

# BUILDING THE CENTRAL INTERCEPTOR

A new wastewater tunnel for Auckland

We will soon embark on a project to build one of the most significant wastewater projects in Auckland's history. Known as the Central Interceptor, the 4.5-metre diameter tunnel will travel deep below the city, from Western Springs to a new pump station at the Māngere Wastewater Treatment Plant.

The tunnel and link sewers will consist of 17 shafts at 16 locations along the route and will be located between 22 and 110 metres below the surface, crossing 15 metres beneath the Manukau Harbour. The shafts will collect and transfer wastewater into the tunnel.

Auckland is serviced by nearly 8,000 kilometres of public wastewater pipes. The largest collector and conveyance pipes are known as 'Interceptors'. Seven existing interceptors convey wastewater from our houses, businesses and industries across the city to the major wastewater plants for treatment and disposal.

The Central Interceptor will replace an aging section of pipe under the Manukau Harbour. This will enable other projects in east and south Auckland to be constructed allowing for future growth across Auckland. The Central Interceptor will also significantly reduce wet weather overflows and improve water quality in local streams and waterways.



Proposed pipeline route

## How will building the Central Interceptor affect you?

The tunnel will pass deep underneath private properties, parks and the Manukau Harbour between Western Springs and Māngere.

Owners of properties along the tunnel's route will soon receive further details about the project from us.

In 2010, we completed a two-kilometre-long-four-metre-diameter underground storage tunnel in Hobson Bay. The experience we gained from this project has confirmed that there is little surface impact tunnelling deep below the ground. Given the depths of the Central Interceptor Tunnel, we do not expect vibrations from the tunnelling to be heard or felt.

We obtained all required resource consents for the Central Interceptor project in 2015, including for the above-ground sites.

### CENTRAL INTERCEPTOR

#### Project build



2019 to 2025

In 2018, we will begin preparing for the tunnel's construction. The underground construction will take place between 2019 and 2025.

#### Length



13 kilometres

Along the 13-kilometre-long route, the Central Interceptor will collect wastewater from the existing network, transferring it to the Māngere Wastewater Treatment Plant.

4.5m diameter

At 4.5 metres in diameter, the tunnel will be one of the largest in Auckland's wastewater network – wide enough to fit two cars side by side!

Primarily used to transfer wastewater, the tunnel can also store the increased volume of diluted wastewater during heavy rain to regulate the flow to the Māngere Wastewater Treatment Plant.

Storage capacity:  
**200,000 cubic metres**  
or 80 Olympic-sized swimming pools

#### Want to know more?

For more information and to keep up to date with this project, visit [www.watercare.co.nz](http://www.watercare.co.nz) and search for 'Central Interceptor'.

#### Project timeline

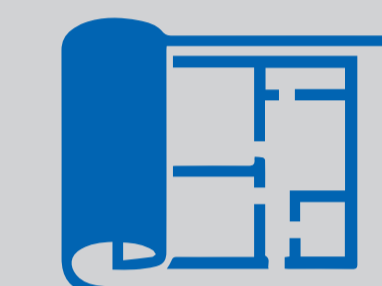
2012–2015

Consenting



2014–2017

Design



2017–2018

Tendering & procurement



2019

Construction starts



2025

Completion



# Why are we building the Central Interceptor?



## To reduce environmental risk

The existing wastewater pipeline that passes under the Manukau Harbour was built in 1964 and is reaching the end of its operational life. Damage to, or failure of, this pipe could result in a significant discharge of untreated wastewater into the Manukau Harbour. The new Central Interceptor Tunnel will also include back-up generators at the new Māngere Pump Station in case of an unlikely extended power outage. Along with the recent \$130 million biological nutrient removal upgrades to the Māngere Wastewater Treatment Plant, the Manukau Harbour will continue to be protected into the future.



## To service a growing city

Auckland is undergoing significant growth and must accommodate another one million people over the next 30 years.

The Central Interceptor is critical to providing additional wastewater capacity for this growth and enabling the connection of future wastewater projects in response to growth.


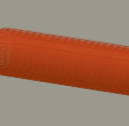
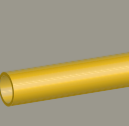

Connecting to the western end of the Ōrākei Wastewater Interceptor, the Central Interceptor will provide a more direct route to the Māngere Wastewater Treatment Plant for much of central Auckland's wastewater flows. This will allow greater capacity for growth in other parts of the network. The Northern Interceptor, which begins construction in 2018, will divert some of the northern wastewater flows to Rosedale Wastewater Treatment Plant, freeing up of more capacity in the southern network to allow for future growth.



## To help reduce wastewater overflows

During wet weather the central wastewater network currently overflows to local waterways and the Waitemātā Harbour at more than 100 locations and to the north-eastern Manukau Harbour at 14 locations. The Central Interceptor is expected to reduce the frequency and volume of overflows by over 80 per cent.

### KEY

-  Wastewater entry points
-  Central Interceptor
-  Link to existing network
-  Volcanic rock