

## WATER HARDNESS

## What is water hardness?

Water hardness is an aesthetic quality of water, and is caused mostly by minerals calcium and magnesium, but is classified or measured based on the level of concentration of calcium carbonate. The Drinking – water Standards for New Zealand 2005 (Revised 2008) indicate a max Guideline Value of 200 mg/L and advises "High hardness causes scale deposition, scum formation. Low hardness (<100) may be more corrosive." How hardness is measured is based on the following scale:

Water Hardness Scale	
Classification	Total Hardness (Ca & Mg as CaCO₃)  Milligrams Per Litre (mg/L)  Grams Per Cubic Meter (g/m³)  Parts Per Million (ppm)
Soft	0-17
Slightly Hard	17-60
Moderately Hard	60-120
Hard	120-180
Very Hard	Above 180

## Water hardness of Rotorua District Council's water supplies:

Last tested in 1995.

Supply Area	Total Hardness (Ca & Mg as CaCO <sub>3</sub> )  Milligrams Per Litre (mg/L)  Grams Per Cubic Meter (g/m³)  Parts Per Million (ppm)
Central Rotorua	10.5
Eastern	10
Ngongotaha	3.7
Hamurana/Kaharoa	15
Mamaku	Bore 4 - 16, bore 6 - 3.2
Rotoiti	30
Rotoma	12
Reporoa – Deep Creek	2.74
Reporoa – Wharepapa	Not tested

