TAPPED IN

Bringing you news, updates and information from Watercare

Autumn 2024



Sampling technician Ma Marriner (pictured) and her colleagues complete between 10 and 14 sampling tests per day at reservoirs, streams and other sites around Auckland.

Ensuring a safe water supply

Every day, we supply more than 400 million litres of safe drinking water to 1.7 million people in Auckland. We collect it from 28 sources, including rivers, dams and underground aquifers. The water is treated to meet New Zealand Drinking Water Standards before it is supplied to homes and businesses via a vast network of pipes.

We have 19 treatment plants in Auckland, each one designed to deal with its particular sources of raw water. For example, groundwater is usually free from bacteria and has very low turbidity (cloudiness), so it typically requires less treatment. On the other hand, river water travels through different environments on its journey to the treatment plant, so it goes through additional treatment processes. In the Hūnua Ranges, home to our largest water storage dams, we are planting millions of native trees and shrubs on land that has been used for commercial forestry. This protects the water in our lakes by stabilising the soil with tree roots. This helps reduce erosion and landslides during storms. We are also helping local school children to grow and plant natives to protect waterways through our sponsorship of Trees for Survival.

Having healthy water sources also means taking care of the species that live in them. We run a trap and haul programme to make sure that the migration paths of native fish and eels aren't disrupted by our dams. We trap juvenile fish and eels in the downstream river systems and transfer them upstream of the dams to ensure they can continue their journey.

Learn more about the journey water takes through our land, city and lives, in this edition of *Tapped In*.



Delivering safe drinking water

Silverdale

Auckland's water supply comes from three different sources: dams, rivers and underground aquifers.

Most homes and businesses are connected to the metropolitan network, which extends south to Pukekohe and north to Waiwera. Overall, about 98 per cent of the water we treat feeds into this network.

Water storage dams

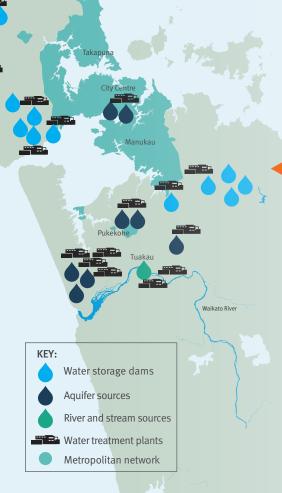
Water is sourced from catchment areas that are protected from farming and industry and largely comprise native bush. It is of a high quality naturally, so it requires less complex treatment.

Rivers

The water from Waikato River supplies metropolitan Auckland. It travels more than 400km, through towns and past farms, before it reaches our water treatment plant in Tuakau. Hoteo River supplies Wellsford.

Aquifers

Water comes from rain that percolates down through the soil or rock fractures, filling up the pores between grains of sand or the fissures in rock.



DID YOU Know?



We collect and test 250 water samples a day on average from across our networks.

across our networks. You can be sure our water is safe to drink, straight from the tap.

Scan the QR code or visit our <u>website</u> to learn more about how we monitor and test water.



* Onehunga and Pukekohe aquifers and water treatment plants are currently offline.



New reservoir at Redoubt Road in service

Last month, we brought a new 45-million-litre reservoir into service. This is the third at our Redoubt Road Reservoir Complex in Totara Park.

The complex receives water from Ardmore and Waikato water treatment plants, with 80 per cent of the city's water passing through it each day.

The new reservoir takes the site's overall storage capacity to 165 million litres – and increases Auckland's overall treated water storage capacity to more than 700 million litres.

watercare.co.nz/aucklandprojects for more details.

Scan the OR code or visit

Protecting our water sources

Trees for Survival programme

Each year, we sponsor five schools close to the Hūnua Ranges to take part in the Trees for Survival programme.

The programme sees young people growing native trees and shrubs and then planting them on farmland to protect waterways and increase biodiversity.

Children from schools in Paparimu, Hūnua, Ararimu, Ardmore and Clevedon plant various native species including mānuka, harakeke (flax), tī kōuka (cabbage tree) and karamū. These species are particularly tough and hardy, so they effectively protect against erosion on steep sections of land.

Trees for Survival is a charitable trust working with more than 200 schools and local communities across Aotearoa. More than two million native plants have been planted by New Zealand school students since it was established in 1991.



Planting days are the highlight for students involved in Trees for Survival.



Watercare staff member Michelle Whitaker plants native trees around the Hūnua Ranges catchment area.

Regeneration project in the Hūnua Ranges

In 2017, we bought a 2200-hectare forestry right in the Hūnua Ranges, home to our largest water supply dams. We then worked with council to amend that forestry right and end the commercial operation decades earlier than planned. Today, this means no more pines are being planted on the land, and we're progressively regenerating it with native trees and shrubs. **To date, we've planted 550,000!**

The purchase was about protecting Auckland's water sources. By regenerating the land with native trees, we're reducing slips and erosion in the ranges. In storms, this means less earth is washed into the dams.

The regeneration project is also increasing native flora and fauna in the region and providing more recreational opportunities for the public. Recently, the Hūnua Traverse cycleway opened. Visit <u>hunuatraverse.co.nz</u> to find out about this 44.5km two-way ride.

Supporting native fish

Our trap-and-haul programme allows a safe passage for native fish and eels to continue their migration journey.

Every year, we transfer incoming elvers (juvenile eels) and whitebait from the streams below our dams to the top of our dams. Once released, they continue growing in a protected environment.

This month, our headworks team is catching adult shortfin and longfin eels, using un-baited nets. The eels are released downstream, so they can find their way to the sea to breed.

Our team is trained to identify morphological changes which indicate eels are mature and ready to migrate, for example, changing eye colour. Eels that aren't ready to migrate are returned to the dam.



Did you know?

Mature eels need to complete their life cycle by migrating to waters as far away as Tonga to breed. We capture and release them downstream so they can reach the sea unimpeded.



Dam technician Gareth Whittington releases native whitebait and juvenile eels into Lower Nihotupu Dam.

Day in the life of sampling technician, Ma Marriner

Becoming a sampling technician at our laboratory has opened up a new world of knowledge for Ma Marriner.

Ma, who has been in her role for a year, helps make sure that our water is healthy and our impact on the environment is minimal.

Her job as a sampling technician takes her all over Auckland and sometimes as far afield as Hamilton and Raglan. She visits a variety of sampling sites, such as reservoirs, streams, treatment plants and sampling taps spread around our city.

Ma and her colleagues sample between 10 and 14 sites in a day. Chlorine testing is completed on site because chlorine levels in samples start to drop after 15 minutes. The temperature of the samples is taken at the time of sampling and once they're back at the lab.

She says during environmental sampling, they sometimes go on boats into the harbour and use a probe to measure

things like conductivity, dissolved oxygen, and salinity, if required.

Once she has delivered her samples to the lab for testing, the rest of the day is spent preparing for the next day's sampling run.

Scan the QR code or visit watercare.co.nz/careers to read more.





Ma says shellfish sampling is one of the most interesting parts of her job. Shellfish are used as water quality indicators.

Keep track of your seasonal water use

Download our app to compare how much water you use each season. You can also view your household's water use in monthly and yearly bites.

It's easy to download – either scan a QR code below or search for 'Watercare' on the App Store or Google Play.

App store









Calling all teachers

Our education programme is open for bookings in terms 3 and 4. Visit <u>waterforlife.org.nz/water-</u> <u>education-lessons</u> or scan the QR



Our prices are scheduled to change on 1 July



The amount you pay for water and wastewater services is scheduled to change on 1 July. We may need to increase prices by up to 25.8% to run our business while sticking to Auckland Council's borrowing limits. This figure was included in Auckland Council's Long Term Plan consultation document, which closed for public submissions in March. We will give you at least 10 days' notice of the price rise by running public notices in the New Zealand Herald and by highlighting the new pricing on our website. We will also remind you of the change in our winter issue of *Tapped In*.

KEEP IN TOUCH

Tapped In is your newsletter. If you would like to talk to us about any stories from this edition or your ideas for future issues, we'd love to hear from you. To get in touch, please email our communications team at **communications@water.co.nz**. You can learn more about what we do at waterforlife.org.nz