

QuadReal Property Group, a global real estate powerhouse, manages a vast portfolio across 17 countries. However, hidden beneath the gleaming facades of one of their Alberta properties lurked a silent enemy: hard water. This adversary, rich in dissolved minerals like calcium and magnesium, caused havoc on their plumbing systems, quietly siphoning away finances and precious resources.

## THE CHALLENGE

Within QuadReal's Alberta portfolio lies Calgary Place East Tower, which exemplifies the insidious nature of hard water. Here, the mineral deposits weren't merely unsightly – they were wreaking havoc.

**Corrosion:** Hard water's high mineral content is a relentless foe for metal pipes and fixtures. Over time, calcium and magnesium eat away at these components, creating tiny cracks and fissures that become pathways for leaks.

**Scale Buildup:** As hard water evaporates, the dissolved minerals leave a chalky limescale residue. This buildup can accumulate within valves, flappers, and other plumbing components, hindering proper functioning and leading to leaks.



This issue had a monumental impact: 65% of the building's water flowed through meters even when unused, translating to a staggering monthly loss of \$13,000 and 4.2 million litres – a financial and environmental drain. To further exasperate the issue, they didn't have insight into where the problem was located and, as a result, had to go into every suite to investigate and fix the plumbing infrastructure.

## THE SOLUTION

Knowing they needed more actionable insight and a proactive solution, QuadReal hired Connected Sensors to deploy the Water Monkey, a non-intrusive, battery-operated smart water flow meter. This innovative device provided minute-by-minute insight into the building's water usage patterns, immediately detecting the most minor water inefficiencies and potential leaks.

## THE RESULT

With the help of the Water Monkey, QuadReal was able to identify the source of the issue, implement the necessary infrastructure repairs and reduce the water loss from 60 litres per minute (LPM) to 10 LPM. This substantial reduction translated into an estimated annual savings of \$100,000 for QuadReal.



By deploying the Water Monkey, QuadReal gained invaluable insights that enabled it to prioritize repairs, optimize maintenance schedules, and identify properties most susceptible to hard water damage.

