Accurate measurement of water consumption across a large metropolitan area is no easy task, but for a water company it can mean the difference between profitability and throwing money down the drain. That’s why City West Water, a major water supplier to residential, commercial and industrial sites in and around the city of Melbourne, Australia, has been working with Siemens for more than a decade to install SITRANS F M MAG 8000 electromagnetic water meters at high-consumption sites and in fire service applications. Today, more than 1000 of these devices monitor customer water usage to improve the billing process and ensure that an adequate supply of water is available in a fire emergency.

The importance of flow measurement
One of three Melbourne metropolitan area water corporations, City West Water provides drinking water, trade waste, recycled water, stormwater harvesting and sewerage services to approximately 276,000 residential and 31,300 non-residential customers in Melbourne’s central business district, inner and western suburbs. They also manage more than 4000 km (2485 mi) of water mains.

Monitoring water flow from the mains to the inlets at high-consumption sites – schools, hospitals, high-rise apartments, retirement villages, shopping centers, hotels, airports and factories, to name just
a few -- is essential for City West Water to bill customers accurately and fairly. Flow measurement also makes it possible to oversee fire service installations, including hydrant and sprinkler systems, for billing as well as operational purposes.

New technology from a trusted name
City West Water had already benefited from a productive business relationship with Siemens stretching back many years. So when Siemens introduced the battery-powered SITRANS F M MAG 8000 electromagnetic water meter in 2005, the water company decided to take advantage of this new and highly advanced technology.

The MAG 8000 offers a wide range of advantages over its mechanical counterparts, including:

- Improved accuracy. The MAG 8000 measures flow at a very high accuracy of 0.4%, drastically reducing unaccounted-for water usage and providing more precise billing for City West Water's customers.
- Obstruction-free operation. The full-bore MAG 8000 never obstructs flow and delivers water without any significant drop in pressure, which is especially important for demanding fire service applications.
- Low maintenance. With a battery that can operate continuously for 6 years and no moving parts to wear down over time, the MAG 8000 is a truly low-maintenance meter.
- Tamper-proof design. Several layers of security help to safeguard the MAG 8000 against tampering, including an optional wired seal, password protection and a hardware key that is required in order to change critical parameters.
- Easier to use. The MAG 8000 features a very intuitive and user-friendly display with only a single push button, making it simple for meter readers and customers alike to obtain information with the tap of a finger.

According to Andrew Geary, Metering and Backflow Specialist for City West Water, "Not only are we fully satisfied with the accurate and stable performance of the MAG 8000, but we're also very happy with the consistently high level of customer service we receive from Siemens." As a result, City West Water currently installs SITRANS F M MAG 8000 electromagnetic flowmeters as part of any new fire service application where sprinklers or fire tanks are involved. In mid-2015, the company placed an order with Siemens for 18 - 6" meters pushing their total installed base to more than 1000.

City West Water has installed more than 1000 SITRANS F M MAG 8000 meters throughout Melbourne.