

TAPPED IN

Bringing you news, updates and information from Watercare



Auckland Botanic Gardens curator Rebecca Stanley is standing behind Muehlenbeckia astonii (shrubby tororaro), a threatened New Zealand plant that is great for dry and windy conditions and requires very little watering.

Creating a water-efficient garden

Maintaining 64 hectares of lush and spectacular gardens during a severe drought might sound like an impossible task, but the team at Auckland Botanic Gardens is doing just that.

Sustainable water use is integral to the way the gardens operate. Curator Rebecca Stanley says the gardens have many water-efficiency initiatives, including water reuse, rain gardens and swales.

But choosing the best plants for the environment and making sure they are planted in nutrient-rich soil that retains water well is also a huge part of keeping the gardens alive and sustainable. For example, they have scaled back the number of annuals they plant, as these need more watering than other types of plants.

“In civic gardens, annuals are usually changed three times a year. Here, we change them twice a year by selecting plants that do well for six months. We make the soil as full of compost and nutrients as possible so the plants will grow bigger and cover more of the soil, which stops it from drying out.”

The only irrigation at the gardens is for the annual beds outside the visitor centre.

“It’s drip irrigation and we don’t have it on a timer,” says Rebecca.

Collecting rainwater in tanks is a challenge at the gardens, where there are few buildings and therefore not many roofs to create run-off.

“We look at the plants and if they’re stressed, we respond.”

“We have a tank in our classroom for the kids’ garden and for the annuals. If you have high-intensity gardening, you can look at options on your property to harvest water,” she says.

“If you can divert rainwater into a rain garden or swale, it will stay wetter for longer. It’s like banking stormwater. A swale is a ditch coming off an impermeable surface that directs water where you want it to go.”

Auckland Botanic Gardens uses rainwater from the visitor centre to run the nikau water feature at the centre’s entrance and to flush the centre’s toilets. The other water features in the gardens have been turned off during the drought.

“Everything we do here has an impact on the wider environment,” says Rebecca.

“We hope people will garden because it connects them with nature and it might start to widen their horizons and get them thinking about the environment outside their property. We see it as a gateway to environmentalism.”

The Auckland Botanic Gardens team provides free gardening advice and the visitor centre has information pamphlets about various plants that are rotated seasonally. You can find out more information on maintaining a water-efficient garden inside this latest edition of *Tapped In*.

Your gardening guide

Right plant, right time

Choosing the right plants for your garden and planting them at the right time is essential for successful growing and saving water. For example, autumn is the best planting season for trees because it gives them time to settle into the ground and grow the feeder roots that will keep it alive when the summer heat hits.

It's important to properly plan out your garden and look at all the different aspects involved, rather than planting the same types of plants over and over and having to try to save them when they start dying.

The Auckland Botanic Gardens website has a database of plants that are suited to the region's conditions and it provides information about their care.

Rebecca from Auckland Botanic Gardens says:

"Getting a tree is like getting a pet – you need to think about the kind of nature and temperament you want and what kind of environment and lifestyle you have. Trees are usually quite expensive and have a lifetime cost. If you plant the right plant in the right place, you'll be saving money and being more sustainable with water."



Café worker Pai Sompong harvests kaffir lime leaves to make Thai green curry.

Sort out your soil

The most important part of gardening happens before your plants get near the soil.

Making sure that your soil is full of nutrients will help your plants grow better and need less watering.

Compost provides the soil with greater water-holding capacity. It's good for all types of soil and will help retain the rainwater for longer. If you don't have a compost bin, planting cover crops and chopping them into the soil is a good way to build up the organic matter.

Once your plants are in the ground, mulch helps hold water in for longer and provides more organic material to feed the plants.

Auckland Botanic Gardens makes its own compost from garden clippings which go into compost piles with the occasional addition of horse manure. It also has worm farms for food waste.

Rebecca from Auckland Botanic Gardens says:

"At the Botanic Gardens, we planted a lupin cover crop that will be chopped into the soil. It improves the water-holding capacity and fixes nitrogen to nourish our plants."



Collection curator Beau Timberland spreads mulch around the roses.

The veggie thirst is real

Growing vegetables is becoming increasingly popular, but before you go berserk with the brassicas, it's important to remember that edibles are seriously thirsty plants.

Think about keeping your garden small. You'll need less water and fewer natural fertilisers, if you're using them.

If you have a big garden, it takes more time and uses more water. Often people end up having to sacrifice plants in their gardens because they were over-enthusiastic.

It's also important to grow what you know you're going to eat and how much. For example, one courgette plant is enough for a family.

If you really want to grow something edible, consider planting a herb garden instead. Mediterranean herbs like rosemary, thyme and oregano are very hardy and need less watering than vegetables.

Rebecca from Auckland Botanic Gardens says:

"Planting in pots might seem like an attractive option, but they need a lot of watering and heat up easily. If you go away for the weekend and don't arrange for someone to water them, there's a good chance you'll come back to dead plants."



Curator Rebecca Stanley adds garden clippings to the compost.

If your lawn is yellow, let it mellow

If you take great pride in the state of your lawn, it might seem counter-intuitive to let it go dry and yellow during summer. But never fear, your lawn won't die – it will go dormant and revive quickly once the rain comes again.

Auckland Botanic Gardens has about 30 hectares of lawn which is never watered or sprayed. The lawns have around 20 grass species and 50 herb species.

If watching your beloved grass turn yellow is too tough, it might be time to think critically about whether you really need a lawn. Garden beds might require a bit more maintenance, but planting some hardy, drought-resistant plants will mean they stay looking nice in the summer.

You could also look at turning your lawn into an urban meadow, which needs less mowing and promotes biodiversity.

The Botanic Gardens is running a sustainable meadow trial with the University of Auckland called Going Low Mow. Check out aucklandbotanicgardens.co.nz for more information.

Rebecca from Auckland Botanic Gardens says:

"People put a lot of money into establishing lawns and are afraid to let them die. But in the summer, they don't die; they just go dormant. The grass will go yellow but it's still OK. People don't need to water their lawns. After the first rains, it will green up again really quickly."



Auckland University students working in the sustainable meadow trial.

Increasing Auckland's water supply

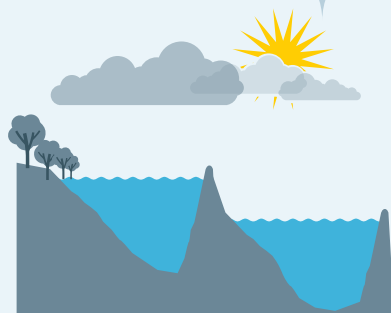
We're carrying out work to increase Auckland's water supply by 40 million litres a day by this summer. This will help our city to recover from a record-breaking drought that saw 40 per cent less rain than normal fall in our water supply catchment areas (1 November 2019 to 30 May 2020).

40 million litres

We will have the ability to produce an extra **40 million litres** of water a day by this summer.

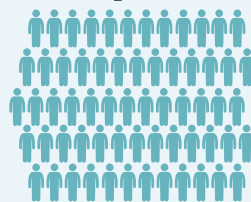


How much is that?

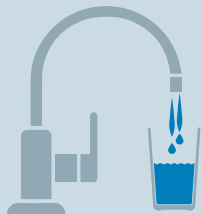
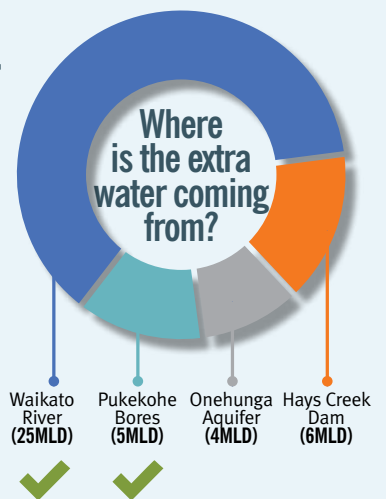


It's equivalent to the volume of water provided by the Upper and Lower Nihotupu dams in the Waitākere Ranges.

130,000+



It's also enough to meet the residential and commercial needs of at least 130,000 people. That's a city the size of Tauranga!



**Pour the
water
in your
plants**

Remember to flush your taps

The Ministry of Health recommends flushing a large glass of water from your drinking water tap each morning before using any water. This removes any metals that may have dissolved from plumbing fittings. New Zealand's water can be slightly acidic, and can dissolve heavy metals such as lead or copper over time.

Small amounts of these metals may then enter your water supply. This simple precaution is recommended for all households on both public and private water supplies.

The health risk is small, but a build-up of heavy metals in your body can cause health problems. We continue to meet the requirements of the Drinking Water Standards for New Zealand 2005 (revised 2018) and deliver safe water.

For more information, visit watercare.co.nz and search for 'drinking water quality'.

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