

2.0 Strategic context

2.1 Strategic framework

The Council has facilitated the identification and definition of Community Outcomes by the Wellington “community”. The Community Outcomes guided the development of Council’s own City Outcomes which interpret the Community Outcomes over which Council has direct influence. The Council has identified key strategic areas, and within each of these areas has developed strategies in order to deliver the City Outcomes. In turn, these strategies form a key input into the asset management plans, along with stakeholder and legislative requirements, current and future demand information, and risk issues.

Figure 1 indicates how they link to the key legislation, planning and documents that guide Council’s water supply activity.

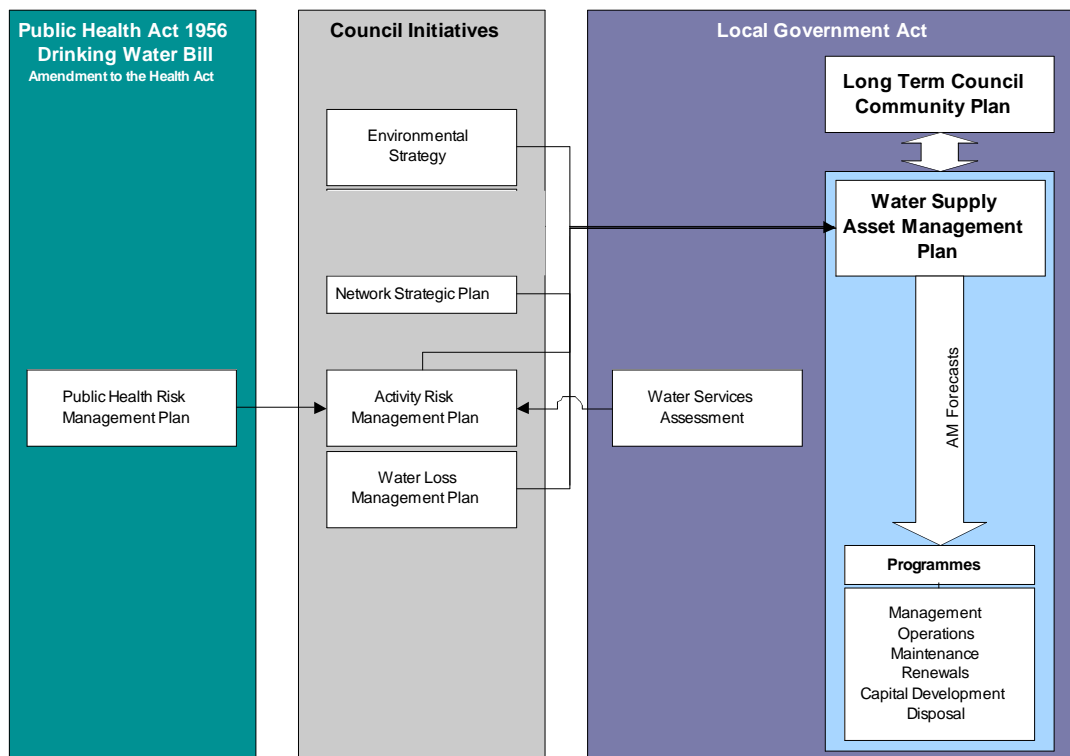


Figure 1 - Strategic framework

The water supply activity contributes to the following Community Outcome

‘Wellington’s long-term environmental health will be protected by well-planned and well-maintained infrastructure’.

This plan gives effect to these high level strategies, Council and Community Outcomes by having specific plans and a detailed programme of works to support and encourage quality of life, enterprise and prosperity through the provision of water supply services.

Figure 2 shows the linkages between the Community Outcomes defined in the Long Term Council Community Plan and the water supply activity, and the nature of the contribution.

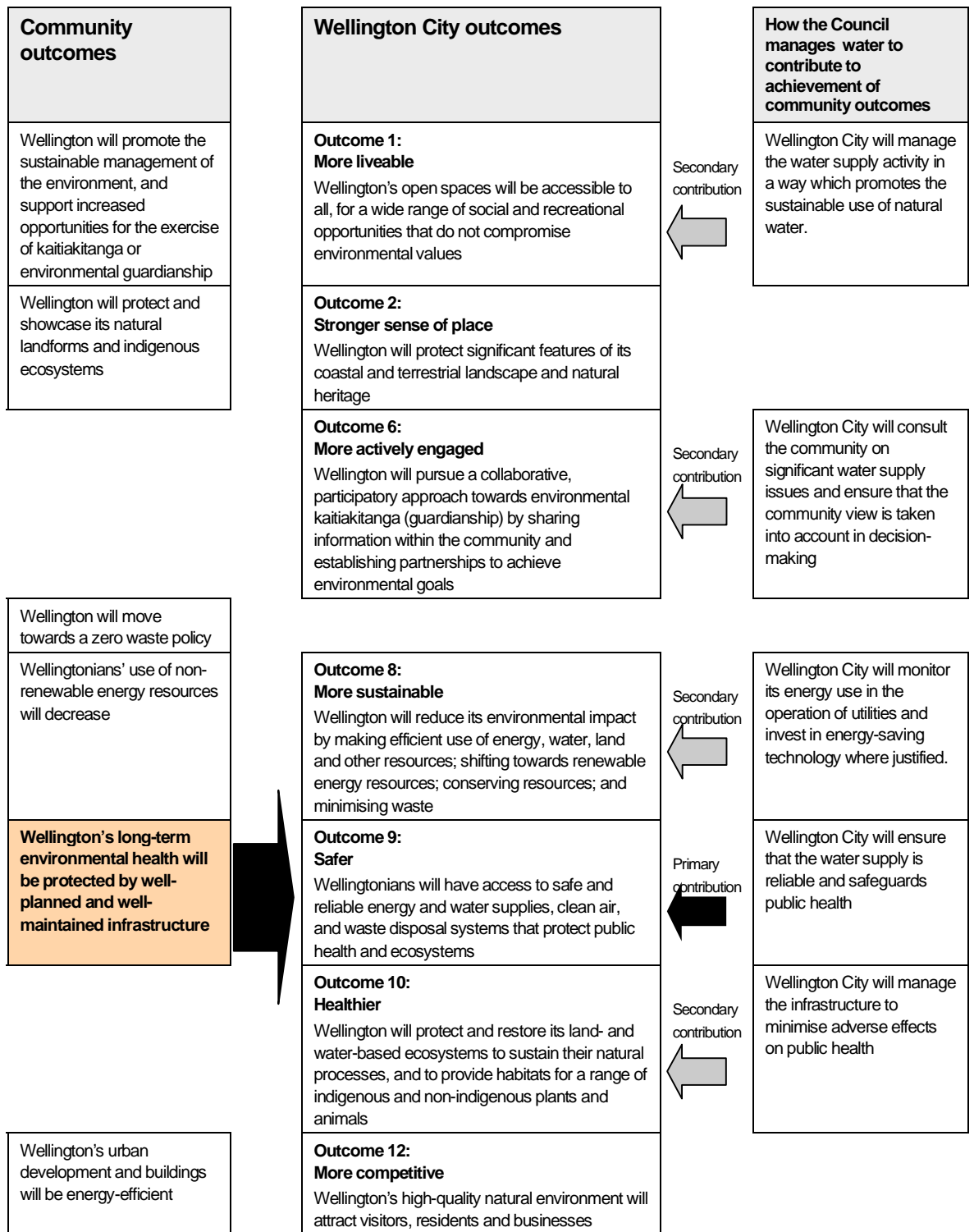


Figure 2 - Community Outcomes, City Outcomes and strategies

2.1.1 Network Strategic Plan

The Network Strategic Plan, when completed, will identify the key strategic issues facing the water supply network and set out our approach to managing these issues.

2.1.2 Public health risk management plan

A public health risk management plan has been submitted to the Regional Health Board need to meet the requirements of the drinking-water supplies amendment to the Health Act 1956.

This plan covers health related risks and sets out how the Council will manage these risks to acceptable levels. Risk management is an essential part of the Council's proactive approach to managing the city's water supply. Rather than simply responding to problems as they occur, risk management is about identifying and managing potential problems in advance.

The risks, strategies and recommendations from the public health risk management plans are consolidated in the asset management programmes and quality processes.

2.1.3 Water services assessment

The Local Government Act 2002 requires all Councils to carry out assessments of water and sanitary services. This requirement is to ensure that sufficient thought is given to the provision of water and sanitary services of an acceptable standard sustainably into the future. The assessments cover both public and private water supply systems.

Assessments of water and sanitary services must be included or summarised in the Long Term Council Community Plans (LTCCPs) of councils and be the subject of a public consultation process specified in the Act.

2.1.4 Water management plan

One of the Council's highest environmental priorities for the next three years is to promote water conservation and more efficient use of water. This is particularly important in light of Wellington's growing population, which is placing increased pressure on water resources. The Council has been working with other councils on a region-wide Wellington water management plan which will suggest targets for water conservation. The Council will work with the Wellington community to identify water conservation opportunities, while also looking at ways we can reduce our own water usage. The plan will be implemented over the following two years.

2.2 Growth in demand

2.2.1 Changing demand

Factors which influence demand for water include:

- Growth
 - Population change.
 - Sub-divisional activity and residential change.
 - Commercial and industrial change.
- Climate change.
- Change in user consumption decisions and increasing customer expectations.

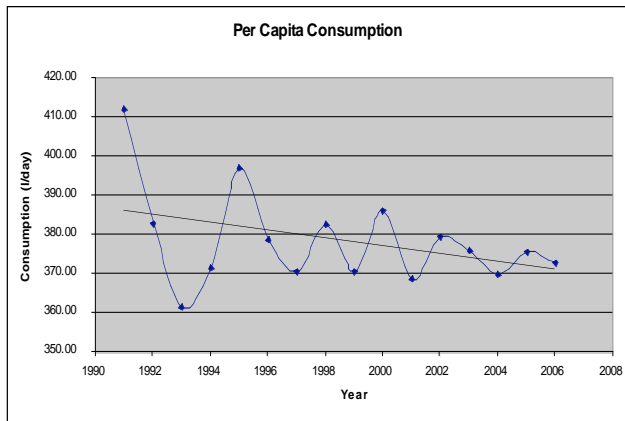
2.2.2 Key issues with changing demand

Water supply management is an activity that influences a range of outcomes, including environmental well-being, health, sustainability and economic development. The key issues for the water supply activity related to the well being of the city are as follows:

Social

The expected growth rate in Wellington City is predicted to be approximately 0.7 per cent per year over the next 20 years¹ (an increase of approximately 27,000 residents). Further, the average number of people per dwelling is decreasing in Wellington, as it is elsewhere in New Zealand. Commercial premises are being converted into apartments within the central business district, and housing needs are changing to smaller lot sizes. In line with declining household size, Wellington will need to provide approximately 24,000 additional dwellings between 2006 and 2026

Increasing population implies increasing water demand, accentuated by the declining household size. Further, development changes and changes in the local economy and growth of particular kinds of business will affect the volumes of water supply required.



Although there has been an increase in the use of domestic water consuming devices, there is an increasing public awareness that water is a valuable resource that should be conserved. Individual consumption decisions and Council's initiatives to reduce water wastage and promote more efficient use of water has resulted in decreased water consumption per capita to offset effects of growth.

Figure 3 – Water consumption per capita

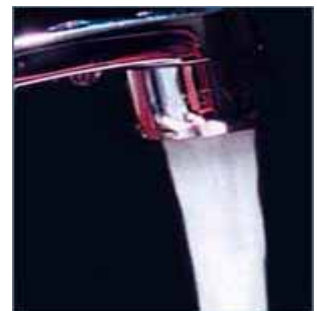
Changes in population growth and water consumption decisions affect:

- The ability of the water supply network to meet the increase in demand of water supply.
- Residents' activities during occasional water restrictions in extreme dry weather.

In recent years, there has been an increased awareness of public health safety issues and higher expectation of a safe and reliable water supply network by customers.

Environmental

There is an increasing focus on the quality of the environment and the sustainable use of natural resources. Climate change, leading to longer dry spells and higher temperatures, is likely to lead to an increase in the demand for water for garden irrigation and reduce the rainfall volumes available for water supply. Greater Wellington Regional Council has informed councils within the region that current allocations could not be guaranteed by 2007 for a 50 year



¹ A slow down in growth is expected around 2030 in conjunction with an ageing population and projected slowing of world population growth

drought scenario without capital development works. The Wellington City Council, together with Greater Wellington Regional Council, will continue to implement a range of strategies intended to reduce and manage the demand for water with the aim of deferring the construction of new facilities.

Cultural

Public health and the quality and reliability of water supply is an issue of importance to all water users. Asset management planning includes a range of strategies to identify and manage the future water supply needs of the city.

Economic

An effective and reliable water supply system supports economic activity in the city. The strategies and funding policies in the asset management plan are focused on minimising the cost of services and ensuring the equitable allocation of costs while maintaining and improving the quality of the water supply service. Development changes and changes in the local economy and growth of particular kinds of business will affect the volumes of water supply required.

2.3 Water supply demand projections

Figure 4 presents high, medium and low forecasts of water supply demand within Wellington. The medium forecasts assume medium growth projections and ongoing implementation of Council water conservation initiatives noted below.

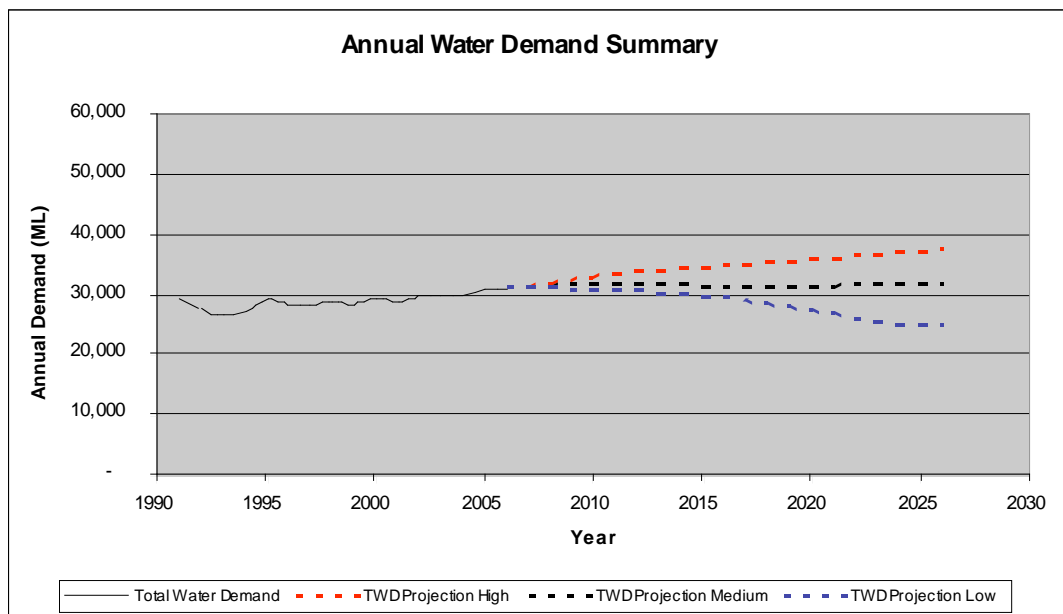


Figure 4 - Projected cumulative increase in water supply demand

2.4 Demand management

In addition to asset development works, the Council currently implements the following demand management techniques:

Metering and charging practices

- Metering – commercial premises have meters installed to monitor consumption. District and area meters are used to assist in demand management, leak detection within pressure zone boundaries and the development of a fully interactive modelling and control system.
- Residential properties that have a meter installed on a voluntary basis are given the option to be billed on the basis of recorded usage, thus encouraging residents to amend their consumption to minimise their water bill. All metered commercial premises are charged on a volumetric basis.

Education

- Environmental awareness and the links to water supply management are promoted to the public and to Council business units.
- Greater Wellington Regional Council publications are made available at the beginning of summer, and media releases are sent out when the water use approaches the trigger of 83,000 cubic metres per day.

Technical options – although not strictly demand management initiatives, these initiatives minimise capital upgrade works required to meet increasing demand and include the implementation of integrated solutions through:

- targeted assessments to identify sources of leaks and works to reduce this
- use of pressure-reducing valves to reduce water losses
- alternative feeds – allowing water to be re-routed to overcome pressure and flow deficiencies.

Demand management options that will be considered for possible future introduction include:

Charging practices

- Metering – the progressive introduction of revenue meters for all premises.

Education

- Increasing public awareness programmes to promote the need for water conservation and its benefits.

Incentives – developing policy tools to encourage:

- better use of rainfall runoff, for example, for irrigation purposes, and alternative water sources
- installation of low-flow appliances and other efficient water-use devices.

Technical options – implementing integrated solutions through:

- increased proactive leak detection and works to reduce this
- further pressure management strategies to reduce water losses.