Waukesha City Hall Realizes Significant Water Savings with Use of High Efficiency KOHLER® Plumbing Fixtures

PROJECT OVERVIEW
Overuse of water resources by communities in southeastern Wisconsin is reducing ground water availability and is threatening streams, rivers and other environmental resources that are supported by that water. The high rate of growth of the Waukesha area, coupled with limited water supplies, led the city to develop a plan for reducing overall water use by 20 percent by the year 2020. Leading by example, Waukesha City Hall, in partnership with the Waukesha Water Utility and Kohler Co., replaced old plumbing fixtures with KOHLER® water-saving fixtures and faucets to demonstrate the environmental and financial benefits of making such changes. By switching to these water-conserving plumbing products, the water utility realized significant reductions in water usage.

PRODUCT REVIEW
Many of the old plumbing fixtures replaced in Waukesha City Hall had been installed before 1979, including 3.5 gallons per flush (gpf) toilets, 1.0 gpf urinals, and urinals on timed flushes that can use up to 15 gallons of water per hour. In addition, aerators on bathroom faucets needed to be replaced to reduce the flow of water from 2.5 gallons per minute to .5 gallons per minute.

The KOHLER water-conserving plumbing products were installed in Waukesha City Hall in March 2006. The products installed included high-efficiency toilets, urinal flush valves, touchless faucets and faucet aerators:

**KOHLER faucets with Tripoint™ Technology**
- Innovative Tripoint technology ensures dependable performance
- Factory preset; no adjustments needed after installation
- Reliable, consistent response in a wide range of environments
- Competitively priced solutions for commercial applications
- Available in two lavatory and kitchen faucet designs to complement any commercial environment
- Tripoint technology actuates when an approaching user is seven inches from the lavatory; reflections won’t interfere with operation

**KOHLER Water-Efficient Urinals**
- Models feature 0.5 gpf are engineered to utilize 50 percent less water than the industry standard 1.0 gpf urinals
- Flushing options include washdown and siphon jet operating systems
- Integral anti-backsplash walls on select models minimize splashing
- Versatile design options suit a variety of installation needs, from space-saving urinals to more traditional sizes

After installation, Waukesha Water City Hall observed a significant month-over-month reduction in water use, using 15 to 25 percent less water each month. The KOHLER water conserving products saved thousands of gallons of water each month, and performed better than the old faucets and fixtures inside the building.

LOOKING AHEAD
Approximately 81 percent of homes in Waukesha were built before 1994, prior to the 1.6 gpf national standard. In single-family homes, it is estimated that Waukesha could save more than 500,000 gallons of water every day by replacing 3.5 gpf toilets with models that flush at 1.6 gpf or less. This is more than 5 percent of the water utility’s average daily use. This would save citizens of Waukesha County more than $30,000 annually on their water bills.