

Milwaukee's Freshwater Advantage for Business

The Milwaukee Water Works (MWW) is a national leader in providing high-quality drinking water and water quality monitoring. While contributing to a healthful quality of life, the utility provides water-related business, manufacturing, and research a reliable supply of high-quality water at a low price. Milwaukee's abundant supply of water, with its return to Lake Michigan, is a key advantage for water intensive and water technology businesses to perform competitively and profitably. Freshwater is Milwaukee's competitive advantage.

Business Leaders recognize a high-value service

- **"Miller-Coors'** roots run deep near the shores of Lake Michigan in Milwaukee. Water flows through every step of the brewing process, making it vital to our products. This location is key to the success of our business because the water here is plentiful, high quality, and the water utility provides sterling water quality service."
Kim Marotta, Vice President Corporate Social Responsibility, MillerCoors. March 2012

- **Coca-Cola Refreshments** "We require safe and sustainable water resources. Lake Michigan provides an ample source of very high quality water. We appreciate assurances that Milwaukee's water utility has strong preventive maintenance programs and a sound capital investment program." **Tom Petrilli, Plant Manager** March 2012. In 2005, Coca-Cola Enterprises expanded its bottling line in Milwaukee to produce *Dasani* for Midwest distribution. Company officials cited the availability and high quality of Milwaukee water in their decision.

- **King Juice Co.** King Juice Co., Inc. is a premier, mid-size packager of non-carbonated liquids based in Milwaukee. The firm also produces its own line of Calypso Branded juices and fruit drinks in a 123,000-square foot facility. King Juice Co. is the 29th largest of Milwaukee Water Works' manufacturing customers. The company recently completed a 54,000-square foot expansion to add a second production line. King Juice benefits from the advantage of the Declining Block Rate and is certified to receive a discounted rate from MMSD.

"We need good water for our products. We love the water here, and we're happy to know that we receive discounted rates. We distribute to 46 states and recently completed a significant expansion to add a second production line, proving our commitment to Milwaukee." **Tim Kezman, President** February 2012

- **Palermo Villa, Inc.** Founded by Italian immigrant Gaspare Fallucca only 40 years ago, today Palermo Villa, Inc. is one of the fastest-growing frozen pizza manufacturers in the country. In 2011, the company completed a \$22 million, 110,000-square foot expansion to its Milwaukee facility in order to extend its national distribution and respond quickly to increased product demand.

"A great pizza starts with a great crust and a great crust starts with great water," said Giacomo Fallucca president & CEO of Palermo Villa Inc. "The high quality water supply we have access to in Milwaukee is just one of the advantages of doing business here." **Giacomo Fallucca, President and CEO** February 2012

- **Cintas Corp. Industrial Laundry** City of Milwaukee and regional business recruiting efforts helped the Cintas Corp. locate an \$8.5 million industrial laundry in Milwaukee. The decision to create 125 jobs was driven by Milwaukee's superior water supply and distribution system, according to the Milwaukee Economic Development Corp.

Rate Advantage for Business

The utility provides a declining block rate (DBR) in which cost per unit volume decreases with increased usage. This rate structure is appropriate where there is an ample supply of water and treatment, and distribution capacity; all water is returned to the source, and construction of additional facilities to meet demand is not necessary.

The DBR applies to customers who use more than 34 Ccf of water per month (25,000 gallons/month) or more than 100 Ccf of water per quarter (75,000 gallons/quarter). A customer using 6,000 Ccf of water/month would pay \$10,380.00/month at the base rate for water use without the DBR. With the DBR the customer pays \$9069.73, a savings of \$1311.27/month.

On the wastewater side of the water cycle, the Milwaukee Metropolitan Sewerage District charges only for wastewater discharged to the sewer, not for water used in the product or that which is evaporated.

Milwaukee water is conducive to water-intensive industry use and research

Milwaukee water is clean and pure, providing an ideal platform for manufacturing, processing, and research.

- Reliable pressure and fire flow pressures exceed state standards. Range: 40- 74 pounds per square inch (psi). Higher elevations may have slightly lower pressures.
- Consistently cool temperature decreases energy used for cooling. Median Value, 55°F; Range, 40°-77°F
- Low total dissolved solids. Median Value, 175 mg/L; Range, 150-266 mg/L
- Moderate Hardness. Median Value, 7.5 grains per gallon; Range, 6.7-8.5 grains per gallon and Median Value, 92 mg/L (as CaCO₃); Range, 83-102 mg/L

The water treatment process uses ozone gas as a primary disinfectant. Ozone destroys illness-causing microorganisms and harmful compounds, reduces the formation of disinfection byproducts, and removes taste and odor. Particles are removed through coagulation, flocculation, sedimentation, and biologically active filtration. Fluoride is added to reduce dental cavities in consumers of the water. A phosphorous compound is added to control pipe corrosion to prevent lead and copper that may be present in pipes from leaching into the water. Chloramine disinfection maintains a residual to ensure high quality water throughout the distribution system.

Milwaukee is a national leader in providing high quality water and water quality monitoring

Milwaukee's water quality meets or exceeds EPA and DNR standards. The Milwaukee Water Works' water quality monitoring and screening activities include organisms and contaminants that are not yet regulated but considered of emerging concern. The utility tests source and treated drinking water for over 500 contaminants even though the EPA requires tests for only 90. This is done as a precaution to ensure safe water, to collect baseline data for study, to help increase the understanding of how contaminants may affect public health, and to meet future regulations. Milwaukee was one of the first U.S. cities to test its source and treated water for emerging contaminants. None have been found in Milwaukee's treated drinking water. Milwaukee was the first U.S. city to post the results on the Internet, demonstrating a commitment to water quality and transparency.

In 2008, the Associated Press cited Milwaukee as one of only 28 major utilities in the U.S. to test source and treated water for EDCs and PPCPs (Endocrine Disrupting Compounds and Pharmaceuticals and Personal Care Products). Neither testing nor disclosure of results is required under the Safe Drinking Water Act. Milwaukee's water quality monitoring system was in compliance five years ahead of time with new EPA regulations to control disinfection byproducts.

Water Supply and Capacity

Lake Michigan is the sixth largest freshwater lake on earth. Water treated and used in Milwaukee is returned to the lake. This translates into excess supply of water for Milwaukee.

The Milwaukee Water Works also has excess treatment capacity. The utility has seen a steady decline in water sold in the past four decades, the combination of more efficient water use and conservation, and changes in the industrial landscape. Water sold dropped from 58 billion gallons in 1976 to 33 billion gallons in 2012. For 2012, average daily pumpage was 104 million gallons. The utility could provide over 100 million additional gallons per day while maintaining an adequate safety margin of supply for emergency fire suppression.

Regional availability of Milwaukee water

Milwaukee water is distributed in a service area of 172 square miles with the physical connections and capacity to expand. Communities served include Brown Deer, Butler, Franklin, Greendale, Greenfield, Hales Corners, Menomonee Falls, Mequon, Milwaukee, New Berlin, Shorewood, St. Francis, Thiensville, Wauwatosa, West Allis, and West Milwaukee.

Excellent customer service

MWW works in partnership with business and industrial customers. The Water Marketing Specialist serves as liaison with commercial customers, providing information about permits and water rates and troubleshoots any water-related issue a customer may present. A founding sponsor of the M7 (FaB) Food and Beverage Milwaukee Network and a member of the Milwaukee Water Council, the Milwaukee Water Works is engaged in economic development efforts encouraging business to expand or locate in its service area and the Milwaukee region.

The Water Quality Manager is available during business hours for consultation and a 24-hour Control Center covers after-hours concerns and emergencies. Commercial Meter Readers read the meters of 1,000 largest customers on a monthly basis, and identify changes in season or monthly patterns and report discrepancies for timely corrective action. Customers can view and compare monthly or quarterly water use by accessing their account online.

Infrastructure Maintenance

The Capital Improvements Program provides for long term improvements to utility infrastructure to ensure a reliable supply of high quality water. The program includes treatment process facilities, laboratories, pumping and water storage, equipment, water mains, hydrants, and meters. The current emphasis is on the distribution system, including remote pumping and storage facilities and water mains and backup power generation. Since 1993, the Milwaukee Water Works has invested \$417 million in its infrastructure.

Security and reliability

To ensure continuous water service, ongoing efforts are improving the physical, cyber, and procedural security of water plants and other infrastructure. The utility maintains and tests its Continuity of Operations Plan (COOP) to ensure the utility has sufficient resources to continue essential operations should critical infrastructure be affected by an adverse event.

The utility has passed the mid-point of a program to provide backup power generation for five critical water infrastructure sites. While public health is the primary consideration in the delivery of water, Milwaukee Water Works systems were designed to provide sufficient water to suppress major fires.

The Milwaukee Water Works has been recognized by the EPA for its relationships with local, state, and national health and environmental agencies. A working group has met for 20 years to maintain a program of enteric disease surveillance and response.

A utility strategy to operate as efficiently as possible

As water use and revenues fall, the Milwaukee Water Works has focused on reducing costs and making operational efficiencies. The strategy results in savings in energy, chemicals, manpower, and other costs to maintain low and reasonable water rates.

The utility has adopted supply-side conservation techniques to save water and energy. The Milwaukee Water Works saved over one billion gallons from 2006 to 2012 through operational changes in treating and distributing water, flushing mains and hydrants. It would take decades of conservation by customers to equal these savings. The American Water Works Association (AWWA) recognized the Milwaukee Water Works' efforts with two awards for water efficiency in 2008. A consumer outreach program to help customers find and fix leaks, "Use Water Wisely," led to the 2011 Utility Special Achievement Award from the Wisconsin Water Association.

Please visit www.milwaukee.gov/water and GreatMilwaukeeWater.com

Contact information

Carrie M. Lewis, Superintendent, (414) 286-2801; Carrie.Lewis@milwaukee.gov

Rosalind Rouse, Water Marketing Specialist, (414) 286-2803; Rosalind.Rouse@milwaukee.gov

About the Milwaukee Water Works

The Milwaukee Water Works is a national leader in providing high quality, healthful drinking water and water quality monitoring. The MWW is the publicly owned utility of the City of Milwaukee; policy is set by the Mayor and Common Council. The utility is regulated by the EPA and the Wisconsin Department of Natural Resources (DNR) for facilities, operations, and water quality; and the Public Service Commission of Wisconsin (PSC), for rates and accounting.

The Milwaukee Water Works serves wholesale clients who operate their own water utilities, bill customers, and maintain distribution systems in Brown Deer, Butler, Greendale, Menomonee Falls, Mequon, New Berlin, Shorewood, Thiensville, Wauwatosa, and West Allis. The MWW provides water wholesale to the Milwaukee County Grounds. Retail customers receive full water service, including billing and distribution system maintenance: Greenfield, Hales Corners, St. Francis, Franklin (a portion); West Milwaukee receives billing services from MWW and maintains its distribution system.

Milwaukee Water Works Customer Service Center, Monday-Friday, 7:30 a.m. to 5 p.m., (414) 286-2830

TDD (414) 286-8801 Fax (414) 286-5452 841 N. Broadway, Room 409, Milwaukee, Wisconsin 53202

24-Hour Water Control Center (414) 286-3710

Email for non-emergency contact: watwebcs@milwaukee.gov

www.milwaukee.gov/water

Para una explicación en español, por favor llame al (414) 286-2830.