

Meter Replacement Program with Automatic Water Meter Readers

Meter Installation Program

Water meters need to be routinely replaced every 10 to 15 years as they eventually lose accuracy and fail.

Cassowary Coast Regional Council will be undertaking the water meter replacement program in homes and businesses in parts of Innisfail and surrounding areas. The new meters will be installed with automatic water meter readers. If your meter is currently below ground, Council will be looking to install the meter device above ground. See photo of typical installation. The above ground meter has significantly higher signal reliability than underground installations and they are also easier to maintain. Where above ground meters are impractical such as in CBD areas or in driveways, Council will install the new meter and transmitter in a meter box.

In the week before the installation team moves into your street, you will be directly contacted by one of our plumbing supervisors who will advise more specifically the location of the new meter, and the date and time of meter changeovers. If not at home, we will leave contact details in your letterbox.

What is an automatic water meter reader (AMR)?

An automatic water meter reader (known as a smart meter) is a small radio transmitter that records the number of pulses generated as water passes through the water meter. It is fitted to the water meter and transmits hourly meter readings by a small radio signal. Council processes the data, allowing almost real-time analysis of water consumption. Council is currently using 2 types of water meters (Honeywell V200-HT or Elster V100) with either built in transmitter (as in the V200-HT) or external transmitters (fitted to the V100). The typical meter types and transmitters used are shown in the photos below.

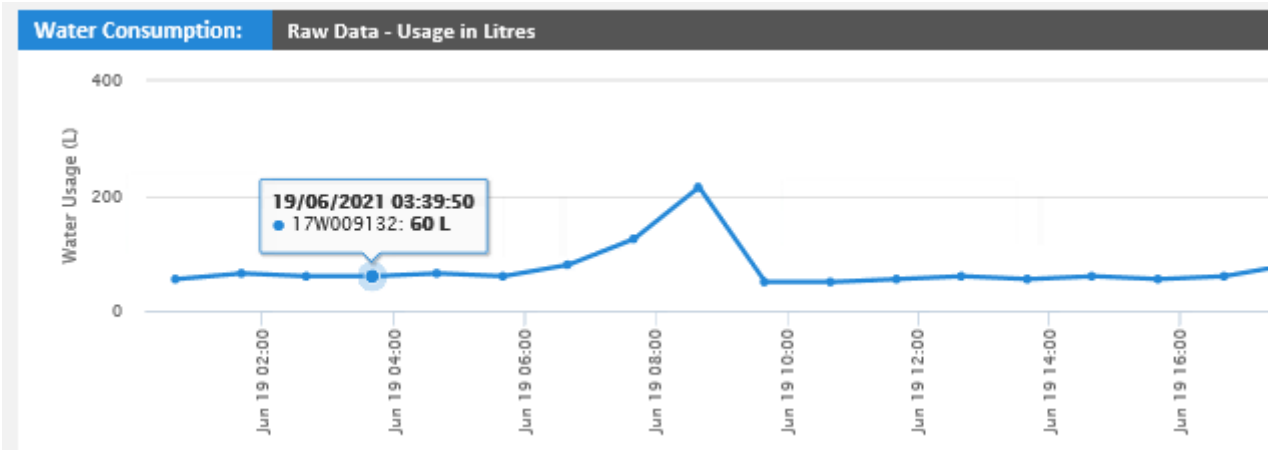


Photo above: A typical Honeywell V200 HT above ground water meter with in-built transmitter.



Photos above: (Left) Elster V100 meter with MRC transmitter. (Right) Elster V100 meter with HP transmitter

The data of hourly water consumption from the smart meters is processed by Aqualus software which Council uses to view daily trends for each metered connection as shown below.



Graph above: Typical data output from the smart metering showing consumption patterns. Leaks are detected by a consistent consumption showing in the middle of the night. This example has a night time leak of about 60 litres per hour.

If this leak was to continue for a complete year, the cost of this leak in water charges would be in excess of \$500. Council operates a two tier set of charges for water consumption. Up to 425kL per year the water consumption charge is at a lower rate but all consumption above 425kL is charged at a higher rate. Further information on Councils water access and consumption charges can be found in Councils Revenue Statement.

If a property has a fully functional AMR, Council will contact consumers who have sizeable leaks.

Why is Council changing its water meter readers?

Water meters typically have a life of about 10 to 15 years depending on flow throughput. As part of our program to replace old meters, Council is also taking the opportunity to install automatic water meter readers (AMR or smart meters). Currently water meters are read by Council twice a year for billing purposes and if there is a leak at the property it may go undetected for up to 6 months. This could lead to expensive water bills. With automatic water meters, there are hourly water meter readings and daily reports are generated, so unusual increases in water usage can be quickly detected and Council can advise individual property owners. See example above of consumption data that Council can see for a typical smart meter.

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The smart metering system will improve Council's management of leaks and this will reduce demand on water supplies from our creek systems. The data will also allow Council to monitor peak demands and improve planning for upgrades. It will also be a cost-effective way to read water meters in the long-term.

How will I know when an automatic water meter is being installed at my property?

We will deliver a notice to your home or business which will let you know when work is scheduled for your street. If you are not home during the installation, you may notice a meter similar to the photo above or alternatively a small green device attached to your above-ground meter.

Above ground and below ground water meter installations?

Above ground meters will be positioned in practical locations to minimize obstructions and hazards. Where possible above ground meters will be located against fences or adjacent to gardens. If meters are currently located in driveways and it is not practical to install an above ground meter clear of the driveway, Council will install the new meter below ground in a pit. Council will be endeavoring to minimize the numbers of meters in pits as the reliability of the meter installation and the signal strength are compromised.

Will my water supply be interrupted during the water meter upgrade work?

Yes, your supply will be interrupted and we apologise for this. We will be working to minimise any disruption and to avoid interruptions at peak water usage periods. The outage will occur for a period of time between 8:30am and 3:30pm. The period of interruption will depend on a number of factors including the complexity of the new installation and the numbers of homes or businesses in your street.

How does the technology work?

The device, which is battery-powered, detects the water meter dial rotating and transmits water meter readings as small radio signals. The information is then stored in a secure database managed by Cassowary Coast Regional Council.

How strong is the radio signal?

The radio signal transmitted by the automatic water meter reader is very small. It is about 30 times weaker than the signal transmitted by your mobile phone. If the transmitter stops working for any reason, Council will be able to detect the loss of transmission and will investigate and take the appropriate action.

How will my water meter data be used?

Your water meter data will be used by Council to identify water leaks at your property. Your data will also be used for billing purposes. Council will also be examining options in the future for customers to be able to access their daily consumption data via internet or smartphone.

Who is responsible for the water meter reader's maintenance?

Cassowary Coast Regional Council. Just like the water meter itself, this device is the property of Council. However, we ask residents to be mindful of their meter when mowing or landscaping and to keep it clear of vegetation.

How can I manually read the meter?

The V100 meter as shown below records kiloliters in the black numbers and litres in the red text. The meter below has a reading of 263.59 KL. Water consumption is charged in kilolitres.

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Photo Above: V100 meter with MRC transmitter showing 263.59KL.

The V200-HT as shown below has a different reading dial. The top display shows m3 or kilolitres and the bottom display shows litres to 2 decimal places.



Photo Left: V200 –HT showing 58 kilolitres and 81.71 litres (ie 58.08171 KL)

What do I do if my water meter or AMR device is damaged?

Please contact Council's Customer Service team on 1300 763 903.

Further Information

For further information contact Council at 1300 763 903 or email enquiries@cassowarycoast.qld.gov.au.