WINTER 2019

TAPPED IN

Bringing you news, updates and information from Watercare



Watercare chair Margaret Devlin, Auckland mayor Phil Goff, Vern Rosieur and Jackie Ruck unveiling the pouwhenua at the new Warkworth Water Treatment Plant in February. The pouwhenua signifies the relationship between the land, environment and Ngāti Manuhiri who are Mana Whenua for Puhinui (Warkworth) and the surrounding area.

As Auckland's population grows, so does the demand for water

On 13 February this year, Aucklanders used 544 million litres of water – 40 million litres more than an earlier record set on 14 December 2017. There is no doubt that a larger city means greater water demand.

Most of Auckland's water comes from dams in the Hūnua and Waitākere ranges. The rest is sourced from underground aquifers and the Waikato River.

To ensure we can continue to provide safe, reliable water as the region grows, we're working on a number of water projects which include upgrading water treatment plants, pursuing new water sources and expanding our pipe network.

For example, we have applied for a resource consent to draw additional water from the Waikato River. Out of the 80 options we examined – which included new dams and desalination – this was the only viable solution that will meet the future demands of Aucklanders.

In this newsletter, we showcase a range of current projects that will cater to a growing Auckland. We also share a number of waterwise tips to help you use water wisely and reduce wastage of this precious resource during winter. FAST FACT During the next 10 years, we're investing \$1.9 billion in expanding our water network.



An Auckland Council Organisation



CENTRAL

Hūnua 4 watermain



Our tunnel-boring machine called 'Amiria' is constructing the Hūnua 4 watermain. 'Amiria' is the te reo Māori version of the name Amelia and means hard-working or industrious.

We are building a large watermain called Hūnua 4 that will provide for population growth across metropolitan Auckland and increase the resilience of our city's water network.

Running for 31 kilometres from Manukau to central Auckland, Hūnua 4 will be one of our city's most important watermains because it will serve communities from the south to as far north as Waiwera.

Work on Hūnua 4 began in 2008. Most of it runs under suburban streets and it has been laid in an open trench. We are using a tunnelboring machine for the last three sections because these run under a number of main roads such as Manukau Road and Khyber Pass Road and we need to minimise disruption to the community.

What's next?

Recently, the tunnel-boring machine completed its 400 metre journey from Khyber Pass Road to the reservoir near Symonds Street. The final two sections are between Broadway in Newmarket and Ranfurly Road under Manukau Road, and between Newmarket and Khyber Pass Road under the southern motorway.

The project will finish in 2020.

Fast facts:

- The final section of pipe will transport 120 million litres per day (or 48 Olympic swimming pools daily)
- The Hūnua 4 is 31 kilometres long.

Albany – Pinehill watermain

A new watermain was completed earlier this year as part of the Northern Corridor Improvements Project, worked on jointly by Watercare and the NZ Transport Agency.

The Albany and North Harbour areas are experiencing rapid growth and the new pipe is expected to cater for future demand over the next 40 years. It will also provide back-up to the East Coast Bays supply.

The new watermain runs through the lower deck of an overbridge that spans State Highway 1, near Albany. The upper portion of the bridge is a new walkway/cycleway and provides better access to Albany Station and the nearby business district.

A new pump station is being built at our Albany reservoir which will be able to pump water using the new watermain when needed.

What's next?

The new watermain can convey up to 20 million litres of water a day from the Albany to Pinehill reservoirs with the help of a new pump station which is being commissioned during July. From there, it will provide water to North Shore communities.

Fast facts:

- The 110-metre bridge is called 'Tirohanga Whānui' (panoramic view).
- The watermain is 2.5 kilometres long.



The Tirohanga Whānui bridge being installed. (Photo courtesy of the Northern Corridor Improvements Project.)

SOUTH

Pukekohe East reservoir



A convoy of concrete trucks recently delivered approximately 273 cubic metres of fresh concrete to our new Pukekohe reservoir site.

We are building a new reservoir in Pukekohe East to cater for population growth across the region and to improve the resilience of the wider water network. This is the largest reservoir we have built since 1994 and will be one of the four largest in Auckland.

Reservoirs store large volumes of water, enabling us to meet demand which fluctuates throughout the day. They also ensure we are able to meet demand if there is an issue at a water treatment plant.

We started building the reservoir late last year. A mix of native and exotic vegetation has been planted around the perimeter of the site to ensure the reservoir blends into the natural environment.

What's next?

The first section of the reservoir has recently been filled with 650 tonnes of concrete. The remainder of the reservoir slab and internal columns will be constructed by the end of the year.

Once the new reservoir is finished in mid-2020, water will flow by gravity from this site to reservoirs in Manukau, via the Waikato No. 1 watermain.

Fast facts:

- The concrete pour used around 57 truckloads of concrete.
- Pukekohe's new water reservoir will hold 50 million litres of water (or 20 Olympic swimming pools).

Pl w Th an Th lo ac ac u w pr V In ap bo w V In ap bo w V





Huia Water Treatment Plant

Planning is under way to build a water treatment plant and two treated water storage reservoirs in Waima, West Auckland.

The treatment plant will replace an existing plant that was built in 1928 and is reaching the end of its operational life.

The storage reservoirs will increase the volume of water stored locally, improving the resilience of the wider water network and accommodating daily demand fluctuations.

In May, we submitted our resource consent application to Auckland Council to carry out pre-construction work, e.g. earthworks, stream works and vegetation removal. We have asked the council to notify the public of our application to give everyone the chance to have their say.

What's next?

In the coming months, Auckland Council is likely to advertise the application in the local newspapers, and directly affected parties will be served notices individually. Council will also post information on its website.

Public submissions will be heard by independent commissioners, who will be appointed by the council, at a set hearing following the end of the submission period.

Fast facts:

- The new plant will continue to treat water from four dams in the Waitākere Ranges.
- The treated water will feed into Auckland's metropolitan water supply network, meeting up to 20 per cent of the city's water needs.
- By using gravity, we can significantly reduce ongoing operating costs as well as our carbon footprint, and ensure treated water can still be supplied when there is a power outage.



The plant and reservoirs have been designed to minimise the impact on the ecological values of the land. The dark red areas have the highest ecological values. The yellow lines show the extent of the proposed footprints – no work will occur outside these lines.



The spillway and valve tower are visible at Mangatangi Dam in the Hūnua Ranges.

We're encouraging Aucklanders to use water wisely during winter

The Hūnua and Waitākere ranges – where we have nine water storage dams – received 34 per cent and 44 per cent (respectively) less rainfall than normal for the January to June period. As a consequence, the city's total water storage was 59.2 per cent at the end of June, which is 25 per cent less than normal for that time of year.

The city benefits from having a variety of water sources including dam, river and aquifer sources. At the moment, we are maximising production from our river and aquifer sources to reduce demand on our dams.

While we expect there will be some wet weather in July and August, the dry start to the year means there's a big shortfall in rain to make up for. That's why we're encouraging Aucklanders to be waterwise this winter. It's not about going without; it's about cutting down on unnecessary use and wastage.

Below are some of our top tips for being waterwise:

- (1) Wash full loads of laundry whenever possible. This will save water and energy.
- (2) Turn off the water when brushing your teeth or shaving. You will use around 1 litre of water instead of 5 litres.
- (3) Check for leaks. Small drips leaking from your toilet cistern can result in thousands of wasted litres. Put a few drops of food colouring in the cistern. If colouring ends up in the toilet bowl without flushing, you have a leak. Have it repaired.
- Use a bowl to scrub vegetables in the kitchen sink. You can pour the water on your plants.
- (5) Consider installing a shower head with a low flow rate. Check its water rating label – the more stars, the more water efficient it is.

Visit www.watercare.co.nz and search 'be waterwise' for more tips to help you reduce water wastage.



Did you know?

If everyone reduced their shower time by a minute, our city would use 18 million litres less water every day. That's enough to fill more than seven Olympic pools!

Free water audit

We can arrange free water audits to help you understand your water use and save money on your bills.

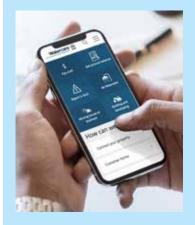
To register for your free audit:

Call us on (09) 442 2222, press 3, or email: info@water.co.nz

NEW ways to pay

We have introduced new digital channels to make it easy for you to pay:

- WeChat
- Alipay
- UnionPay
- Apple Pay



Price change reminder

Our water and wastewater prices changed on 1 July, so the new prices are reflected on your bill.

The price of water has risen by 2.5 per cent and the price of wastewater services has increased by an average of 3.3 per cent.

The adjustment is necessary to cover our increases in service delivery, maintenance and infrastructure costs.

All of the money we receive from our customers goes into operating, maintaining and expanding our infrastructure.

We do not receive any additional funding from Auckland Council or the government, nor do we pay a dividend to Auckland Council.

For more information, visit www.watercare.co.nz/Manageaccount/Our-charges

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 www.watercare.co.nz.

