



Water hardness

This brochure explains water hardness, what it means for your town, and how to manage the impacts of water hardness in your household.

What is hard water?

Water hardness is a measure of calcium and magnesium carbonate in the water. These carbonates are natural minerals that dissolve into water as it moves through soil or rock in the catchment.

Household impacts

Hard water may deposit spots on shower screens, drinking glasses or plants because the minerals remain after the water has evaporated.

When hard water is heated, the minerals that cause hardness may come out of the water and be deposited as scale. This can affect kettles, hot water services, pipes and fittings, and scale may build up over time.

Soap does not lather well in the presence of hard water. The higher the mineral content, the more soap is required to form a lather.

It is important to note that hard water is not a concern from a health perspective.

Hardness levels

The Australian Drinking Water Guidelines (ADWG) have a scale of water hardness and its impacts on water quality:

Level	Description
< 60mg/L	Soft water, but possibly corrosive
60 - 200 mg/L	Good quality
200 - 500 mg/L	Increasing scaling problems
> 500 mg/L	Severe scaling

Bore water sources tend to have higher hardness than surface water sources. Many townships are supplemented with, or solely rely on, bore water sources for their drinking water supply.

Sometimes hot water systems can corrode if the wrong type of anode is used. An anode is the metal rod installed inside a hot water system that preferentially corrodes to protect the hot water system.

Speak to your local plumber or your hot water system supplier to ensure you have the right type of sacrificial anode appropriate for the hardness of your water supply (refer overleaf).

It is also important to follow the manufacturers' recommendations on maintenance if you fit any additional water treatment devices in your house.

Reducing the impact

There are several ways to reduce the effects of hard water in your home. These include:

- Keeping your hot water system to below 60 degrees Celsius.
- Using a water softener to reduce scaling in hot water services and associated pipework. NOTE - It is not recommended that you drink softened water. Softeners can significantly increase the level of salt in your water.
- Avoid spots on glassware/shower screens etc. by using liquid soaps and ensure you dry wet surfaces immediately after water use.
- Use acid-based (e.g. vinegar) cleaning products to clean domestic appliances (making sure to rinse thoroughly after use).
- If you are installing a new dishwasher, check your water hardness and follow the manufacturer's recommendations.
- If you're away from your property for extended periods of time, consider running a tap for a period of several minutes to help flush "stale" water from your pipes.

Water hardness in your town



Town	Water hardness mg/L
Allansford (via Warrnambool Water Treatment Plant)	75
Balmoral	66
Camperdown (Rural)	34
Camperdown (Urban)	34
Caramut	108
Casterton	241
Cavendish	23
Cobden	22
Coleraine (via Casterton Water Treatment Plant)	241
Darlington (Regulated supply)	910
Dartmoor	246
Derrinallum (via Camperdown Water Treatment Plant)	34
Dunkeld (via Hamilton Water Treatment Plant)	66
Glenthompson	76
Hamilton	66
Heywood	180
Koroit (via Warrnambool Water Treatment Plant)	75
Lismore (via Camperdown Water Treatment Plant)	34
Macarthur	320
Merino (via Casterton Water Treatment Plant)	237
Mortlake (via Terang Water Treatment Plant)	59
Noorat/Glenormiston (via Terang Water Treatment Plant)	22
Penshurst	395
Peterborough (via Port Campbell Water Treatment Plant)	150
Port Campbell	150
Port Fairy	168
Portland	18
Purnim	26
Sandford (via Casterton Water Treatment Plant)	241
Simpson	24
Tarrington (via Hamilton Water Treatment Plant)	66
Terang	22
Timboon (via Port Campbell Water Treatment Plant)	150
Warrnambool	75