# kaikõura Waterwise guide

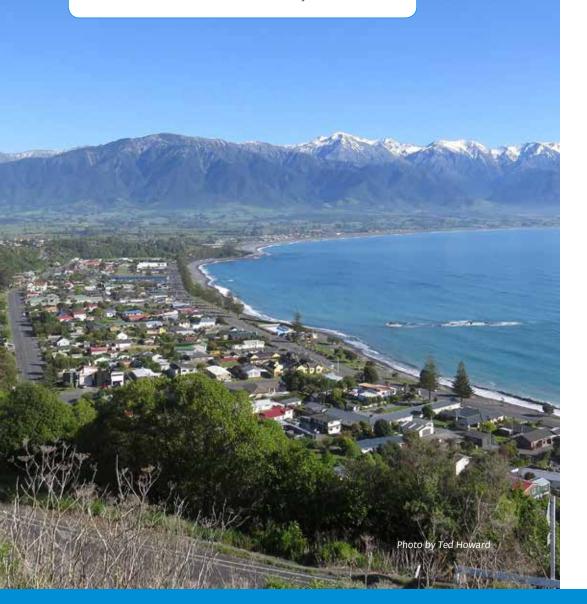
Koranga o ngā Ko te wai mea kātoa <sup>Water</sup> is the life-giver of all things

Kaikōura Water Zone Committee



#### Kaikōura Water Zone Committee

The Kaikōura Water Zone Committee was formed in 2011 as part of the Canterbury Water Management Strategy to working with the community to find solutions to local water issues. The zone committee is made up of six community members, two rūnanga representatives and a representative from the Kaikoura District Council and Environment Canterbury.





### A call to action – from Ted Howard Kaikoura Water Zone Committee chair



The theme of this brochure – Waterwise – is about how each of us can all make a difference by making small changes in what we do.

Being aware that we are all part of the problem and that each of us can play a part in finding solutions is a good start.

For some people that's all they need to start making a difference. For others we know they may need a bit more information or encouragement to play their part – this can be as simple as talking to them or it could be providing incentives or even showing them what they can do.

While we currently have a good supply of freshwater we shouldn't take it for granted. It's better to take care of it and use it wisely rather than having to find more water to replace overuse. That is potentially expensive and not good for the environment.

Most of our town water supply comes from groundwater aquifers that are reliant on recharge from rainfall and snow melt. As the recent quake has demonstrated, our water supply can be fragile, and having some degree of self reliance is not a bad idea. Being both smarter about our water use, and having a reasonable quantity of water on hand for emergencies are very sensible things to do.

So have a look at this brochure, do more research and reading if you are interested, talk to us or your neighbours, and start doing what you can to conserve our precious water.

We're counting on you.

**Ted Howard** 

### **Our Precious Water**

Our fresh water is a precious resource and one that is continually under threat.

In Kaikōura we are lucky enough to have a good supply of freshwater but we should not take it for granted.

The majority of our town water supply comes from groundwater aquifers which are reliant on recharge from rainfall and snow melt. Recent research has shown that the water in the aquifers is not getting replenished as fast as it is getting taken out.

Our rural water supplies come from a mixture of surface and groundwater takes. These sources are also reliant on rainfall and snowmelt for replenishment.

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Water Decline

The map shows

how New Zealand

annual mean rainfall

is predicted to change,

*comparing* 1980-1999

data with predictions for 2030-2049.

We all know the east coast of New Zealand is getting drier - droughts are more frequent and water shortages are now common place.

We rely on rainfall for our water supply, so this reduction in rainfall could become an issue in the future. By taking some small steps now we can help preserve this precious resource.

Kaikōura is predicted to have 2.5-5 percent less rain in 2030-2049 compared to 1980-99.

15.0

10.0

7.5

50

2.5

-2.5

Kinacid Water Scheme, which is a council managed rural scheme.

## What can you do...

Everyone can do their bit to save water — and every little bit counts.

The easiest thing we can all do is to stop taps in our home leaking. These small drips cause the greatest waste of water.

Replacing a worn washer in a tap, can save up to 2,000 Litres of water per month for the cost of a few dollars.

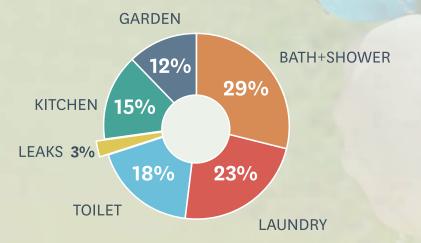
You can also fit water efficient fittings on toilets, taps and washing machines.

These fittings can reduce the amount of water we use by at least 50 Litres per person each day.

### Household water use

An average New Zealand family uses 247 litres per person every day. Water use is considerably higher in the summer months.

The pie chart below shows how water is used in the average household:



Take a look inside for tips & tricks to conserve water in your home and a guide to harvesting rainwater.

## **Harvesting Rainwater**

Have you thought about harvesting some of the thousands of litres of rainwater that fall on your roof every year?

Collecting rainwater off your roof can:

- Reduce demand on mains water supply
- Reduce stress on local stormwater networks
- Provide a supply of water in emergencies



In Kaikōura a 150m² roof has the potential to provide **130,000 litres a year.** That's over **350 litres** per day!

This could be 65% of your household water needs.

#### FOR OUTDOOR AND GARDEN USE

Rainwater collected from the roof via gutters and pipes flows through screening devices to remove dirt and debris and the water is then stored in tanks for use in the garden.

A building

consent is not

required for

this system

Installation of a basic rainwater collection system can cost as little as \$200-\$300 and requires a tank with capacity to store about **200-1000 litres.** 

#### **INSTALLATION BASICS**

STAND TO ALLOW FOR \_\_\_\_\_ GRAVITY FLOW TO IRRIGATION

HOSE FOR WATER SUPPLY —

#### FOR INSIDE LAUNDRY USE AND TOILET FLUSHING

Storage of water for use inside the house requires a similar set up...

Water is collected and stored, as before, but the outside tank is then plumbed into your house connecting to the toilet so you can flush with rainwater and connecting to your laundry so you can wash your clothes with rainwater.

All sanitary plumbing (this is most plumbing) requires a consent from the council and different rules apply for each area.

The cost of this more sophisticated set up is around \$3000-\$6000 and a 3000-5000 litre tank is needed.

\*\* NOTE: If mains supply is connected, backflow must be prevented by an air gap or a backflow prevention device.

HOSE FOR IRRIGATION

**OVERFLOW TO APPROVED DISCHARGE POINT** 

TOILET EFFLUENT TO SEWER **OR ON-SITE TREATMENT** 

#### **CATCHMENT AREA**

ROOF COLLECTION AREA

RAINWATER GUTTER WITH LEAF GUARD

#### **CONVEYANCE SYSTEM**

FIRST FLUSH DIVERTER OVERFLOW PIPE DOWNPIPE TO TANK

#### **STORAGE SYSTEM**

PLASTIC COLLECTION BARREL **INSPECTION COVER** 

TAP

### Tips & Tricks to conserve our water

# There are many simple things we can do to save water in our home:

- Make sure all the appliances you use have an AAA water conservation rating.
- Check all your taps and water cisterns to make sure they don't leak or drip.

#### **KITCHEN TIPS**

• Make sure the dishwasher is full to capacity before using.

#### LAUNDRY TIPS

- Only use the washing machine for full loads.
- Consider a front loader they use about half the water that top loaders require.



Tips and Tricks

#### **IN THE BATHROOM**

- Install tap aerators which can cut water flow by 50% without reducing water pressure. They are cheap and easy to install.
- Install a low-flow shower head. You can save up to 11 litres of water a minute.
- Install a dual flush cistern on the toilet. This device allows you to save up to eight litres each time you flush.
- Showers are more water efficient than baths but only if they last for four minutes or less.



#### **IN THE GARDEN**

- Choosing drought tolerant plants for dry areas reduces the need to water as often.
- Use mulch to keep your garden cool and moist.
- Water your garden once every few days, when the soil is dry or just moist.
- Water at cooler, less windy times of the day to minimise evaporation and water wastage.
- Wash your car with a bucket of water on the lawn and you'll water your lawn at the same time.
- Report broken pipes, open hydrants and errant sprinklers to the property owner or the Council.

#### THE LEGAL BITS...

The Building Act 2004 states that a building consent is not needed for tanks:

- Not exceeding 35,000 litres and supported directly above the supporting ground, OR
- Not exceeding 2,000 litres and supported not more than two metres above the supporting ground, OR
- Not exceeding 500 litres and supported not more than four metres above the supporting ground.

#### LOCAL SUPPLIERS

Local Tank + Hardware Suppliers:

**CRT Kaikōura** Ph: (03) 3195448

Kaikōura ITM Ph: (03) 5195447

**Mitre 10 Kaikōura** Ph: (03) 3195013

**Pyne Gould Guinness** Ph: (03) 3195012 Tank Suppliers: Bailey Tanks 0800 861333 www.tanks.co.nz

**Devan Tanks** 0800 129 659

www.devan.co.nz

**RX Plastics Tanks** www.rxplastics.co.nz

Contact your local plumber for advice and installation.

### **USEFUL LINKS**

For more information on water conservation and rainwater harvesting view:

www.ecan.govt.nz

www.smartirrigation.co.nz

For more information on water management in Kaikōura visit www.ecan.govt.nz/canterburywater and click on 'Committees'





