



# Water hardness

## Water quality factsheet 4

**Water hardness depends on the amount of naturally occurring minerals that are dissolved in water.**

This factsheet explains more about the nature of the water that we supply at South West Water, which is generally soft surface water.

We take water quality seriously at South West Water. This is one of a series of factsheets about water quality – you can find more factsheets at [southwestwater.co.uk](http://southwestwater.co.uk)

### What makes water soft or hard?

Rainwater is naturally soft – it contains only small amounts of minerals. But as the water passes through rocks, such as chalk and limestone, minerals in the rocks are dissolved in the water, giving it its hard nature.

The dissolved minerals are normally calcium or magnesium compounds.

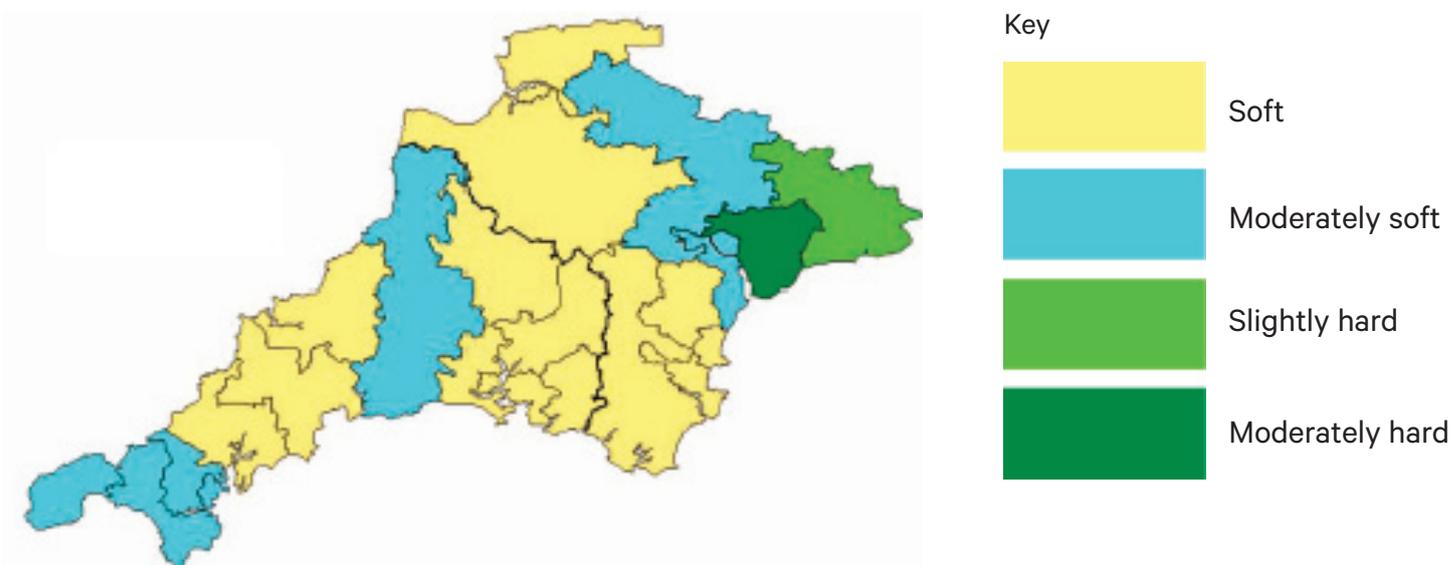
### Is the water supplied by South West Water soft or hard?

Most of the water in our region is sourced from moorland rivers and reservoirs and is classed as soft or moderately soft.

However, if you live in East Devon, your water comes from boreholes drilled deep underground, and this water is classed as slightly or moderately hard.

### Water hardness in the South West

The map on the next page shows the hardness of water across our region.



## Water hardness measurements

There are several different measurements for water hardness. You may see any of these mentioned in the manuals for washing machines and other appliances.

Hardness category	Calcium (mg/l)	Calcium carbonate (mg/l)	English Clarke degrees	French degrees	General/German degrees
Soft	0 to 20	0 to 50	0 to 3.5	0 to 5	0 to 2.8
Moderately soft	21 to 40	51 to 100	3.6 to 7	6 to 10	2.9 to 5.6
Slightly hard	41 to 60	101 to 150	8 to 10.5	11 to 15	5.7 to 8.4
Moderately hard	61 to 80	151 to 200	10.6 to 14	16 to 20	8.5 to 11.2
Hard	81 to 120	201 to 300	15 to 21	21 to 30	11.3 to 16.8
Very hard	Over 120	Over 300	Over 21	Over 30	Over 16.8

## Do I need to install a water softener?

Some people living in harder water areas choose to install water softeners in their homes.

The Drinking Water Inspectorate recommends that people don't soften the water supply to the taps used for drinking water. This is because some softeners increase the levels of sodium in the water, which can be harmful for people suffering from high blood pressure.

Softened water can also be more corrosive to metal pipework, which can lead to higher concentrations of metal in the water.

## What does the hardness of my water mean for me?

As most of the water we supply is soft or moderately soft, it's unlikely that you will experience the common effects of hard water, such as scale (or limescale) forming inside kettles, irons and washing machines.

The table below lists some of the things that water hardness can mean for customers

Item	Soft water areas - applies to most South West Water customers	Hard water areas - does not apply to most South West Water customers
Kettles	No special requirements May discolour over time	Avoid re-boiling the same water to reduce limescale build-up.
Boilers and central heating systems	No special requirements	Set the boiler to below 60 degrees to avoid limescale.
Irons	No special requirements	Use the lowest appropriate temperature to reduce limescale build-up.
Washing machines	Use the lower amounts of washing powders and fabric conditioners recommended by manufacturers	May need more powder and conditioners. Limescale may build up over time.
Soap and washing-up liquid	Relatively small amounts needed	May take longer and more to build up a lather.
Dishwashers	Use the lower settings recommended by manufacturers	Use the higher settings for softening as recommended by the manufacturer. May want to use salt tablets.
Bathware and fittings	No special requirements	Limescale likely to build up and may require regular use of anti-limescale cleaners.

