

# Summary assessment: water and sanitary services

This assessment was adopted in 2005 for inclusion in the Long-term Council Community Plan 2006-16 and has not been updated.

## Introduction

Part 7 of the Local Government Act 2002 (LGA) requires territorial local authorities to assess the provision and services of water-related and other sanitary services within its District.

Specific information required from the assessment for each identified community includes:

- A description of the services provided
- an assessment of risks to communities relating to the absence of services
- the quality, quantity and adequacy of services provided
- the current and estimated future demand
- the territorial authority's role and proposals for meeting these demands
- the options available to meet the forecast demands and the suitability of each
- the health and environmental impacts of discharges and other sanitary services

- the extent to which public health is adequately protected.

The Act requires the first assessment to be completed by 30 June 2005.

### Assessment of water services

The LGA Part 7 defines "water services" as all three waters: water supply, wastewater and stormwater. All forms of supply and delivery systems servicing 'communities' must be assessed as to adequacy of supply for present and future demands, and with respect to any risks to the supply and the associated community.

Much of the urban area will be serviced by well-recorded and maintained reticulated pipe systems for all three waters. Asset and Catchment Management Plans are likely to contain most of the information required for assessment of these services, but the Act requires that the process still be carried out.

The outlying rural communities will be more difficult to assess as Council records will be

less complete and some if not most local systems will be privately owned and maintained.

Examples of non-Council water services would include:

- Stand alone activities: schools, correction facilities and private schemes
- small rural and holiday settlements
- small lot rural-residential and bush living subdivisions
- marae and other cultural settlements.

The full range of options and their environmental and public health impacts must be considered in the assessment. These options must include, but may not be limited to, the following:

- On-site collection and disposal methods
- greywater and stormwater reuse or recycling
- demand reduction strategies including public education and information, promotion of appropriate technologies, pricing strategies and regulation
- the full range of technologies available.

### Assessment of sanitary services (including solid waste)

The Local Government Act (LGA) LGA Part 7 (in referring to the Health Act section 25) defines “sanitary services” as cemeteries, crematoria, public toilets and solid waste disposal.

### Community - LGA Definition

The definition of Community, as defined in LGA 2002 Section 5 “Interpretation”, refers to Schedule 6, which has the context of legally defined Communities having community boards.

However the definition is subject to S5(2), where the above definition does not apply to:

- a) Section 3 “Structure and reorganization of local government”, or
- b) The definition of the long-term council community plan, or
- c) Any of the provisions of Parts 2 (“Purpose of Local Govt...”) and 6 (“Planning, decision-making, and accountability”), or
- d) Any of the provisions of Schedules 10 (“Council plans and reports”) and 11 (Matters relating to rates relief on Maori freehold land”), or
- e) Any other provisions of this Act in respect of which the context otherwise requires.

### Practical definition

For the purposes of the assessment therefore, a community can be either the legally constituted kind, or any other area or group that is identified as useful for making a satisfactory assessment of water and sanitary services.

The Ministry of Health defines a water ‘community’ in practical terms as any area with a community water supply with “25 or more persons resident for more than 60 days a year”.

For the purposes of the water services assessment, the practical meaning of ‘community’ may vary depending on circumstances, communal interests or locations, and may for example include:

- A number of farms served by a rural water supply (which could be less than 25 people)
- a community served by a piped water supply or reticulated sewerage system
- an industry or factory water supply
- an area of 50 ha divided into 20 x 2.5 ha lifestyle blocks
- and area or school or marae with problems due to septic tank soakage.

The practical meaning of a sanitary ‘community’ may vary as above, and could for example include:

- Part or all of a territorial authority
- a rural area or an urban part of a territorial authority
- an isolated locality within a territorial authority.

### Assessment process

The assessment of water and sanitary services in Papakura District has been carried out in three sections. They are:

- Water services assessment
- Sanitary services assessment
- Solid waste assessment.

The detailed level of assessment is outlined in the separate sections in the report.

This assessment has been carried out with the available information and survey in some rural areas. Papakura has Urban, Rural and Future Growth areas. The future growth areas are mainly in the greenfield rural areas. This overall assessment has been based on these three areas by assessing the health and safety risks for current required level of service and future level of service.

As this assessment was carried out with current available information, there are some areas

that require more detailed attention and further assessment. The gap and additional required works are identified in the improvement plan for continuing works in this area. According to Council's planning process, this assessment will be eventually lined up with future Activity Management Plans and then incorporated into LTCCP 2006/16.

The improvement in the infrastructure management has mainly been identified in the asset management plans and those improvements are implemented through Council's Annual Plan processes.

Although assessment of water and sanitary services and asset management plans will be incorporated into activity management plans, these two documents will be kept updated for operations and asset management purposes.

## Summary of water and sanitary services

### Current services

Watercare Services Limited (WSL) supplies potable water to the Papakura District from the Ardmore Filter Station and the Papakura Filter Station. Downstream of the bulk supply points the potable water is supplied to consumers through the United Water operated water reticulation system.

The overall supply pressure across the Papakura water reticulation network can be regarded as good.

The grading undertaken by Public Health for the 2002 calendar year resulted in a continuation of an AA grade for each of the three distribution zones in Papakura, achieved for the first time in 2000.

The supply of drinking water to rural properties is primarily via non-reticulated sources such as rain tanks and the occasional ground water bore.

Urban wastewater is collected by Watercare Services Ltd via United Water for treatment at the Mangere Treatment Plant. A small volume of wastewater is currently treated at the Drury wastewater treatment plant.

The disposal of wastewater from rural properties is primarily via the use of septic tanks and the associated disposal fields on private property. A small number of rural residents use a "biocycle" system instead of a septic tank.

The stormwater network is owned and managed by Papakura District Council (PDC). The disposal of stormwater in the urban areas is via a comprehensive network of reticulated pipe systems connecting to treatment ponds through (in some cases) soakage pits.

### Demand for services and risks

The franchise agreement between PDC and United Water also allows for the growth of the greenfield areas as well as the intensification of the existing urban areas in terms of the reticulated supply of water and the disposal of wastewater. Under the agreement, United Water has developed asset management plans for water and wastewater services which include the long-term planning required to accommodate the expected population growth.

United Water and the Council have regular meetings to align the anticipated demand requirements with the provision of water and wastewater services to the District.

In rural Papakura the projected demand for water services is expected to be accommodated through the construction of rainwater tanks and septic tanks on private property to service each new development.

Demand for stormwater treatment and upgrades to the capacity of the existing network will be required by the intensification of the existing urban areas as well as the new requirements of the Auckland Regional Council (ARC) Air Land Water Plan. The proposed stormwater works in the current Annual Plan (04/05) include both maintenance of the existing network and upgrades required to meet the on-going growth.

The current risk for the quality and adequacy of water supply for both the growth and existing rural areas was assessed as 'low'. Given the future growth anticipated in the "growth" areas and the introduction of a reticulated system for both water supply and wastewater, the risk for quality and quantity in the growth areas is expected to decrease.

The current sources of water and wastewater disposal options are expected to remain unchanged for the population in the rural areas and have been assessed as 'low' risk in terms of public health. With the increasing age

of the existing septic tanks, there may be an increased risk associated with the disposal of wastewater via overflows/leaks, hence the risk associated to public health for these properties was increased to 'moderate' for the future.

Health issues resulting from the increased demand for stormwater services are expected to be restricted to flooding. Such issues are being addressed through the current programme of works. Developments in the growth areas will also necessitate the construction of new stormwater disposal systems and stormwater quality treatment systems, however it is expected that developers will build the required infrastructure as part of their development works.

#### **Proposed programme**

As a result of the assessment Council has developed an improvement plan to address the potential but low risk issues identified by the rural survey. The plan includes investigations into the small number of septic tank overflows, the quality of bore water being consumed by a small number of rural residents and the flooding incidents reported by rural residents.

On the basis of the services described and the proposed works in the assessment, Council

considers the provision of water services to Papakura District to be adequate.

### **Sanitary services - cemeteries and public toilets**

#### **Cemeteries**

The Council manages the Papakura Cemetery and the Papakura South Cemetery. There are also two private cemeteries, being managed by the Anglican Church and the Presbyterian Church. The available capacity at the Papakura South Cemetery has been assessed as 60 years. Even with the anticipated growth in the District, it is expected that the cemeteries have in excess of 30 years remaining land to accommodate the requested interments. The existing capacity at the Papakura Cemetery has been reserved already for future use.

The space available within the two public cemeteries has been assessed as adequate to provide for future interments as a result of growth within the District.

#### **Public toilets**

The Council is the only provider of public toilet facilities.

The Council also provides toilet facilities in a number of community facilities that have varying degrees of public use, including for sports fields. There are also a number of commercial operators that provide toilet facilities that would be considered as having a degree of public accessibility – particularly family restaurants and service stations.

There are no commonly agreed standards for the adequate provision of public toilets. There is, for example, no population to toilet ratio or maximum distance between toilet facility threshold to work with. As such, the Council's overall provision of public toilets is the result of historical decisions made in response to specific community issues rather than in accordance with a set level of service.

As a general rule of thumb, the Council should provide full public toilets in areas of concentrated public use where people will be using public space for a prolonged amount of time – such as in the Town Centre, at major parks and reserves, and at the terminals for public transport.

The Council is currently developing a strategy for the provision of public toilets that will provide a qualitative assessment of adequacy of current provision to meet current and future demand.

On the basis of the services described and the proposals in this report, Council considers that public health is generally adequately protected. It is recognised that the proposed strategy for the provision of public toilets may seek to reduce the vandalism /misuse currently identified as an issue.

#### Sanitary services - solid waste

The sanitary services in terms of solid waste provided for the community in the District are:

- Weekly kerbside collection and disposal of household refuse
- weekly kerbside recycling collection
- annual inorganic refuse collection
- annual hazardous household refuse collection in association with Auckland Regional Council
- daily litter bin collections in the Town Centre and on arterial routes
- programmed sweeping of street kerb and channels.

In addition, Council is responsible for monitoring four closed landfills.

Population data shows that by 2021, 25.6 million tonnes of refuse will have been landfilled in the 35 million tonne capacity available. If the projection is extrapolated, at current regional population growth levels, there is sufficient landfill capacity till 2032 over all four listed landfills.

Future demand can be met by privately owned and operated consented landfills, and hence there are no public health issues for disposal. Council has made financial provision to continue to collect refuse and other wastes of sanitary concern in order to cater for public health needs of the District with respect to solid waste.

On the basis of the services described and the proposals in the assessment, Council considers that public health is adequately protected.

## Statements on assessment of water and sanitary services

The provision of water and sanitary services to the Papakura District has been assessed as adequate for both the current requirements and anticipated future growth. An improvement plan to address the potential low risks identified by the assessment is in place.

Activity	Assessment of Public Health					
	Urban Areas		Rural Areas		Future Growth Areas	
	Present	Future	Present	Future	Present	Future
Water	Adequate	Adequate	Adequate	Adequate	Adequate under Rural designation	Adequate; network extended
Sanitary Sewer	Adequate	Adequate	Generally adequate	Generally adequate but further enhancement required in some areas	Adequate under rural designation	Adequate; network extended
Stormwater	Generally adequate	Generally adequate but further evaluation and works required as identified in the Asset Management Plan	Generally adequate with natural waterways	Generally adequate but further evaluation and works required	Generally adequate under rural designation	Adequate; network extended
Cemeteries	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate
Public Conveniences	Generally adequate	Generally adequate but strategy to reduce vandalism required	Generally adequate	Generally adequate but strategy to reduce vandalism required	Generally adequate	Generally adequate but strategy to reduce vandalism required
Waste Management (solid waste and landfills)	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate