

Information Sheet 1: Background – Southern Pipeline case study

What is the Southern Pipeline?

The Southern Pipeline will be a large capacity wastewater trunk main of approximately one metre in diameter that will run between Maleme Street and the Te Maunga Wastewater Treatment Plant (WWTP). The Southern Pipeline is a significant wastewater project for Tauranga City Council and will be a major long-term investment in the city's infrastructure. The objective for the project is to construct a pipeline from the Maleme Street Pump Station to the Te Maunga Wastewater Treatment Plant that:

1. Is safe, economical and robust;
2. Protects the environment and public health;
3. Minimises environmental and community disruption during construction; and
4. Is generally supported by the community.

Population growth and wastewater treatment

The need for the Southern Pipeline was identified during the development of the SmartGrowth Strategy. As Tauranga continues to grow, its' wastewater infrastructure needs to be expanded to effectively collect and treat the wastewater. Healthy communities rely on networks of wastewater pipes and pump stations to collect and transport the wastewater to specialist treatment facilities.

In Tauranga the development of the wastewater network has evolved over many decades. The two existing WWTPs are situated at Chapel Street and Te Maunga. The existing treatment plant at Chapel Street is located on a relatively confined site and has little room for expansion. The Te Maunga Wastewater Treatment Plant, the newer of the two facilities, has capacity to receive and effectively treat the flows from an increased population, with considerable land available for expansion. The treated wastewater from both treatment plants first passes through the Te Maunga wetlands before the final discharge via an off shore ocean outfall. This ocean outfall is planned to be used for the long term.



Ocean outfall location
(Image – Tauranga City Council)

Future growth, wastewater and the Southern Pipeline

Growth strategies have determined that the Te Maunga Wastewater Treatment Plant is the logical site to cater for the future growth in the city's wastewater flows. To transfer wastewater to the Te Maunga Wastewater Treatment Plant, a new trunk main is required to collect the flows from the southern parts of Tauranga and to transfer the collected wastewater to Te Maunga. The proposed Southern Pipeline will do this.

The Southern Pipeline is a large wastewater pipeline that is needed to transfer sewage from Tauriko/Greerton to the Te Maunga Wastewater Treatment Plant. It will also take away a lot of the pressure from the rest of the city's wastewater system, especially the existing Judea to Chapel St trunk main. The total project cost is now estimated at \$106.1million (2009 dollars).

Possible routes

The pipeline will need to get from Memorial Park to the Strand (near the rail bridge). There are two options being evaluated – the coastal option and Devonport Road option. The Council is considering a coastal walkway along the coastal pipeline route. The Council is considering two options for crossing the harbour – a submarine pipeline and upgrade of the existing rail bridge. Funding is being sought to upgrade the rail bridge. The alternative is a submarine pipeline laid on the harbour bed, crossing from 1st Avenue across the harbour and connecting to the Matapihi rail causeway.

Independent review

Before committing to the \$106 million project, Council requested an independent review. The findings of this review supported the fact that we need the pipeline in the short term to avoid overflows of wastewater caused by growth in the city and in the long term to divert wastewater away from Chapel Street Wastewater Treatment Plant. The review also recommended that Council look at sustainable options for reusing wastewater and discharging it into waterways.

Key features of the Southern Pipeline proposed works

Key features include:

- Construction of a new 14.5 km trunk main sewer pipeline from Maleme Street, Greerton to the Te Maunga WWTP;
- Construction of a new Maleme Street pump station and major re-construction of the Memorial Park pump station;
- Construction of an integrated reclaimed embankment along part of the foreshore of the Te Papa Peninsula, from Sixth Avenue to 'The Concourse' – which will accommodate both the pipeline (from Fifth Avenue) and a walkway/cycleway;
- Attachment of the pipeline to a new walkway/cycleway, which will be attached to a strengthened ECMT Railway Bridge No. 71, and widening of the railway causeway at the eastern (Matapihi) end. The widened causeway will accommodate the pipeline, a new walkway/cycleway, and also provide construction and service access for the railway bridge;
- Reclamation on the Matapihi foreshore;
- Construction of associated facilities including siphon structures, valve chambers, receiving chambers and air control structures.

In the event that the Memorial – Strand Walkway project proceeds, but the Railway Bridge Upgrade project does not, the Southern Pipeline will be placed within the reclaimed foreshore embankment as far as First Avenue – at which point it will cross the harbour to Matapihi via a submarine pipeline sitting on the seabed.

References and additional reading

See: Tauranga City Council at www.tauranga.govt.nz or <http://www.tauranga.govt.nz/council-projects/southern-pipeline.aspx>

Question / Pātai:

1. Make a list of affected parties. Who will be affected by the proposal?
2. What are the potential impacts that will arise from the proposal? (Consider environmental, social, economic and cultural factors).

