Friday and leave for the weekend and start back up on Monday morning.

The plant has a one million gallon clearwell. Water will be pumped from the river into a holding pond, and then gravity feed into the plant. Two 40-HP pumps will push the water from that point through the plant. Larry Williams of Bartlett & West, Inc., the project consultant, reports that because of considerable elevation difference from the plant to the top of the elevated storage tanks in Louisburg and Paola, two 600-HP high service pumps are required to send water out through 18 miles of 24-inch, 18-inch and some 12-inch pipeline. One new and important feature of the plant is that it will generate NaOCl (sodium hypochlorite) on site. Ozone is for primary disinfection and NaOCl is for distribution system chlorine residual.



This photo shows the intake on the Marais des Cygnes River. The sign shows flood mark for the 1951 flood. What it does not show is the mark for the 2007 flood which was above the 1951 level by one foot.



View of the front and south side of the new Marais des Cygnes Public Utility Authority water treatment facility southeast of Paola.

Contractors on the project are Walters-Morgan Construction, J&N Utilities and Caldwell Tank.

The PUA is the newest member of Assurance District No. 2. Other members include the cities of Osawatomie, La Cygne, Ottawa and Melvern, as well as Franklin County Rural Water District No. 6 and Kansas City Power & Light. All of the members have water rights to withdraw water from the Marais des Cygnes River.

According to the Kansas Water Office, the Assurance District also owns water storage in the Melvern and Pomona reservoirs for times of low flow. The assurance district acquired 5,400 acre feet of storage for just over \$1.2 million. The Assurance District now owns a total of 20,800 acre feet of assurance storage divided equally between Melvern and Pomona reservoirs. Of that total, 9,800 acre feet of storage is for use by municipal members and 11,000 acre feet of storage is for use by Kansas City Power & Light.



Front and north end of plant with CO₂ tank



New million gallon clearwell