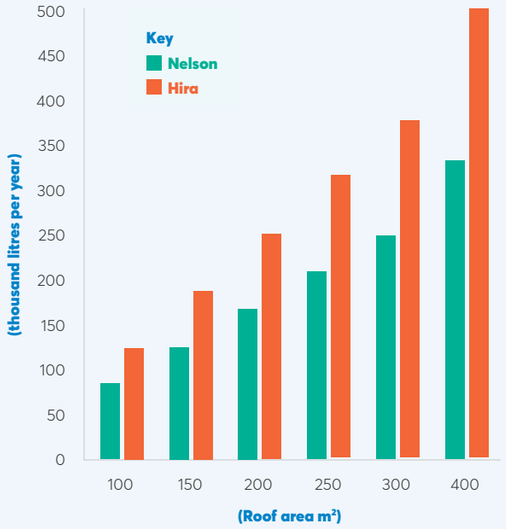
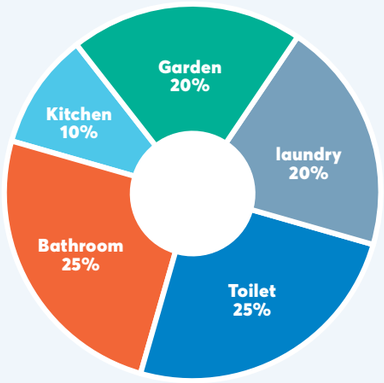
How much water could you collect?



How much rainwater can a typical household use?

Approximately 65% of our household water needs can be met by collecting rainwater.



How much water do you need?

If you are looking for a simple system to store water for watering the garden, washing the car etc. then a 250 – 400 litre tank will usually be more than adequate for your needs, and easy to install yourself. Gardens use about 20% of a household's water.

Laundry and toilet flushing uses up to 45% of a household's water.

If you want to use rainwater for all your household needs, including showering and drinking water, allow at least 300l per day per person, and make sure your tank has plenty of capacity for dry periods. Bathrooms and kitchens use about 35% of a household's water.

Household use	Litres/Person/Day
Toilet	86
Bathing and Hygiene	68
Laundry	36
Kitchen	32
Housekeeping	5
TOTAL	227

Other use	Usage
Garden watering	5 litres/m²
Stock watering	Up to 50 litres/animal

What are the legal requirements?

The NZ Building Act allows tanks not exceeding 35,000 litres and supported directly by ground to be installed without building consent. Tanks supported on a structure have limits on size before they need consent.

However if you are installing a rainwater tank system that will be connected to your home's plumbing in any way, you should check with our building and planning officers to find out how to make sure your water supply is safe, legal and won't cause any problems in your home.

For further information please contact duty.buildingofficer@ncc.govt.nz or visit nelson.govt.nz/rainwater-harvesting

Useful links

level.org.nz/water
level.org.nz/water/water-supply/mains-or-rainwater/harvesting-rainwater

smarterhomes.org.nz
smarterhomes.org.nz/smart-guides/water-and-waste/collecting-and-using-rainwater

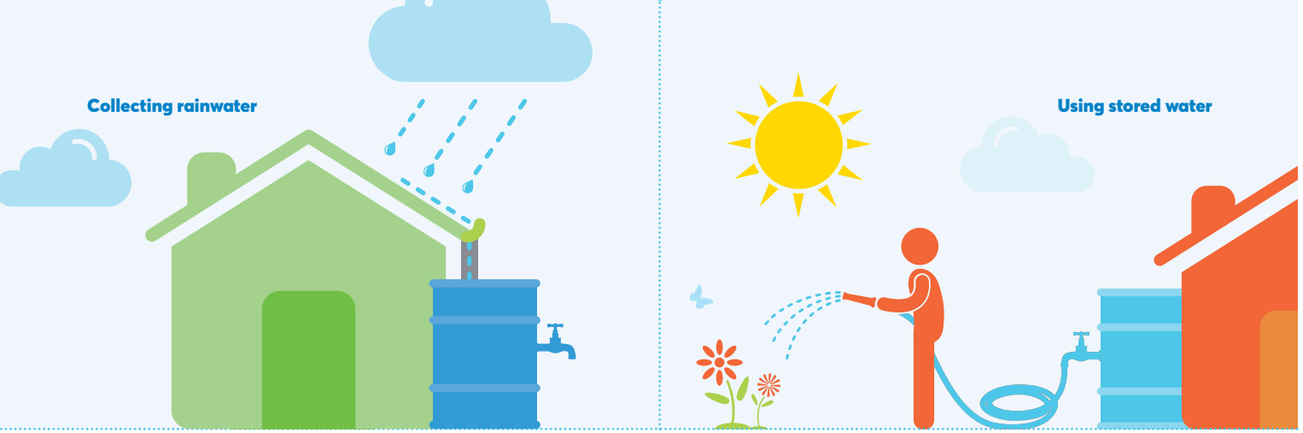
Civic House, 110 Trafalgar Street, Nelson
03 546 0200 • nelson.govt.nz

03 546 0200
nelson.govt.nz

Nelson City Council
Te Kaunihera o Whakatū

Harvesting rainwater

Our most precious natural resource



Harvesting rainfall

Harvesting rainfall is a simple way of being more sustainable, wherever you live. By collecting and storing the rain that naturally falls on your roof, you are doing lots of good things:

- Reducing pressure on our streams, rivers, and groundwater resources.
- Saving money on water bills.
- Giving yourself an emergency supply.
- Taking water out of the stormwater system during heavy rain, which can help reduce flooding and erosion.
- Reducing energy used for water treatment and transport.

The quality of the water you collect depends on the condition of your roof, guttering and storage system, and there are filters available if you need to ensure your rainwater is suitable to drink.

Rainwater harvesting systems can be as simple or as sophisticated as your needs and budget dictate. You could start with a simple rainwater barrel to use for watering the garden, and add more storage and filters

Before you get started

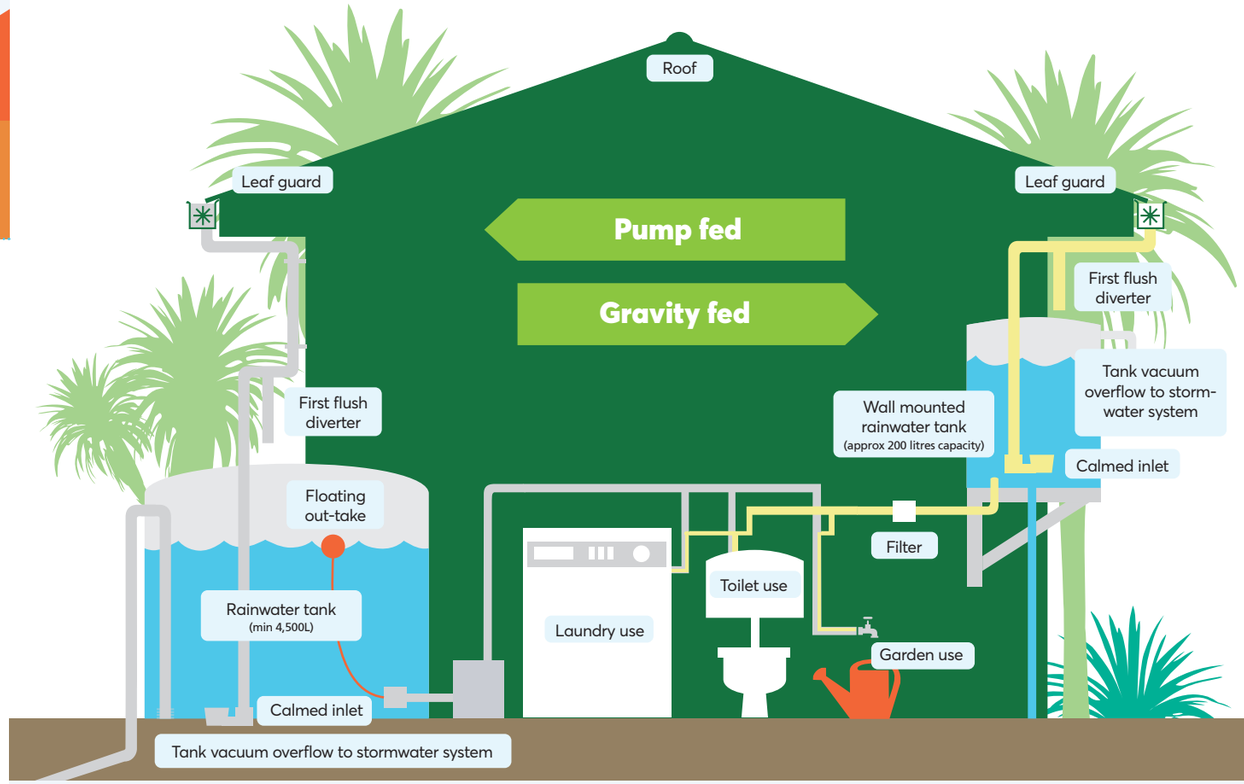
- Check the condition of your roof surface and the roofing materials including the type of paint, flashings, and nails used. Lead paint and rusty nails could contaminate your water.
- Mount tanks out of direct sunlight.
- Ensure feed pipes have a constant gradient to avoid stagnant water pooling along the way.
- Elevate your tank so you can use gravity to increase pressure.
- Fit a floating out-take, calmed inlet and tank vacuum overflow.

Maintenance

Your rainwater harvesting system will be most successful when it is well maintained:

- Make sure tree branches do not overhang the roof.
- Clean filters and leaf collectors regularly.
- Keep spouting and guttering clear and clean.

Using rainwater to supplement your mains supply



Drinking – filter options

If you are using rainwater as a domestic or drinking water supply, use a UV steriliser plus a filtering system to ensure it is safe. There are lots of different filters available for keeping debris out of your rainwater, including first flush diverters and leaf filters. Check building consent requirements to find out what is required for your needs.

Household systems can be pump or gravity fed and should be designed in accordance with building regulations