More than 13 years ago, Gene Jett, manager of the Fleming County Water Association, put an idea into motion. He wanted to form a commission to provide a safe, reliable, and cost-effective supplementary source of water to Fleming County, Kentucky. In 1998, the Fleming County Water Association, the city of Flemingsburg, the Nicholas County Water District, and the Western Fleming Water District formed the Greater Fleming County Regional Water Commission (GFCRWC).

Finally, in April 2004—after six years and countless hours of meetings, planning, engineering, and securing funds—what was once an idea moved off of the drawing board and into action. The project to bring water to the area consisted of approximately 20 miles of 24-inch ductile iron water line, a 1.024-million gallon clear well, a 500,000-gallon elevated storage tank, and three wells. A little more than a year later, major construction is complete, and the Greater Fleming County Regional Water Commission is now a reality.

Funding
Grants from KIA, Appalachian Regional Commission, and Rural Development provided almost $5 million in grants of the total of $13.1 million it took to build and develop the infrastructure to the commission. The remaining $8 million will be paid off in 20-, 30-, and 40-year loans.

Well Field
The commission owns more than 250 acres of land in the northwestern part of Lewis County along the Ohio River, which makes up the GFCRWC well field. Source water protection has been the main reason the commission has bought the land encompassing much of the aquifer recharge area for the wells. These land protection efforts will pay off hugely in the future by ensuring the protection of their water supply and allowing for future expansion.

Currently, there are three wells, each approximately 100 feet deep, that draw water from a large aquifer. According to the Kentucky Division of Water, this aquifer is not directly influenced by the Ohio River. Each well is fitted with a 200-horse power (hp) turbine pump and can produce more than 1,000 gallons per minute (gpm).

Treatment Plant
The GFCRWC treatment plant is located in the northeastern part of Mason County, approximately 8,000 feet from the well field. The raw water is transported from the well field to the treatment plant by a 24-inch ductile iron water line. Here the water is injected with chlorine, fluoride, and phosphate. The treated water is stored in a 1.024-million gallon, glass-lined clear well that sits adjacent to the treatment plant. Currently, the treatment plant is a 2.88-million gallon per day (mgp) facility but can be increased by simply adding additional wells. The treatment plant houses three 250 hp centrifugal high service pumps, which can pump approximately 3,000 gpm each.
Jim Vergne, commission superintendent (seated at computer), and Chris Dunaway, assistant commission superintendent (showing Jim how to use computer), make everything happen. Other members of the commission are Gene Jett, commission coordinator (standing on left with back to camera), William Graham, Jr., chairman-appointed by Fleming Co. Fiscal Court, and the four commission members—Chip Span, appointed by Fleming Co. Fiscal Court; J.E. Smith, Jr, Fleming County Water Association; Louie Flanery, city of Flemingsburg; and Jerry Neal, Western Fleming Water District.

Rates—The estimated cost of water for the GFCRWC as of March 30, 2005

<table>
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<th>Existing Demand</th>
<th>Additional Demand</th>
<th>Total Demand</th>
<th>Estimated Cost per 1000</th>
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</tbody>
</table>

During a power failure, power to the treatment plant is transferred to an onsite generator. The system is monitored and controlled at the treatment plant as well as at the operator’s house by using a SCADA system. A state-of-the-art security system will be installed at the treatment plant and the well field, which will allow the operators to monitor the facility after hours from home.

Elevated Storage Tank

Once the treated water leaves the treatment plant, it again travels through approximately 18 miles of 24-inch ductile iron water line to a 500,000-gallon storage tank located in the Industrial Park in Flemingsburg. The treated water is then transported to five master meters owned by the individual water systems.

The rates are currently estimated because operation and maintenance (O&M) costs have not been determined. Once GFCRWC is in operation for a few months, actual O&M costs could affect the cost of water. Cost of water is based on no additional debt service and also based on existing and new customers being equal and paying the same rate.

For more information about the commission, contact them at Greater Fleming County Regional Water Commission, 9147 Garrett Run Road, Vanceburg, KY 41179. You also may call them at (606) 563-0850, or send them e-mail at aquaman@kywirelesscollie.com.

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What’s your story?

Does your water system have a story to tell? Call On Tap editors Mark Kemp-Rye or Kathy Jesperson at (800) 624-8301 or (304) 293-4191 to let us know about it. You also may e-mail us at mkemp@wvu.edu or Kathy.Jesperson@mail.wvu.edu. We would love to hear from you.