

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 the Council’s own city outcomes, which interpret the community outcomes over which the Council has direct influence. The Council has identified key strategy 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 the linkages between the key legislation, planning and documents that guide the Council’s stormwater activity.

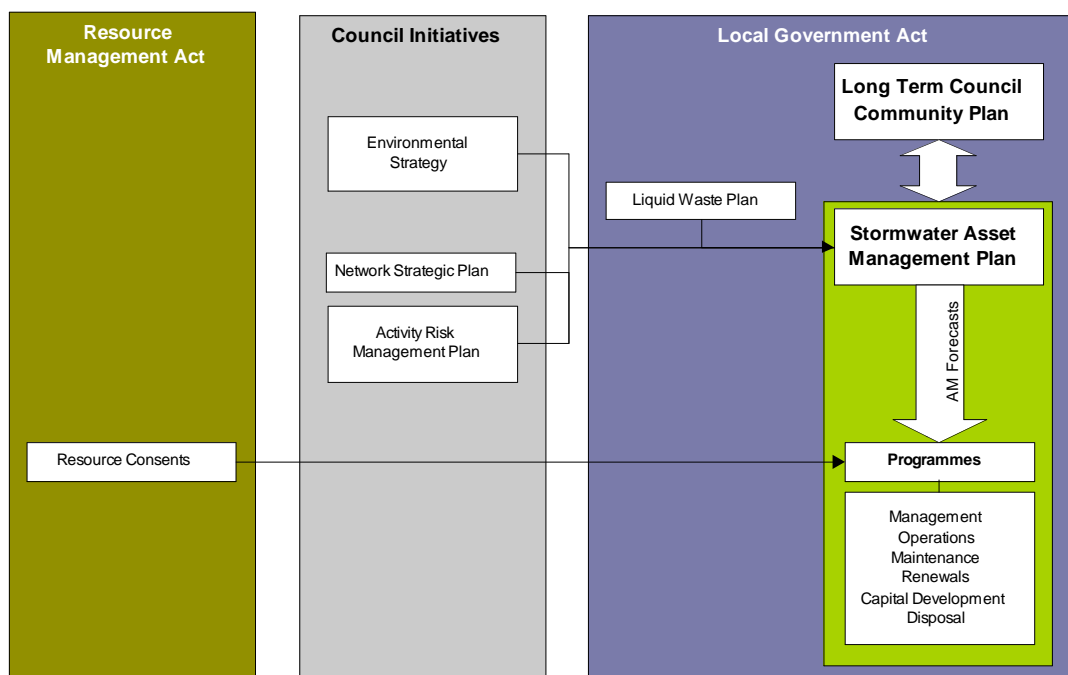


Figure 1 – Strategic framework

The stormwater 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 stormwater collection and disposal services.

Figure 2 shows the linkages between the community outcomes defined in the Long Term Council Community Plan and the stormwater activity, and the nature of the contribution.

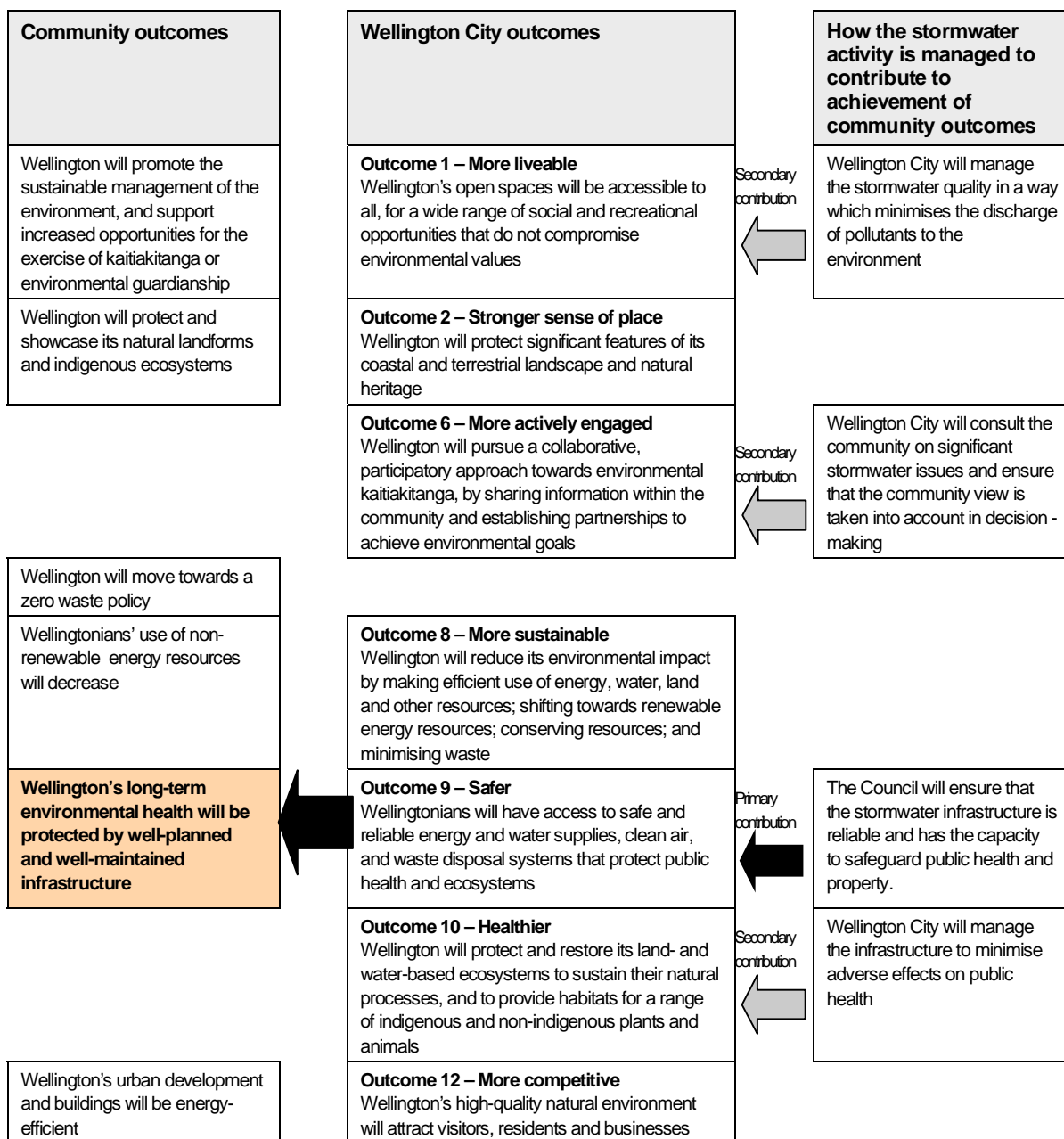


Figure 2 – Community outcomes, city outcomes and strategies

2.1.1 Environmental Strategy and Network Strategic Plan

The Environmental Strategy adopted by the Council in 2006 provides a high-level statement of the Council's long-term environmental intentions for Wellington as well as shorter-term priority areas for action. The Network Strategic Plan, due for completion in 2009, will identify the key strategic issues facing the stormwater network and set out our approach to managing these issues.

The strategy identifies as priorities over the next three years the following actions relevant to the stormwater activity:

- increase efforts to improve the quality of streams
- increase the Council's promotion of sustainable resource use, including a drive for energy efficiency in the operation of the city's infrastructure.

2.1.2 Liquid Waste Management Plan

This plan was adopted by the Council in 2005 to meet the requirements set out in the Local Government Act 2002 and the New Zealand Waste Strategy 2002. The plan states objectives, policies and actions relating to the sustainable management of stormwater and wastewater discharges which provide a framework for asset management planning. The goals of the Liquid Waste Plan are to:

- lower the social costs and risks of waste
- reduce damage to the environment from waste generation and disposal
- increase economic benefit by more efficient use of materials.

2.2 Growth in demand

2.2.1 Changing demand

Factors which influence demand for the stormwater activity are:

- growth
 - population change
 - sub-divisional activity and residential change
- climate change
- increasing customer expectations.

2.2.2 Key issues with changing demand

Stormwater management is an activity that influences a range of outcomes, including safety, environmental well-being, health, sustainability and economic development. The key issues for the stormwater activity related to growth and changing demand for services in 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. In line with declining household size, Wellington will need to provide approximately 24,000 additional dwellings between 2006 and 2026.

Property development associated with increasing population implies increasing stormwater generation. Development of the northern suburbs and changing housing needs to smaller lot sizes and more use of concrete and other sealed surfaces around homes will increase stormwater flows with more rainfall run-off directed to the system.

There is an increasing expectation from the community that flooding incidents will occur less frequently, will be less severe and will be dealt with more rapidly.

Changes in growth and demand on the stormwater infrastructure affect:

- the ability of the stormwater network to meet the increase of stormwater flows
- the frequency with which secondary overland flow paths are used, including roads and private properties
- the likelihood of flooding and subsequent property damage.

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

Environmental

There is an increasing focus on the quality of the environment, including water quality in watercourses and the coastal receiving waters. The Council will continue to implement a range of strategies intended to reduce contamination of stormwater. Some preliminary work has been undertaken to investigate environmental effects of contamination associated with urban run-off. Climate change leading to higher-intensity rainfall events could increase environmental damage caused by flooding and slips.

Inflow from stormwater pipes and infiltration of groundwater causes occasional overflow of wastewater from the wastewater network despite programmes to reduce inflow and infiltration. The Council has invested heavily in improving the water quality of harbour, sea and streams through assessment, monitoring and investigation projects, and implementation of physical works. The focus has been on reducing wastewater pollution from the city's stormwater system at 11 consented sites and other selected sites as part of the wastewater activity.

Cultural

The discharge of contaminated stormwater to receiving waters is offensive to the tangata whenua. Asset management planning includes a range of strategies to identify and reduce the contamination within stormwater discharges.

Economic

An effective and reliable stormwater system which provides adequate protection against flooding supports economic activity in the city. The economic cost to individuals and to the community can be catastrophic in major flood events, as seen in the 1976 and 2004 floods in the Wellington region when numerous dwellings were flooded. 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 stormwater service. Growth in industry may increase impervious areas within the catchment and so increase stormwater run-off, as well as increasing the risk of point source contamination of the stormwater discharges.

2.3 Stormwater demand projections

Figure 3 below presents estimated indicative cumulative increases in stormwater run-off from development and climate change. This projection assumes medium growth projections and climate change forecasts. Greater detail is provided in individual catchment management plans, including the capability of both the primary and secondary stormwater systems to manage these flows.

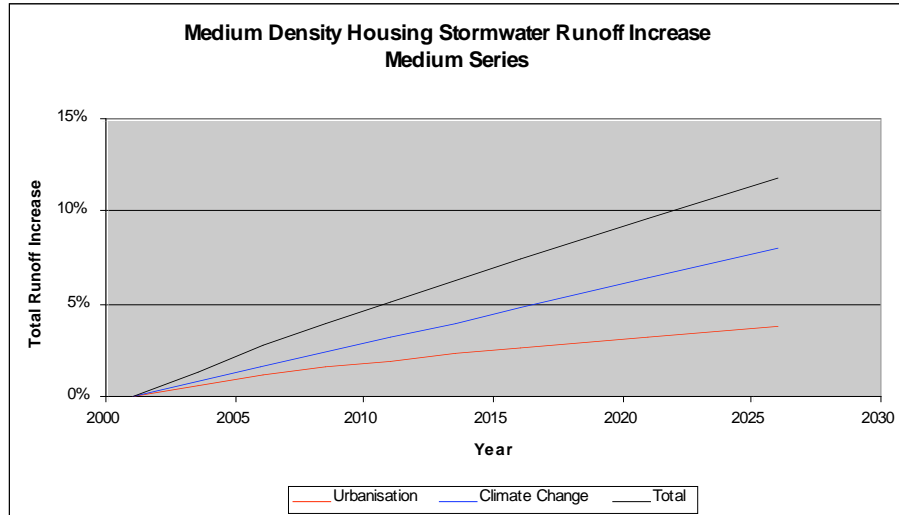


Figure 3 – Projected cumulative increase in stormwater flows

2.4 Demand management

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

Regulation – The District Plan dated July 2000, discourages greenfield development through its urban containment policies by encouraging infill housing in existing urban areas. It includes policies to limit site coverage and therefore peak run-off volumes.

Education – This includes promoting environmental awareness and the effects of activities such as car washing, where contaminants may enter the stormwater system through sumps.

Demand substitution – implementing integrated solutions through:

- maximising the use and benefits of natural catchment areas, including soakage and storage/attenuation potential
- exploring opportunities to reduce stormwater run-off through re-vegetation programmes, the use of porous pavements and infiltration drainage (soakage)
- managing waterways using a holistic approach as articulated in the Council's Bush and Streams Restoration Plan, "Wet and Wild" 2001
- minimising run-off impacts through raising affected properties, or purchasing, protecting and reselling affected properties.

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

Education – increased promotion of environmental awareness and the effects of activities such as car washing, that may allow contaminants to enter the stormwater system through sumps.

Demand substitution – exploring opportunities to reduce stormwater run-off through capture of run-off from roofs for re-use as a non-drinking water source.