

How do we protect Christchurch's drinking water?

Where does Christchurch's water come from?

Around three-quarters of Christchurch's groundwater comes from the Waimakariri River to the north of the city. The rest comes from rainfall to the west and north of the city. The water from the river and rainfall seeps into the gravels and flows towards the city at up to 25 metres per day.

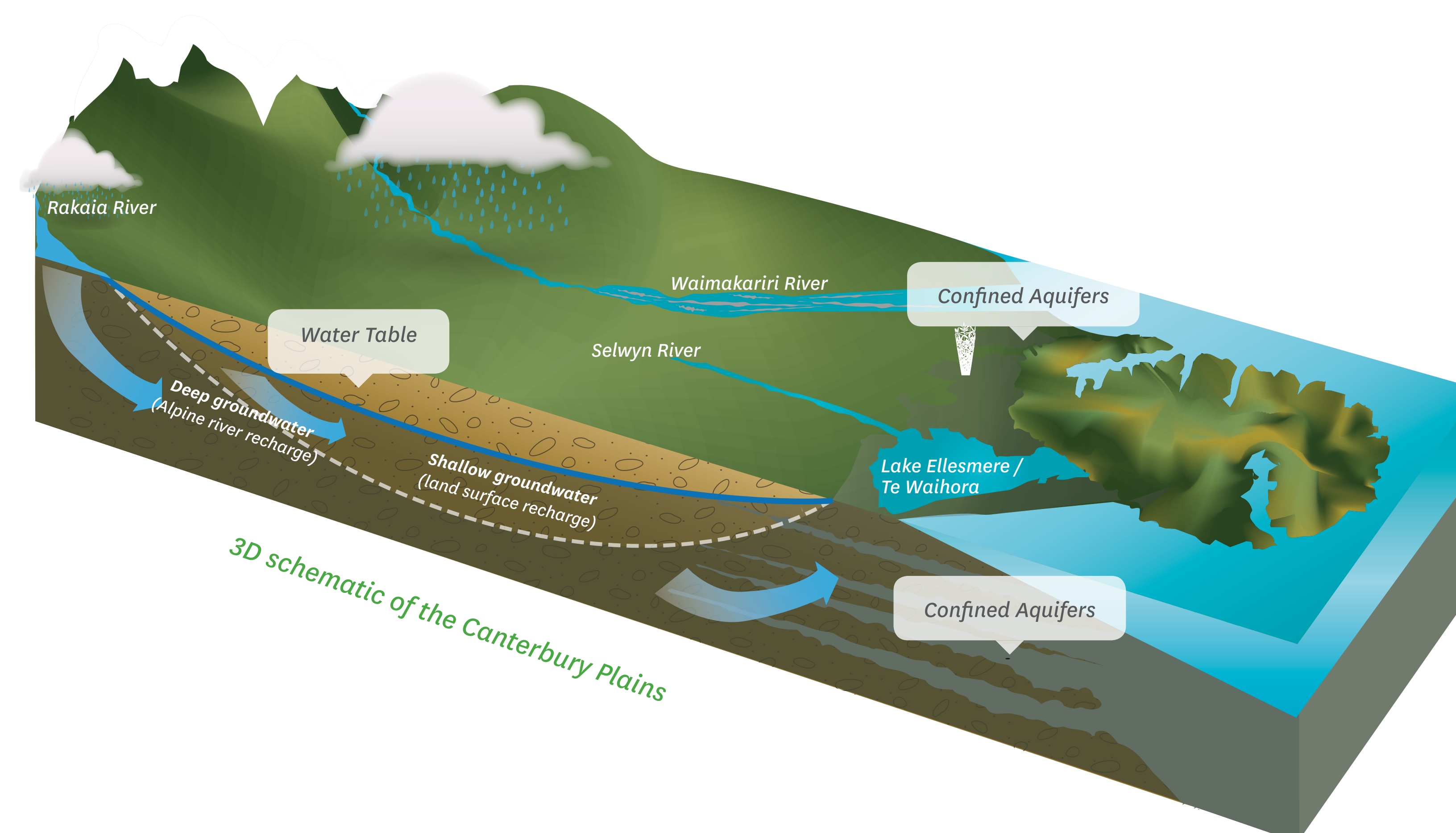
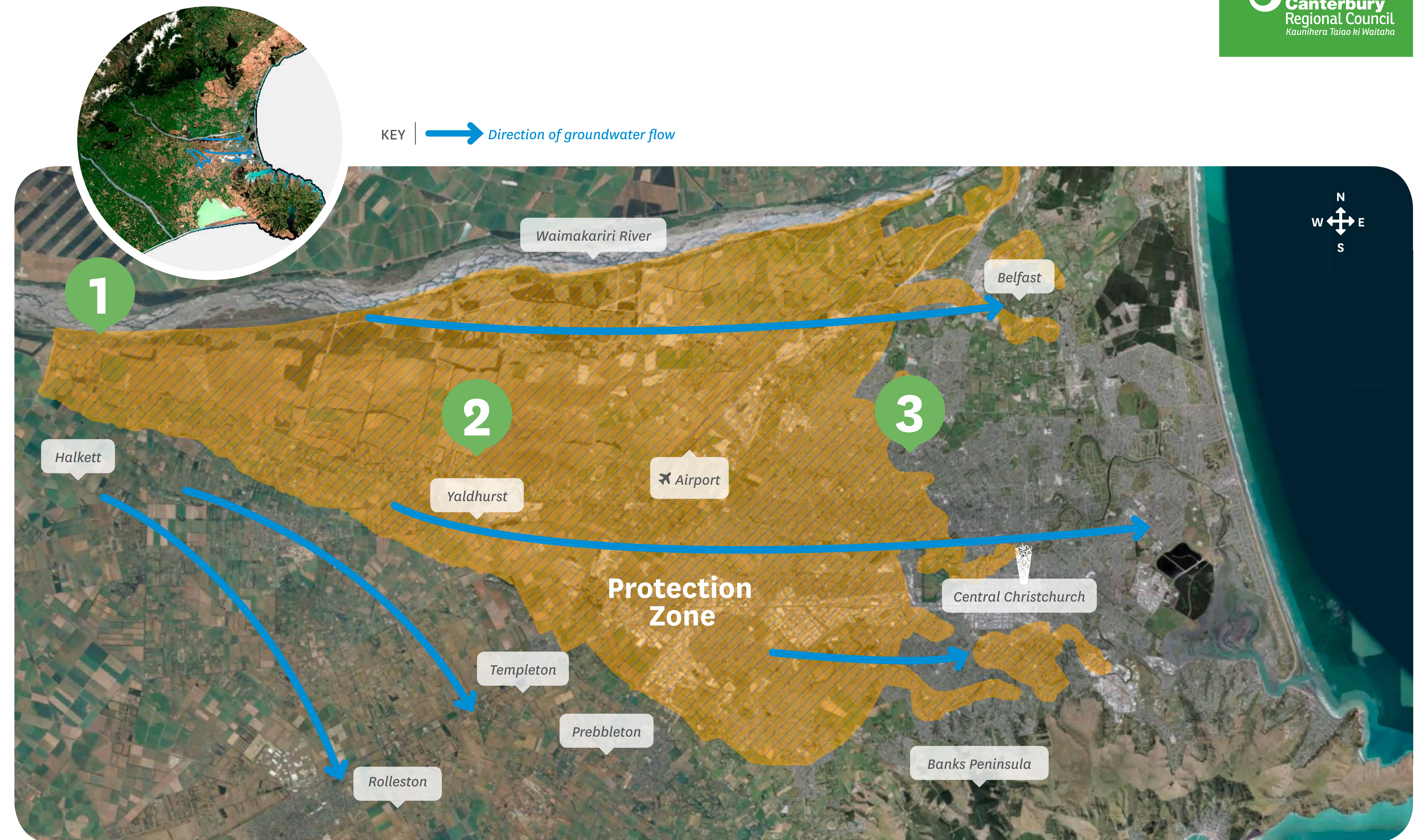
Is it protected from contamination?

Christchurch's groundwater supply is famously pure at its source but the most serious threat to groundwater quality is development (industrial, agricultural and commercial) over the zone. Once water quality is compromised it takes decades to reverse the damage, and it is also extremely expensive to fix.

The good news is that Christchurch's drinking water is protected by rules in the Canterbury Land & Water Regional Plan. These rules control land-use in the areas north and west of the city which minimize the risk of contamination. Much of the area is used for very low intensity stock grazing and recreational parks.

Who helps ensure our water is safe to drink?

- Local councils are responsible for the supply, distribution, treatment and safe supply of drinking water
- Environment Canterbury's role is to monitor and test our drinking water and protect it at its source
- The Ministry of Health appoints drinking water assessors who are employed by the Canterbury District Health Board to oversee the impact of water quality on health
- Groundwater is vulnerable to contamination so people with private drinking wells are responsible for ensuring their supply is safe. This includes regular testing and ensuring wells are clear of debris and animals.



Protection Zone

This is the most vulnerable area. Groundwater is very close to the land surface and overlying soil and gravel is permeable, meaning that nearly everything is able to pass through it easily. There is high risk of groundwater contamination.

Environment Canterbury regulates land uses and activities that could compromise drinking water supplies.

- 1 Downstream of this point, some of the water in the river begins to flow into the gravels of the plains, topping up the aquifers on which Christchurch depends for its drinking water.
- 2 Environment Canterbury owns a significant amount of land in this area. The land is managed to ensure it is used for appropriate purposes that won't have an adverse impact on Christchurch's groundwater.
- 3 Flowing through the gravels at about 25m a day, groundwater takes a few years to reach the zone from which Christchurch takes its drinking water.

For more information visit www.ecan.govt.nz/drinkingwater