

Municipal Water Board

Motion F5 Tablet PCs Improve Effectiveness of Water Conservation Program

Overview: A Municipal Water Board's Conservation Efforts

A large municipal water board is committed to providing its customers with high quality water and excellent service through responsible and creative stewardship of the assets they manage. The organization, its region's oldest and largest water utility, serves high quality-water and promotes its efficient use to 1.3M people in the City and surrounding areas.

In 2003, the City experienced a significant drought. As a result, the Water Board initiated several conservation programs aimed at reducing water waste. While citizens reduced water use during the drought, when the water shortage ended usage patterns began to rise. Realizing that water conservation works best if consistently applied, the Water Board created a program to significantly reduce water use on a consistent basis through education and better enforcement of restrictions.

New water use guidelines, impacting both residences and businesses, consisted of a variety of rules that would help conserve water, such as limiting the time of day and number of days that irrigation can occur. And with more than one million customers, it was important to adopt technology solutions that would help better monitor and control water use across its entire service area.

Challenge: Monitoring Water Conservation Programs

In an effort to help limit water use as the City's population continued to grow, the Water Board initiated several programs that would limit water use. After implementing the programs, the organization wanted the ability to identify which of them were successful. So, a team of water conservation technicians were deployed to monitor and enforce water use guidelines. Teams were instructed to first warn, then site and finally fine violators, and those violators that continued to ignore guidelines ultimately lost their access to water.

In late 2007 a technology analyst for the Water Board was tasked with identifying and developing tracking solutions that would enable it to better educate its customers and more efficiently measure the success of the water conservation programs. In addition to the development of an effective Customer Information System (CIS), the analyst was responsible for selecting the best mobile device for field technicians.

"We knew we needed a rugged device, and we also knew that our technicians would need full PC functionality in a highly mobile and portable design," said the analyst. "Our paper-based process was inefficient and time consuming, so we did a thorough review to identify the PC that would best meet our needs."

Prior to the adoption of a mobile device solution, water conservation technicians had to fill out a three part form and if photos were also required, they took them separately, printed them and then attached them to the paper form file.

"The question we had was how to be sure you had the right picture associated with the right file. The process to incorporate the information was just so disparate," he added.

The Solution: The Right Mobile Device

Knowing that he was in search of a rugged, fully-functional PC, the analyst brought in several different types of devices. With a thorough understanding for the highly mobile nature of technician workflows, and knowing the devices would be subjected to wet or dirty conditions, it was important to get a field tool that would enable technicians to access and update files, while also withstanding harsh outdoor elements.

The Motion® F5 stood out with its highly mobile design, molded handle, light weight, and integrated camera. When compared to other rugged devices, the F5 was chosen because it was lighter in weight while rugged enough to suit the utility's outdoor application, and its 10 inch screen enabled full PC capabilities whether in the office or in the field. Additionally, its highly mobile design easily beat out other devices developed for rugged outdoor use.

"The F5 is at least a pound lighter than many of the other fully ruggedized computers we tested – so we were initially unsure about its durability," added the analyst. "But, after using the F5s over time, I don't think that any other rugged PC could hold up as well in the harsh environments our technicians sometimes encounter."

Now, equipped with the F5s, technicians begin their workday with customer files fully accessible on the PC. Throughout the day they monitor water use, and when they identify violators they can electronically document the appropriate information for a citation, and easily incorporate a photo into the record by utilizing the integrated digital camera. When back in the office, they can connect to the F5's docking station and Bluetooth keyboard for full desktop replacement functionality.

"The fully sealed design of the F5 leaves me confident that devices will stay protected while users are out in the field," said the analyst. "We're confident that we've supplied our technicians with the tools they need to more efficiently do their jobs, with a device that is sure to withstand the conditions of their work environment."