## 5 Wastewater

Council protects property and public health by safely and efficiently collecting, transporting, treating and disposing of wastewater. This includes managing treatment plants, pumping stations and a physical wastewater pipe system. The latter totals some 1048km.

Since 1840, the wastewater of Wellington found its way into the harbour by means of open drains and watercourses. Reports on the problem of wastewater transport and disposal were received by Council as early as 1877. In the 1890s a major programme of drainage construction was undertaken to improve the sanitary conditions for the city. An extensive system of "intercepting wastewaters" was planned, to operate as far as possible by gravity to minimise pumping costs. The population of the city at that time was 30,000 people. The works were completed in 1898.

The intercepting wastewater system was comprehensively extended and partially duplicated in a major works programme undertaken in 1936. By this time, barely 40 years after the 1890's programme was completed, the population of the city had reached 95,000 and the drainage infrastructure was in acute need of renovation to increase capacity.

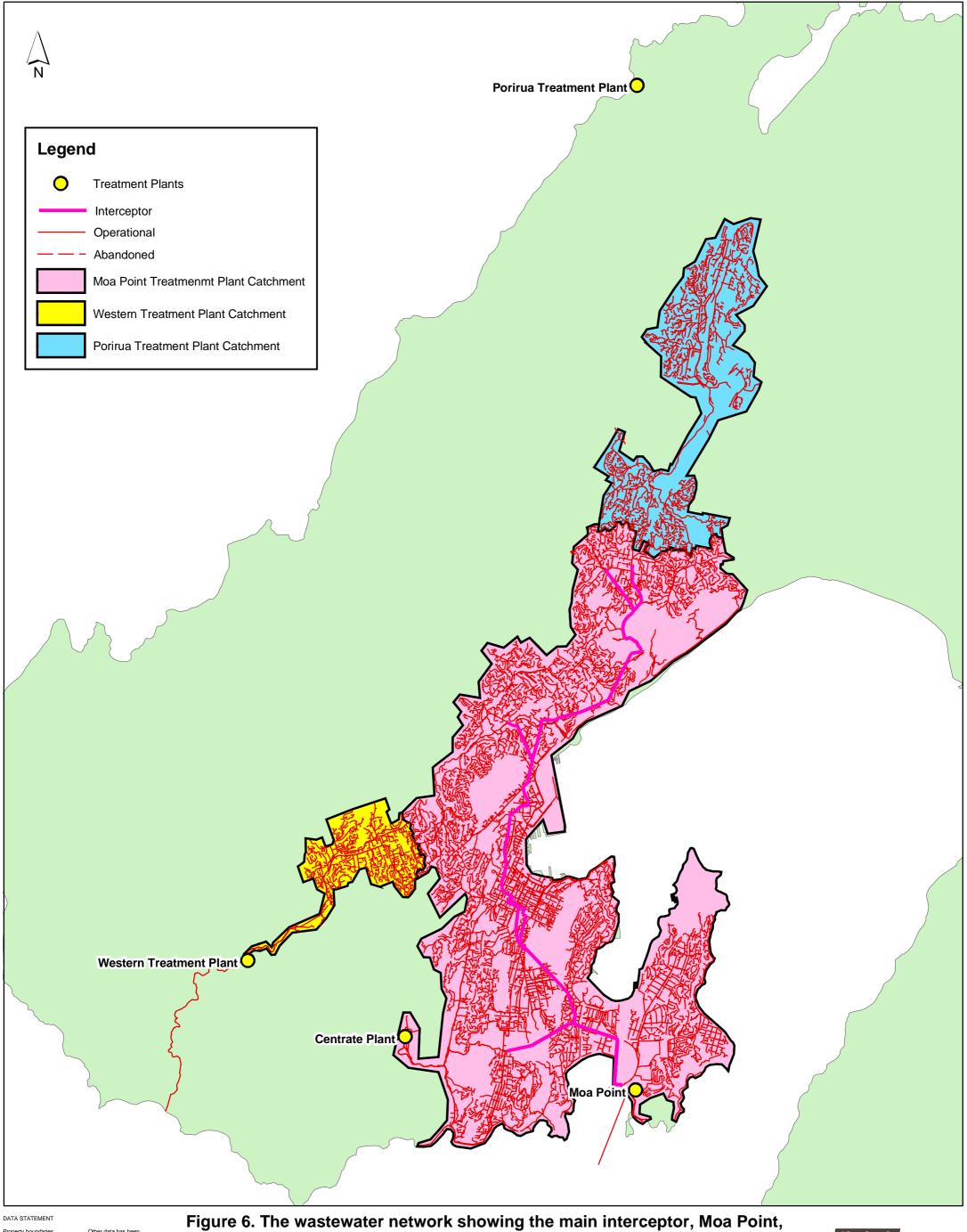
Further work, such as construction of the Kaiwharawhara foothills tunnel (1970's), the Mount Albert tunnel (1980's) and Kilbirnie interceptor triplication (1999) has been completed since the 1930's to give today's current configuration (Figure 6).

Because residential development post-1945 in the Wellington region has occurred predominantly outside Wellington's boundaries, the percentage of wastewater pipes 50 years or older is high by average standards in New Zealand. There also tends to be a larger number of smaller diameter pipes in Wellington compared to many cities of similar size due to the steeper topography.

## 5.1 Communities

The communities for the wastewater services assessment have been divided into the reticulated area of the city and the non-reticulated communities of Makara, Ohariu, and Horokiwi.

The reticulated area of the city can be further broken down into which treatment Plant- Moa Point, Western and Porirua- serves that area of the city.



Property boundaries Land Information NZ Licence WN0853547/2 Crown Copyright reserved Accuracy in urban areas: +/-1m Accuracy in rural areas: +/-30m

Other data has been compiled from a variety of sources and its accuracy may vary

Figure 6. The wastewater network showing the main interceptor, Moa Point, Western & Porirua Treatment Plants and Carey's Gully Sludge Plant

1:80,000

■ Meters 1,000 2,000 4,000 6,000 8,000



The non-reticulated communities operate individually with the exception of the Meridian village, within the Makara area, which has a combined system of wastewater disposal and treatment serving 25 houses. In the instance of wastewater, the majority of South Karori Road is connected to the Councils reticulation system.

## 5.2 Standards

Council provisions for wastewater quality and quantity are based on provisions in the following documents;

- o Resource Management Act 1991
- o Local Government Act 2002
- o Land Drainage Act 1908/Soil Conservation and Rivers Control Act 1941
- o Building Act 1991
- o Health and Safety in Employment Act 1992
- o Civil Defence Emergency Management Act 2002
- o Health Act 1956

Several by-laws and policies apply to the wastewater service, including:

- Asset Management Plan
- Sewage Pollution Elimination Project
- Drainage Rehabilitation Strategy
- Private Lateral Policy
- Building Over Drains Policy
- Wellington City Council Consolidated Bylaw 1991 (Currently under review)
  - Earthworks