

Mobile Connectivity Helps Water Utilities Service Customers

Utility Field Crews Supported by Cradlepoint Vehicle Routers

The Challenge | Aging Fleets and Overloaded Systems Diminish Connectivity

Regardless of the type of utility — or whether it's publicly or privately operated — ensuring that systems are up and running every hour of every day is absolutely essential to business. Utilities are tasked with the mission-critical task of ensuring residents within their municipalities have access to some of the most basic, but vital, necessities — water, oil, gas, and electricity.

When there are outages or issues within a community, or if a utility has internal issues that are impacting its ability to deliver resources, peoples lives can be severely impacted. For utilities that deliver water services, an inability to access fresh, drinkable water can quickly become a life or death matter, especially for residents unable to procure water from other means.

In order to keep water utilities up and running, crews are often dispatched at all hours of the day and night, in all weather conditions, to remediate issues. The crews need to be able to reliably communicate with their headquarters, dispatchers, and each other while also having access to existing and incoming information (such as weather and materials updates) that could impact how they handle a situation.

Once dispatched, water utility field crews need round-the-clock constant and reliable access to the cloud applications and smart devices they use to perform on-site service visits and repairs.

One American water and wastewater utility realized that as technology advances, their reliance on such applications and devices continued to increase. Unfortunately, their aging field service

vehicle fleet was experiencing incidents related to network congestion and limited bandwidth

This particular utility happened to be located in an temperate region that experiences incredibly warm summers and below-freezing winters. They realized that Mother Nature was negatively

These instances of poor connectivity were deemed unacceptable. They stalled maintenance

and repair schedules, while also requiring they re-task internal resources, often delaying the

resulting in partial and complete failures to connect that required in-person remediation.

impacting the performance of fleet hardware that wasn't built to withstand the elements.

completion of other vital projects while they worked to restore fleet connectivity.



Industry Profile

- Water Utilities
- · Wastewater Utilities

Technology Solutions

- · Cradlepoint R1900
- Cradlepoint IBR1700
- · w/MC400-5G Modem · Mobile Mark LTMWG943

Targeted Results

- · Increased Bandwidth
- Reduced Latency
- · Remote Troubleshooting



The Solution | Security, Reliability, and Longevity with NetCloud The situation had gotten so dire that some employees had lost complete confidence in the

installed systems within the fleet and were using their personal cellular devices as hot-spots in order to get the job done. While this was not ideal by any means — least of all because it meant employees were using their personal resources to complete their jobs — it also opened the entire operation up to security risks.

Searching for a solution that would deliver security, reliability, and longevity, the utility landed on USAT and Cradlepoint. Their key considerations were to replace their aging equipment with a ruggedized solution that could withstand the elements, provide a very good signal, and could be remotely managed and maintained to eliminate the need to take service vehicles off the road when troubleshooting.

USAT delivers water and wastewater utilities the end-to-end 5G communications solutions they need to support their mission-critical fixed and mobile operations.





Cradlepoint R1900





Mobile Mark LTMWG943



This water utility reached out to USAT to help them provision and deploy Cradlepoint's wireless 5G edge routers (*specifically the R1900 and MC400-5G equipped IBR1700*) with multi-year NetCloud Service for Mobile plans, and external antennas (*like the Mobile Mark LTMWG943*) purpose-built for vehicles, to address the connectivity issues throughout their fleet.

NetCloud Manager allows them to immediately identify the source of the connectivity issue — whether it's the laptop, carrier, power supply, Wi-Fi, or router itself — and troubleshoot the issue immediately. The wireless edge solution and external antennas mean that they can expect — and rely on — constant cellular connectivity inside and outside of the vehicle.

The Results "The Cadillac of Wireless Network Solutions"

The field team can now use their vehicle connection and devices with as much reliability as if they were sitting in an office. They can also depend on the devices needed to do the job while outside of the vehicle.

Further, the IT team can monitor connections and provide troubleshooting remotely, without having to take the vehicle off its route and back to headquarters. Their Data Center and Client Services Supervisor referred to it as "the Cadillac of wireless network solutions," emphasizing that the real-time visibility is incredibly useful.

The Team | Device Provisioning, Activation and Installation Services

USAT serves the nation's critical infrastructure by creating secure communication networks that pass data wirelessly between key systems - linking remote personnel, locations, and machine assets. We work with public and private utilities across the entire USA — equipping them with the cellular connectivity solutions they need for their various fixed and mobile applications.

Having received the 5G for Enterprise Branch Specialization from our partners at Cradlepoint, we are expertly equipped to provide targeted 5G IoT connectivity solutions that fit our clients' exacting needs. Our team sells, designs, configures, and installs the wireless edge devices and management platforms utilities need to succeed in our technology driven world.

CONTACT US TODAY TO ENGINEER YOUR MOBILE 5G CONNECTIVITY SOLUTIONS



www.usatcorp.com • 888-550-8728 • info@usatcorp.com