



# Transform your water network

Explore how >

# Introduction



Water is a scarce resource. When utilities are focused on making every drop count, water losses can quickly add up. Sydney water reported non-revenue water equivalent to 26000 Olympic size pools in 2018. That's 65 billion litres of water and millions of dollars in costs and lost revenue.

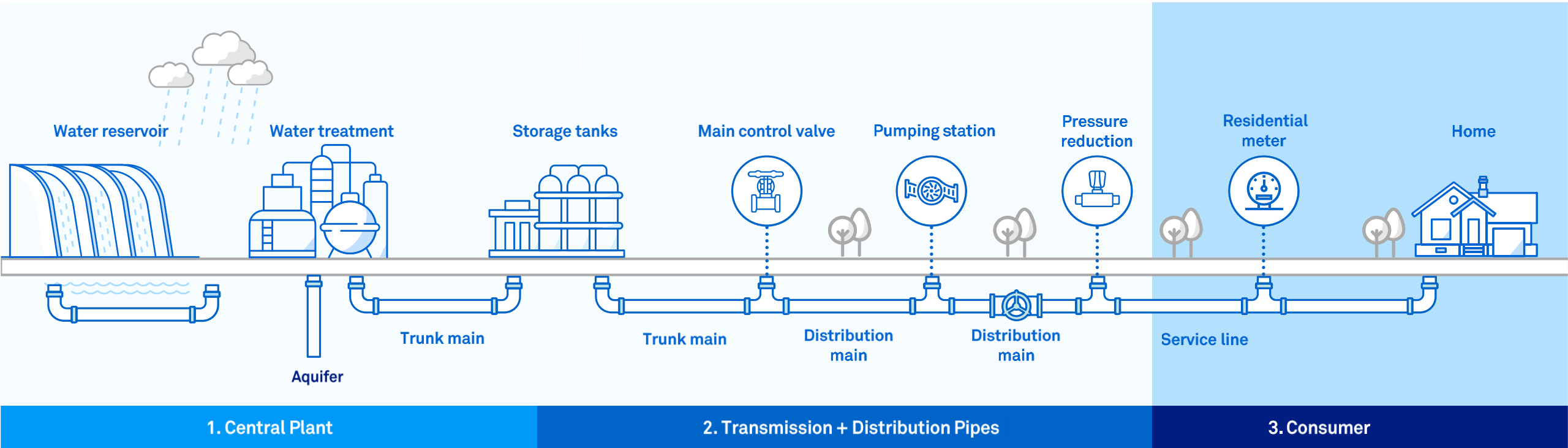
Managing the maintenance of water infrastructure is also capital intensive. The [Water Services Association of Australia](#) estimates its members collectively spend between \$3.5 and \$4.5 billion on water infrastructure every year.

## Supporting water utility transformation

Technology can help your organisation manage its water network more effectively and become more sustainable by helping to reduce non-revenue water losses, increase asset life, and provide insights into household water usage.

# Discover how IoT can transform your water network

Click on a part of the water network below to explore.



# Central plant distribution pipes



## Devices to keep the water flowing

Telstra Captis Multi/Pulse devices are ideally suited for central plants and distribution pipes as they have sensors that capture more insights than just water consumption or flow. Depending on your requirements, Captis Multi/Pulse devices can capture data on water quality, water temperature and water levels. These devices can be used to capture a variety of data across your water network.

# Central plant distribution pipes



**Predictive maintenance can help to avoid costly downtime**

Predicting asset failures before they happen and optimising maintenance schedules can help maximise equipment life and reduce unplanned outages. MOVUS FitMachine® is a simple predictive maintenance solution for your pumps, machinery and fixed equipment. It gives you visibility of the performance of your industrial equipment - even when you're not there.

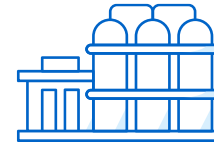
It's suitable for most fixed rotating machinery such as pumps, motors, gearboxes, compressors, cooling towers and more. And you can get started quickly and easily with MOVUS. Just magnetically attach the wireless, industrial-grade sensor to your equipment and connect via existing WiFi or the Telstra IoT Network—no tools required!

## Leeton Council Case Study

Typical number of Telstra Captis Pulse/Multi devices required:



**Central plant**  
~100-1000



**Transmission and distribution pipes**  
~1,000-100,000

MOVUS FitMachine® device number depends on requirements.

# Central plant distribution pipes



## Long-life deployments on Telstra certified Captis devices

With hundreds or thousands of devices in use, you want to be confident you won't spend time maintaining the solution rather than enjoying the benefits. We have certified Telstra Captis devices on Telstra's IoT networks, ensuring you receive optimal performance in the long-term. And with guaranteed minimum battery life for five years – and up to 10 years\* under certain conditions – you can have peace of mind that your deployment is there for the long term.

\*Battery life is dependent on a signal strength of -90dB (RSRP) and operating temperatures of -5°C to +45°C, with hourly reads and daily uploads to the network, up to 5KB per day utilizing the LTE-M and NB-IoT coverage on the Telstra IoT network.

# The end user



## Metering for better water management

Digital water metering for homes enables you to offer management teams daily or weekly water consumption, aggregated consumption over time, flow and trend analysis, as well as peak and non-peak consumption, through intuitive dashboards. Gaining such an advanced understanding of your customers' usage will help your organisation to plan for a more sustainable future.

Telstra's IoT Water Solution provides you with insights into water consumption wherever a device is installed across your water network. Our Captis Metrum devices are CAT-M1 and NB-IoT certified and designed to fit most existing mechanical water meters.

Typical number of Telstra Captis Metrum devices required:



**~1000 – 2 million**

# The platform



## Visibility and machine learning to get you on the front foot

Collecting the data from sensors is just one part of the IoT equation. We offer a single platform to manage your IoT device and water consumption data via Telstra's Water Management Application.

When it comes to improving equipment lifetime and reducing faults, maintenance checks are no longer limited by how frequently equipment can be visited. You can help maximise equipment availability with data-led predictive maintenance as advanced algorithms analyse data to learn the right time to repair and replace components.



# The network



## Connecting to the right network

Your choice of access network is critical to the long-term success of your IoT project. You need to consider the type of network and, critically, whether it provides enough secure, high performance coverage to enable you to scale your IoT deployment.

Telstra's IoT network is Australia's largest with a range of future-proof, ready-built network technologies for a range of use cases. Telstra's Captis Metrum devices connect within Telstra's LTE-M/NB-IoT coverage areas. We take care of SIM management and data connectivity as part of a bundled service.

End-to-end control of the network also enables us to support configuration and firmware updates over the air, with no manual updates required. This makes it easy for you to manage and secure your devices.

To learn more about Telstra's network coverage [visit our website](#).

# Make your water management more efficient with data driven problem solving, reduced operational costs and increased equipment availability



Telstra makes it easy to get started with affordable, complete turnkey solutions which include NB-IoT certified sensors and devices.

For a simple monthly fee customers also receive data connectivity and SIM management, security for data and devices via our virtual private network, a single platform to manage IoT device and water consumption data and intuitive dashboards via Telstra's Water Management Application.

To discover how you can take advantage of these benefits [contact us](#).