

Redoubt Road Reservoir Complex

Increasing water storage capacity to support Auckland's growth



Auckland is predicted to grow by 700,00 to 1 million people over the next thirty years and with it the demand for water will also grow. While Watercare is actively working on increasing water supply, we also need to increase our capacity to store treated water.

The Redoubt Road Reservoir Complex, which currently has two large reservoirs on the site holding 120 million litres, is of huge importance as over 80% of Auckland's treated water supply travels through the site each day. The addition of a third reservoir, able to hold 45 million litres, will help future-proof Auckland's water supply and cater for the region's future growth.

Project background

The Redoubt Road Complex was initially constructed in 1973 where the site was historically a gully before significant earthworks took place in the form of a 20m high cut adjacent the northern boundary of the site and infilling an adjacent west-east oriented valley of up to 23m thickness – a great future proofing investment which will be able to accommodate for up to 8 reservoir sites. Watercare's current project is building the third reservoir on the site and also including ground improvements and foundation construction for a future fourth reservoir which will be built in future years. This avoids double handling and prepares us for the future.

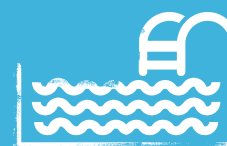
Currently the reservoir complex provides water as far north as Orewa. Reservoir storage helps buffer variations in demand and provides the system flexibility in its operation, maintenance and security of supply in the event of a water treatment plant (WTP) or watermain outage. You can find out more about this project and see a walkthrough of the planned site by visiting www.watercare.co.nz/redoubtrd.

Did you know?

The new reservoir storage capacity is

45 million litres
equivalent to

18 Olympic sized
swimming pools



The reservoir complex has solar panels with a Tesla Powerpack installed.

This reduces our electricity from the grid usage by 75%

Current average water usage in Auckland is

approximately 400 million litres per day

with a peak of **500 million litres** in the summer



Completion
February 2024

Cost

\$60 million

What's coming up



Early works of the project have been focused on earthworks to prepare the site. You may have seen an increase of trucks as the site was prepared and a new temporary access road built from Mill Road. Check out a timelapse of the earthworks at www.watercare.co.nz/redoubtrd.

As we move into the reservoir construction phase you may be able to see cranes on the site. One of the innovations residents may notice, is that the sides and roof of the new reservoir will be pre-cast and trucked in, rather than being built entirely on site. This will be a faster, safer method of construction, requiring less concrete and therefore reducing our carbon footprint.

In addition to the reservoir itself, our contractors, Fulton Hogan, will be installing pipework and the watermain as well as tie in work into the existing watermain connections. Once done the Redoubt Road driveway will be reinstated for on-going access needs.

Works will also include installation of the stormwater system pipework to the gully and construction of trench drains and earth retaining walls. Later in the project planting of the toe bund and wetland area in the gully will occur.



Keeping you safe

As this site is further away from residential areas we hope that the impact of our works will create only limited disruption. Traffic management has been in place along Mill Road while we built the temporary access road. A reduced speed limit of 50km/hr along part of Mill Road will be in place for the duration of the project.

Due to the truck movements and works taking place on the site, we must request that the community does not enter the Redoubt Road Reservoir Complex while the project work is underway. We understand that previously community members have enjoyed using this space for recreation and as a shortcut between Redoubt and Mill Roads, however until the completion of the project all community access is restricted. Health and safety of the communities we work in, as well as for our team members and our contractors is of upmost importance and we must restrict access in order to keep everyone safe.

Want to take your water-saving efforts to the next level?

Sign-up for a **free** water check.

We've partnered with **EcoMatters** to offer free in-home visits to help you reduce your water use.

An advertisement for 'Future Proof Your Home'. It features a photograph of a family (a woman, a man, and a child) smiling and looking at each other. Overlaid on the image is the text 'FUTURE PROOF YOUR HOME' in large, bold, white and blue letters. Below this, it says 'with a FREE home water check!' in white. At the bottom, it says 'Help us, help you, save water.' and includes the logos for EcoMatters and Watercare.

To sign up for a free check, visit www.ecomatters.org.nz/saving-water

Keep in touch

Want to find out more about the project? Visit

www.watercare.co.nz/redoubtrd

If you have any questions about this project reach out to us at redoubt@water.co.nz