

# WATER QUALITY

## KEY POINTS

- How to check the quality of your water supply
- Interpreting salinity readings
- Easy interpretation of water analysis information
- Minimising the effects of salinity on plants and soils
- Greywater: all the facts
- How to divert and use greywater without problems

Most water has various things dissolved in it. Even rainwater direct from the sky has a low concentration of salts from sea spray (common salt), lightning (nitrates), pollution and dust. This rain will pick up more salts (from bird droppings and leaves) as it flows from roof to tank. When rain flows over and through soils to reach streams and reservoirs, it dissolves more salts from the soils. In dry areas, more salts can enter streams from saline springs and seepage from irrigated crops. Greywater has extra salts from detergents. Low concentrations of salts in water do not harm our plants and soils, but as salt concentration increases, the possibility of harm being done also increases.

The simplest way of describing the salts in waters is by listing their separate parts – called ions. The important ions in water

supplies are sodium and chloride (as in common salt), calcium, magnesium, bicarbonate, sulphate and phosphate.

## How do I know if my water is salty?

The simplest way of finding the saltiness of your water is to ring your water supply authority or look up the information on their website. You will get a figure for the electrical conductivity (EC) of the water they supply to your area. The higher an EC reading, the saltier the water. EC readings internationally and for all Australian states except Western Australia are given in units called microSiemens per centimetre ( $\mu\text{S}/\text{cm}$ ) or deciSiemens per metre ( $\text{dS}/\text{m}$ ). One  $\text{dS}/\text{m} = 1000 \mu\text{S}/\text{cm}$ . Use Table 6 to interpret the figure. The units used in Western