

Water Meter Readings

Water meters are read twice a year in mid-June & mid-December and readings across the region are completed in approximately 2 weeks.

Charters Towers' properties that have a smart water meter will not have a manual read, however, Council has read a sample of meters.

Water Meters

- 1. Water Meters are owned by the 'water business' and are installed at the commencement of the water service line of a home or business to accurately measure the water being consumed. The accuracy of the meter type used by Council is guaranteed by the manufacturer when it is purchased, having met stringent guidelines as required for maintaining accreditation with the National Measurement Institute (NMI). For this reason, Council uses Australia's leading manufacturer and supplier of water meters, being a company who is also a world leader, maintaining accreditation across more than 130 countries, audited and renewed annually.
- 2. To ensure that the 'water business' does not lose revenue, water meters are replaced by Council when 5,000 kilolitres has passed through the meter, or when the meter reaches 9 years of age; whichever comes first. This replacement policy is required based on the fact that water meters 'under register usage' as they age.
- 3. Water meters used by Council are calibrated by the manufacturer to accurately record the flow of water based on the units required to be read, using the motion of the measuring element called a 'piston'. As water passes through the meter, the registered reading of each litre is dependent on there being no factors preventing the 'piston' from making the correct number of cycles required to measure each litre of water. This style of meter records less water with age due to factors such as, but limited to:
 - a. Wear within the aging meter causes the clearances between the 'piston' and its housing to increase, allowing water to slip through unmetered.
 - b. Wear within the aging water meter causes the 'piston' to slip, resulting in under-registration of usage.
 - c. Age results in corrosion, as all the metals used in the construction of the meter used by Council are affected by the corrosive action of water, again causing excessive clearances to develop in the measuring element, allowing unmetered water to slip through.

Can the 'Water Meters used by Council' change from accuracy to running too fast?

The answer to this question is "No". The 'piston' within a meter can be calibrated at manufacture to cycle too fast, however, this would be very rare based on the NMI quality control standards followed during manufacture and testing, prior to release by the Manufacturer. Age reduces the ability of the 'piston' to cycle at its calibrated speed, as identified in a. to c. above. Age does not speed it up.

Based on the construction and operation of the water meter used by Council, age does not have the ability to increase the cycle of rotation. Therefore in a very rare case, a council installed water meter may run fast from installation, but the meter cannot alter from 'accuracy to fast', only 'accuracy to slow'. It is this fact that makes regular monitoring by property owners essential; especially in the year where a meter has been replaced.

It is a fact that at the time every old meter is replaced, it will be recording water usage below the actual usage flowing through the meter. Therefore when a meter is replaced, the same water usage pattern will result in increased readings, based on the meter again recording accurately and no longer understating the actual usage.

Monitoring Water Usage

It is the responsibility of each property owner to monitor the water usage recorded by their water meter. Such monitoring allows changes in water usage to be investigated early, as they are happening, therefore avoiding unexpected excess. There are many avenues where increased water usage can be used without one being consciously aware that it is.



Causes such as:

- 1. Leaks between the meter and the house or the meter and the yard taps.
- 2. Timer issues experienced in automatic sprinkler networks.
- 3. Leaks associated with a cistern within the house, or increased pool evaporation increasing the activation of the automatic fill valve.
- 4. Subtle increased watering of yards and gardens during periods of extreme dry.
- 5. Watering yards by way of sprinklers, where timers are not utilised, results in sprinklers being inadvertently left on for extended periods.

It is impractical to wait until the 1st & 2nd *Half Yearly Rates Notices arrive in the mail to 'discover' excess usage*. Excess usage needs to be identified early so that the cause can be resolved before the circumstance turns into an unplanned excess water bill.

Property Owners in Charters Towers can monitor water consumption through the free MiWater website. Visit charterstowers.aqualus.com

The basis of the water charge is:

Residential:	Can choose between the Allocation Tariff or Two Part Tariff
Non-Residential:	Two Part Tariff only

Allocation Tariff is an annual fixed charge combining access charge with an annual allowance of water, and is unit based per parcel according to the variables as set out in the Water Charges Schedule.

Two Part Tariff

- First Part: Flat Charge covering Access or Availability (levied in advance, split between the two half yearly rates notices)
- Second Part: Charge per kilolitre Used (excess threshold applies per unit) levied on the 1st & 2nd half yearly rate notice following the bi-annual meter reads.

Residential Properties can choose annually between tariffs. A defined timeframe will be advertised each year, following water meter readings, during which time a request to transfer can be submitted online, or via a hardcopy Transfer Form. Transfer requests will not be accepted outside of the defined advertised 'Transfer Period'.

2024/25 Consumption – IMPORTANT ADVICE

Property Owners will now be charged for consumption each 6-moth period, instead of just once per year (access charges for those on 2-part tariff, and allocations units will continue to be billed per levy)

Residential Allocation Tariff:

If you have remained on the Allocation Tariff, to avoid excess water levies, you must not exceed your allocation. Your water allocation will be represented by the

number of units noted on your Rates Notice. Each unit represents 187.5 kls.

Standard residence (4 x 187.5 kls = 750 kls annual allocation). **750 kilolitres equates to an average of just over 62.5 kilolitres per month.**

Two-Part Tariff (All Non-residential properties & Residential if applied)

Your Rates Notice indicates the units linked to your 'Access Fee', and identifies the usage threshold, charged at \$1.16 per kilolitre. Greenvale properties: charged at \$1.07 per kilolitre.

Standard non-residence property (6 x 187.5 kls = 1125 kls annual threshold for usage @ \$1.16 per kilolitre) Usage above the threshold will be charged at \$2.09 per kilolitre. Please monitor usage closely, to avoid unexpected usage levies on the 2024/2025 Half-Yearly Rates Notices.

When you read your meter monthly, if you are exceeding 62.5 kilolitres per month, you are heading for an excess water bill unless you change your pattern of usage.



The only way to check if water is being used by way of a concealed leak, is to ensure that no water is running and no appliance, cistern, shower or pool etc. uses water until you have finished the check. Proceed to check the meter and see if it is turning. If it is turning, then water is being used somewhere, or by something. If you cannot find where, then you need to employ a 'contract plumber' to assist you.

Only if the water is leaking out of the meter, is it the responsibility of the 'water business' to fund the cost of repairs.

Replaced Meters

As discussed above, as meters get older, they under-register the water being used. In many instances the underregistering can be substantial. As such, when a meter is replaced, the same water usage pattern will result in increased usage, based on the meter again recording accurately and no longer understating the actual usage.

Tampering with a Water Meter is against the Law

Water meters are owned by the 'water business' and law does not allow, under any circumstances, for the public to remove a meter and replace it with another. Due to the serial number contained on each meter, the address to which the meter belongs is recorded, and any changes will be identified.

How to read your meter

Below is a picture of a water meter, which recorded a quantity of 5,019.663 kilolitres of water during its useful life.

The black and white section represents kilolitres, while the three red numbers represent litres. When the red section reaches 999, as the next litre is used, the black and white kilolitres will increase by one, and the red section will revert back to 000, ready to count the next 1000 litres.





Water Meter Serial Numbers

Each meter is engraved with a unique serial number, and this number is recorded within the rate account for every property at which a water meter has been installed. The first two digits of the serial number represent the year of manufacture. If a meter is replaced, the usage on the replaced meter is entered into the rating system and marked 'pending', and the replacement meter is entered marked 'active'.

When water meters are read in the following June period, the reading of the 'active' meter is also entered into the rating system, and the usage between the two meters is combined to calculate annual usage against annual allocation.

On the Water Notice which is mailed with your Rates Notice, each meter is noted separately, showing the opening period on which the new meter was installed being the same date that the old meter shows as being removed. The notice also shows the opening readings, annual usage and closing reading for each meter.

Stopped Water Meters

Based on the active 'Meter Replacement Program' which takes place annually for meters which meet the criteria of 5,000 kilolitres of usage or 9 years old; instances where stopped meters are found is now quite rare. However, faults do still occur, and when they do it is important that equity is upheld whereby property owners still contribute towards the water they have used. In this instance, usage on the meter will be averaged based on the average daily consumption across the previous three full years. Based on this policy, it is in the interest of the property owner to advise Council when regular meter usage monitoring determines that the meter has stopped.