

## CASE STUDY

# Badger<sup>®</sup> ORION<sup>®</sup>

## Radio Frequency System



*Badger Meter's ORION<sup>®</sup> Radio Frequency System*

## Badger ORION Succeeds TRACE<sup>®</sup> In The Rockies

*By: Ted Schaar*

Westminster, Colorado, is located about 13 miles northwest of Denver, on slightly higher ground than the Mile High City. The average altitude is 5400 feet. "The air is crisp and clear," said Utilities Services Supervisor Robert Booze, "and it's a wonderful place to live. We have all kinds of recreation, from water skiing to snow skiing."

### Prospectors among early residents

First settled during the Colorado Gold Rush of the 1850s, the area later attracted an institute of higher learning named Westminster University that was promoted as the "Princeton of the West." When the community incorporated in 1911, it took the college's name.

As a salute to the city's ultimate namesake, Big Ben's home in England, a 14-story bell tower was erected in 1986 to celebrate Westminster's 75th anniversary of incorporation.

### Second generation Badger AMR

Booze, a member of Westminster's Department of Public Works and Utilities, was instrumental in bringing AMR to the city. "We began installing the TRACE system in 1994," he said.

Following the advice of the American Water Works Association, which recommends replacing meters every ten years, he began planning for a new AMR system several years ago. The focus was on Badger ORION right from the start, given the department's excellent relationship with Badger Meter and its distributor National Meter and Automation.

"We like Badger meters and wanted something that would work with them," Booze said. "TRACE was an easy-to-use and dependable system and from what we heard about ORION, we figured it would be the latest technology and even better. In addition, you can't ask for a better level of customer service than we get from our account rep Noel Frakes. He stays on top of things and makes sure our meter techs are up-to-date on all the Badger technology we're using."

*Badger<sup>®</sup> and ORION<sup>®</sup> are registered trademarks of Badger Meter, Inc. TRACE<sup>®</sup> is a registered trademark American Meter Company.*

#### About the Author:

Ted Schaar is a freelance writer based in Brookfield, Wisconsin.

WESTMINSTER CASE



#### **BadgerMeter, Inc.**

P.O. Box 245036 • Milwaukee, WI 53224-9536

(800) 876-3837 • Fax: (888) 371-5982

[www.badgermeter.com](http://www.badgermeter.com)

## Case Study: *Badger® ORION® Succeeds TRACE® In The Rockies*

### Water flows off surrounding peaks

Water for the city's 31,000 accounts and 108,000 citizens comes from Rocky Mountain snow melt and the Clear Creek Basin. It's stored in nearby Standley Lake and withdrawn, treated, and distributed, at an average rate of 18 million gallons per day, across the 35-square-mile community. Highest usage occurs during the summer when temperatures climb and citizens water their lawns.

### Customers alerted

Residents and commercial accounts were already familiar with AMR, but the Department of Public Works and Utilities sent out a mailing to tell them about the new Badger ORION system. "We also mentioned that they might see slight bill increases due to the new meters which would be more accurate than the older units that were being retired," Booze said.

The cost of Badger ORION was paid by "Tap Fees," amounts that newly constructed homes and buildings pay to hook up to the water and sewer system.

### Meters installed in pits

Access to homes and businesses is not required because meters are housed in plastic or concrete pits within the city's right-of-way, which extends past the sidewalk onto each property. The pits are 20 inches in diameter and are installed about 54 inches into the ground. "Service lines enter and exit at the bottom," Booze pointed out, "and the meter sits about 12 inches below the surface."

As a courtesy, residents are contacted before water is turned off to let them know that the new meter and Badger ORION transponder are going to be installed. "Some residents have questions," Booze said, "such as 'Why are you doing this? Will it affect my water pressure? Will my hot water be hotter and my cold water colder?' Basic kinds of things."



*The Badger ORION Water Meter Monitor*

National Meter and Automation is doing the installation and about half of the services have been converted. Booze said the time to read with the Badger ORION system is significantly faster than with TRACE® system.

### Water Meter Monitors aid conservation

Westminster also purchased a number of Badger ORION water meter monitors and loans them to

customers. "When people ask how to conserve water and lower their bills, we recommend the monitor, which they stick on the refrigerator like a magnet," Booze said. Family members can then see—at the touch of a button—consumption for activities such as lawn watering, taking a shower, washing the car, and so on. "We loan the monitor to customers free of charge, just asking that they take care of it and return it in good condition," he continued.

The monitors work hand in hand with Westminster's water conservation program, Booze emphasized. "We're in the business of obtaining, treating, and distributing water, but we recognize and want our customers to recognize that it's a valuable resource that must be used carefully," he said.

### Excellence today and tomorrow

Booze is pleased with Badger ORION and the advice and support Westminster has received from Badger Meter and National Meter and Automation. "They believe in their products, stand behind them, and bend over backwards to make sure we're satisfied," he said.

"I'd recommend other utilities look carefully at ORION before selecting a system. It's doing the job for us and with its Wi-Fi network capability, it's definitely the wave of the future." ■