

## c a s e s t u d y



A view of Gulf of Mexico from Galveston, Texas

## BADGER® ORION® IMPROVES ACCOUNTABILITY, ACCURACY, AND EFFICIENCY FOR GALVESTON, TEXAS

By Kevin Orfield

Like it says in the old Glen Campbell song, you can hear the sea winds blowing and the sea waves crashing in the City of Galveston. Located on the Gulf of Mexico 40 minutes south of Houston, the 32-mile long island is a major tourist destination and the largest cruise ship port on the Gulf Coast. With a permanent population of 57,000 and a growing population of people who are making it their second home, Galveston is the largest island community established on a barrier island.

Just a few short years ago, sea waves weren't the only thing crashing in Galveston. The City's water meters and related infrastructure were dilapidated and unreliable. Faulty readings and inaccurate counts had become commonplace.

By switching from an aging touch-type metering system to an automatic meter reading (AMR) solution, the City believed it could recover a significant amount of revenue by identifying and recapturing unaccounted for water. After carefully evaluating meters, transmitters, and software from many manufacturers, Galveston selected Badger Meter's ORION® system.

Since installation, ORION has helped the city dramatically increase water accountability, accuracy, efficiency, and revenue. The city estimates it will recover more than \$1.4 million annually in billing that was lost to the old metering process.

### ORION REDUCES STAFF, RECOVERS LOST BILLING

Before ORION, a wide variety of meters were in the ground, some almost 40 years old. Many meters were either not registering or under-registering up to 75 percent. An inordinate number of meter rereads were needed to verify customer claims, which was labor intensive and inefficient.

Installation of ORION began in November 2004. More than 23,000 meters were installed over a 14-month period by a private contractor. After installation, the city was able to reduce its meter reading staff from thirteen down to three.

When the system went live, the benefits of the new system became immediately apparent. The system revealed that many of the old meters had been inconsistent, inaccurate, or not reading at all. It also revealed that significant revenue from a handful of large, private, and governmental customers had previously gone undetected.

### READ TIMES REDUCED FROM SEVERAL DAYS TO UNDER AN HOUR

Using ORION, reads are picked up much faster. Meter readers simply drive the route with their laptops, and the ORION AMR system does the rest, automatically reading meters.

The optional GPS feature displays the exact location of each meter on a map. A color code displays whether a meter has been read, skipped, or has a possible leak.

Readers can now complete routes with over 600 meters in 45 minutes, instead of two or three days. Readers now have more time to spend on maintaining meters and on customer service issues, such as turning water service on and off for seasonal residents.

The new "drive by" system is much easier on readers. "Our readers no longer have to walk three or four miles in the heat, cold, and rain," said Michael Tolbert, Utility Foreman. "Imagine bending over 690 times to manually read meters carrying a two-pound handheld. Our readers got very tired."

Accuracy has significantly improved. "The old hand-held meter reading system was highly inaccurate," said Diane Millican, Customer Service Superintendent. "We often had to send out readers to reread a meter after finding an error, doubling the work of readers and billing staff. ORION ensures reads are picked up more quickly and accurately, with far fewer errors, estimated reads, and re-reads."

### BILLING DEPARTMENT GETS CONNECTED TO SOFTWARE

Billing staff have become much more efficient using the user-friendly Badger® CONNECT software. Menu options are clearly displayed and easy to follow. Read data is easily transferred and

**d i s t r i b u t o r   p r o f i l e**

**From Left to Right: Mike Crumbaker - VP Sales - General Pacific, Jon Koch - Outside Sales - GenPac Water, Lori Teel - Inside Sales - GenPac Water, Rick Hall - President - General Pacific**

# GENERAL PACIFIC JOINS BADGER METER DISTRIBUTOR TEAM

**By Mike Crumbaker - VP Sales and Marketing, General Pacific, Inc.**

General Pacific, Inc. (GenPac), serving utilities in the Northwest since 1965, is pleased to announce our selection as the new distributor for Badger Meter, Inc. for Washington, Oregon, Northern Idaho, and southern Alaska, effective immediately.

Badger Meter Inc. has over 100 years in manufacturing the finest quality water meters to utilities throughout the United States. This also includes the best-in-class in AMR systems, as well as tailored systems for water-only utilities and AMR systems designed for combination reading utilities with electric, gas, and water.

GenPac has been a leader in metering and AMR systems for the past 20 years. GenPac has committed to hiring skilled people and training our sales staff to support our customers on technical issues. Our success stems from a combination of representing quality products, commitment to stocking adequate inventory, and hiring and maintaining a committed and well trained staff.

historical reading data can be stored and archived. The custom report builder makes it easy to create and generate reports, including high/low read limits, number of reads sent to billing, unread meters, meters with/without tamper codes, meters with/without GPS coordinates, and more.

Using the optional leak detection feature, the Billing Department can monitor excess water consumption for individual meters. When usage increases dramatically during a particular month, the department alerts the customer to potential leaks.

“If a customer challenges the meter’s consumption accuracy, the meter profile proves that there was a leak or other issue that caused the consumption,” explained Eric Wilson, Assistant Director of Municipal Utilities. “As consumers become more aware of this technology, challenges will dramatically decrease.”

Accordingly, we have hired Jon Koch as our Outside Meter Technical Sales Representative. Jon has a long history working for a large water utility in our region before beginning his sales career in water meters and AMR sales.

Lori Teel will handle our Inside Meter Technical Sales. Lori has had a long association with the utility industry. She offers a wealth of experience to this position.

We believe our customers will enjoy working with Jon and Lori and will value their focus on your needs for excellent metering and automated metering technologies.

We are excited about representing Badger Meter and serving the water and gas utilities in our region. If you need further Badger Meter product information, or need to find GenPac's contact information, please refer to Badger Meter's website: [www.badgermeter.com](http://www.badgermeter.com) ■

The City is currently implementing ORION’s data profiling feature, which allows them to graphically display water usage data in as small as one-minute intervals. “This is a very valuable tool,” said Wilson. “It helps us evaluate where and why there is a spike in usage.”

Wilson has recommended ORION to a number of other municipalities. “I highly recommend ORION to any entity that has low water accountability and spends excessive time in the data acquisition process,” he said.

“Anyone that is currently using a manual reading system should consider ORION,” added Millican. “It’s an excellent solution for more accuracy, faster meter reads, and easier operation.” ■

*Kevin Orfield is a freelance writer based in Thiensville, WI.*