

# **Water Reuse**

More for the price of one: Making the most of existing water supplies.

While 70 percent of the Earth's surface is covered by water, only one percent of that water is accessible for potential use by the growing global population. Supply of our most critical resource can no longer meet demand in many places, making innovative approaches to reusing the water we have an absolute imperative.

The U.S. Environmental Protection Agency (EPA) estimates that more than two million gallons of water are reused in the U.S. every day. Even without a federal mandate on water reuse, private water service providers are on the frontline of efforts to treat and redistribute water for use in a range of daily commercial and residential functions such as washing, flushing, landscaping and even recharging groundwater aguifers.

Our members are actively involved in a variety of reuse programs across the country that will help ensure a safe, secure and clean water supply for generations to come.

# **Meeting Increasing Demand**

### Artesian Water • Middletown, Delaware

Communities and water service providers across the country have begun to reuse treated wastewater to meet increasing demands for life's most precious resource. In 2010, Artesian Resources Corporation created a robust public-private partnership in the state of Delaware that not only has incredible potential, but had also made an immediate impact on the local agricultural community.

Working with the Governor's office, the University of Delaware and the town of Middletown, the Artesian Water Recycling Partnership (AWRP) program saves nearly three million gallons of water per day. Completed in only nine months, the AWRP project in Middletown helped two local farmers survive crop-killing drought by receiving reclaimed water from the local facility. In addition, the Delaware Department of Natural Resources and Environmental Control calculated that using reclaimed water spray irrigation on just one 100-acre farm saves enough energy to power more than one home and to provide water to 130 households during a year with average rainfall.

Governor Jack Markell recognized the contributions of the Artesian-led partnership, which continues to generate significant benefits for the local agricultural community. "This is an outstanding green success story that shows what real cooperation between the public and private sectors, among state and local government and across agencies can achieve," said Gov. Markell.



### PROGRAM:

Local water recycling program benefits the community

# IMPACT:

Saves nearly three million gallons of water per day

# **DETAILS:**

www.artesianwater.com

# Solving the Halftime Flush

# American Water • Foxborough, Massachusetts

When sports fans attend games at various stadiums and ballparks across the country, the last thing on their mind is where the water in the bathrooms comes from or where it goes when they are done with it. But when Gillette Stadium, home of the New England Patriots, was being designed, plans were made to address the tremendous demand for water on game days. As part of efforts to make the stadium one of the world's greenest stadiums, American Water was engaged to create an advanced treatment system for the significant amount of wastewater generated by 69,000 Patriots fans in attendance on game days. When game-day attendance is larger than the entire population of the town, that's a critical solution.

American Water's complex system treats water on-site, returning high-quality treated wastewater both to the stadium and the Foxborough economic development area. The recycled water is used for toilet flushing, facilities cooling and other purposes, preserving the integrity of the town's water systems and meeting the needs of stadium visitors.



#### SCOPE:

Industry-leading filtration technology treats 250,000 gallons per day

#### IMPACT:

Reduces strain on local community's water systems

#### **DETAILS:**

www.amwatersolutions.com

# **Optimizing Every Drop**

# Utilities, Inc. • Clermont, Florida

When a community's groundwater supply gets dangerously low, reuse is one way to responsibly, and economically, balance water use between potable and non-potable. Reuse programs are not yet required by federal mandate, but not surprisingly, many utilities in the Sun Belt states are exploring more sustainable uses for the reclaimed water running through purple-colored pipes.

One area in Central Florida served by Lake Grove Utilities, a subsidiary of NAWC member Utilities Inc., has experienced a huge amount of residential and commercial growth over the past 30 years, and that growth has put a strain on water reserves. With nearly 13 different reuse facilities in operation across the country, Utilities Inc. is no stranger to working with local environmental regulators on building water reclamation facilities and advising on reuse quality standards.

According to a Utilities Inc. reuse expert in Clermont, Florida, irrigating just one landscaped yard takes collecting the reclaimed water from the showers, sinks and toilets of four to five average-sized homes. Private water companies have access to capital, allowing them to make the initial investment for those struggling communities that need to optimize every drop of water they have to meet the continuing need.



# SCOPE:

Company has nearly 13 reuse facilities in operation in U.S.

#### CHALLENGES:

Irrigation of one landscaped yard requires reclaimed water from 4-5 homes

### **DETAILS:**

www.uiwater.com

About the NAWC: The NAWC is the voice of the private water industry and the only organization that represents this group of quality water service providers, innovation drivers and responsible partners. In conjunction with our members, we engage with others looking for fresh and powerful solutions to water-related challenges.

We invite you to contact us to learn more about the private water industry and the solutions our members are creating. Together, we're moving water forward.

CALL: 202.833.8383 to speak about a wide range of water issues

VISIT: www.nawc.org for access to additional resources

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