



Waitakere City Council
Te Taiao o Waitakere

Cost allocation and cost recovery methodology: Water supply

This document supports the draft development contributions and financial contributions policy
April 2009
Supporting information: Document B07

Summary

Waitakere City Council uses development contributions and financial contributions to fund some of the costs it incurs because of growth. This document is part of the supporting information behind the development contributions and financial contributions policy.

This document is the cost allocation and cost recovery methodology for the water supply activity. It sets out:

- The approach to cost allocation (identifying the cost of growth);
- The approach to cost recovery (identifying how the cost of growth should best be shared);
- The way that the guidelines identified in the framework have been reflected in decisions about cost allocation and cost recovery, and included in this methodology.

The guidelines in the framework document come from the key factors to be considered as part of putting a development contributions policy in place, including elements of the legislative framework; growth; economic efficiency; asset management; equity; operations; and risk management.

For water supply, these factors have generated a methodology in which:

- Relevant growth related projects are individually analysed, under programmes for network upgrades (including historic projects) and projects specific to the NorSGA growth areas;
- The levels of service reflect nationally accepted pressure and flow requirements, appropriate security of supply measures, and fire flow capacity acceptable to the New Zealand Fire Service;
- Capacity is based on network capacity for the reticulated network.

As set out in this document, the methodology complies with the requirements of the Local Government Act 2002.

This document should be read in conjunction with the other documents in the supporting information pack.

Contents

<i>Summary</i>	2
<i>Contents</i>	3
Glossary	3
1.0 Introduction	4
1.1 Use of development contributions	4
1.2 Purpose of this document	4
1.3 Supporting information	4
2.0 The Water supply activity	5
2.1 Definition of the activity and its assets	5
2.2 Purpose and Community outcomes	5
2.3 Activity plan and level of service	5
3.0 Outline of Cost allocation approach	6
3.1 Outline of methodology	6
4.0 Outline of cost recovery approach	7
4.1 Basis of demand	7
4.2 Use of information from the growth model	7
5.0 Evaluation in terms of the Cost allocation and Cost recovery guidelines	7

Glossary

PC	Plan change area
NorSGA	Northern Strategic Growth Area; used to refer to the larger area containing PC 13, PC14 and PC15, as well as Future Urban Areas Trig Rd, Redhills, Scotts Point and Whenuapai Industrial.

1.0 Introduction

1.1 Use of development contributions

Development contributions are a funding tool provided to the council under the Local Government Act 2002 (LGA 2002). They allow the council to recover some of the capital costs it faces arising in connection with growth of the city. Development contributions can be charged when the council grants resource consents and building consents.

1.2 Purpose of this document

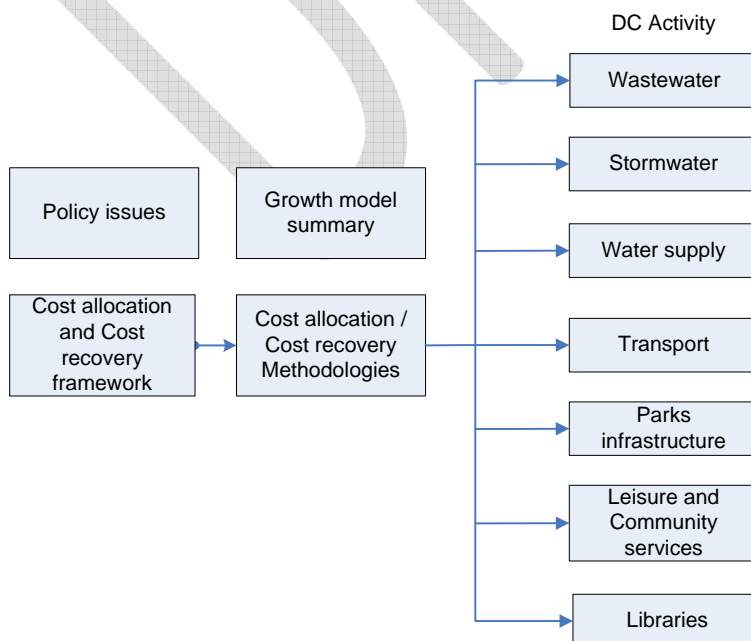
This document sets out the approach the council has taken to cost allocation and cost recovery for water supply. It therefore:

- Describes this activity;
- Sets out the way in which the cost of growth was arrived at;
- Explains why the chosen units of demand were selected;
- Shows how these decisions comply with the requirements for a development contributions policy;
- Fulfils part of the council's obligation to make the development contributions methodology available publicly.

1.3 Supporting information

A set of other documents also helps support the development contributions and financial contributions policy, as illustrated in Figure 1 below.

Figure 1: Outline of supporting document set



2.0 The Water supply activity

2.1 Definition of the activity and its assets

The water supply activity covers responsibility for service delivery, management, maintenance, renewals and capital works for Waitakere City's water supply network. Key assets include watermains, valves, water meters, pump stations, reservoirs and hydrants. The council's network receives bulk water from the network operated by Watercare Services Ltd.

The programmes included within this activity are:

- Water supply network upgrade programme, which includes:
 - Network upgrade projects;
 - Water supply network modelling;
 - Water supply historic projects (2004 – 2008).
- NorSGA capital expenditure for water supply.

2.2 Purpose and Community outcomes

The purpose of this activity is to provide a water supply service for all residents and businesses in the water serviced area of Waitakere City. This area includes the Metropolitan Urban Limits (MUL) area, and some rural areas. Water supply services are to be provided in accordance with the current levels of service.

The water supply activity contributes in particular to the following community outcomes:

- Strong Communities - He iwi kaha;
- Strong Economy - He tupuranga kaha ihi wana;
- Sustainable Environment - Kauneke Tauwhiro Taiao;
- Urban and Rural Villages - Nga kainga taone, tuawhenua.

2.3 Activity plan and level of service

The 2009 development contributions and financial contributions policy is based on the draft 2009-2019 Long Term Council Community Plan (LTCCP) and the supporting water supply activity plan.

The most important levels of service that relate to growth and managing the impacts of growth are:

- The provision of 250 kPa water pressure to all properties (allowing for up to 30 minutes duration at less than 250 kPa during peak demand);
- A minimum flow of 25 litres per minute provided at the property boundary;
- The provision of adequate capacity of backup supply mains to provide appropriate security of supply;
- Providing 100 kPa residual pressure in the network associated with fire flows as per the New Zealand Fire Service Firefighting Water Supplies Code of Practice.

3.0 Outline of Cost allocation approach

3.1 Outline of methodology

The water supply activity uses the cost allocation process, as set out in the framework document (A01). This methodology takes the planned cost of a proposed project and assigns it to various cost components including Renewal, Backlog, Growth and Unallocated.

The methodology is applied recognising:

- Capacity defined for the watermain network through detailed network models (using both the council's network and the delivery of water from the Watercare Services Ltd network);
- Levels of service defined in section 2.3 above;
- Catchments (or supply areas) based on the area of the city which is either reticulated currently, or planned to be reticulated within the current LTCCP period. This reflects that planning for this activity is carried out on a citywide basis, except that some areas are still reliant on private systems for water supply (and likely to remain so). In addition, the NorSGA areas (below) have specific water supply needs.
- Four catchments as follows:
 - 1) The area currently serviced or proposed to be serviced across the city, excluding the three plan change areas below;
 - 2) Plan Change area 13 – Hobsonville Peninsula;
 - 3) Plan Change area 14 – Hobsonville Village and;
 - 4) Plan Change area 15 – Massey North.
- Population figures, projections of non-residential demands and estimates of existing levels of service, to determine backlog components and the time when design capacities are reached or over which growth costs should be recovered;
- Asset valuations to determine renewal splits and the value of assets abandoned as part of capital projects.

The cost allocation approach leads to water supply assets and services being funded from a mix of rates, loans, and development contributions.

This distribution of funding sources is considered to appropriately provide for the wellbeing of the current and future community, and to be consistent with the purpose of the water supply activity (s101 (3)(a) LGA 2002). The projects and programmes carried out for the water supply activity support a healthy community, contributing to current and future social and economic wellbeing (s101 (3)(b) LGA 2002). In particular, use of development contributions provides a funding source that will explicitly assist the council in continuing to provide these assets and services in a transparent way as the city grows.

4.0 Outline of cost recovery approach

4.1 Basis of demand

Demand for water supply services and assets arises from normal domestic activities and from “dry” commercial and office-based activities as well as from “wet” or water intensive industrial activities. Water supply services are therefore required by both residential and non-residential developments.

Residential developments are assessed on the basis of the number of Household Units (HHU) they include. While the average number of occupants (and therefore likely water demand) varies for different sized dwellings, it is not administratively practical or sustainable to charge different sized dwellings different amounts for this activity.

Non-residential developments are assessed on the basis of their expected water supply demands, relative to a typical household i.e. using the Household Equivalent Unit (HEU). As set out in the growth model document (A03), this is based on their gross floor area.

4.2 Use of information from the growth model

The growth model delivers projections for residential HHUs and for non-residential water supply HEUs, and these are used to set the per-unit charges.

5.0 Evaluation in terms of the Cost allocation and Cost recovery guidelines

	Guideline	Comments
1	General and activity-specific information regarding all aspects of cost allocation and cost recovery for development contributions should be publicly accessible.	This methodology, the LTCCP and the activity plan make this information available.
2	The cost of growth to be recovered by development contributions may only include capital costs that the council expects to incur. Operating costs, such as maintenance, must be excluded.	The methodology provides that only capital costs are included in the cost of growth.
3	The cost of growth to be recovered by development contributions may only include expenditure to meet demand created by future growth.	The methodology excludes costs associated with past development from the cost of growth to be recovered through development contributions.
4	The cost of growth may not include costs that have been or will be funded from other sources.	Other funding sources are rare for this activity, however, these are excluded as part of the methodology.
5	The unit of demand must reasonably relate to demand.	Household units and non-residential HEUs (based on gross floor area) are considered to reasonably relate to demand. The approach

		taken is likely to under-represent the demand from water-intensive industrial activities. These developments could be subject to a special assessment, or this could be explored in future policy refinements.
6	The cost of growth attributed to each unit of demand must be representative of the cost of meeting the demand that the unit generates.	Each household unit or household equivalent unit shares in the cost of growth.
7	The proposed approach should consider the overall impact on the well-being of the current and future community.	The overall impact of the proposed cost allocation is considered appropriate. This achieves a balance between the costs met by the existing community and the growth community.
8	The growth community should pay the full cost of a project that only meets an expected increase in demand driven by growth, and that delivers no material net benefits to the existing community.	Growth-only projects are rare for this activity. However, for such projects the methodology determines the distribution of costs between growth, backlog and level of service.
9	The minimum cost of a multi-product project that should be allocated to growth is the incremental cost of growth.	Compliance with this guideline cannot be confirmed precisely. However, it is believed that this guideline will be met in most cases.
10	The maximum cost of a multi-product project that should be allocated to growth is the stand-alone cost of growth.	The methodology provides for this to be explicitly confirmed.
11	The cost of carrying additional capacity for growth (usually in the form of interest costs on borrowing) is considered part of the growth costs.	The cost of finance approach delivers this outcome. The activity plan process, and public consultation on proposed facilities and planned expenditure, ensure that asset planning is sound.
12	The methodology chosen for calculating the cost of growth should reflect asset planning, including the network nature of assets and services and the project, programme and catchment-based nature of planning for that activity. Development in a catchment should pay only for costs related to that catchment or to the city as a whole.	An appropriate catchment (supply area) based approach has been adopted, consistent with planning for and use of the underlying assets and services. The project based nature of planning is also recognised in the methodology. Sites outside the current and planned serviced area are currently not subject to development contributions charges.
13	When determining allocation of the costs of growth, due consideration must be given to both those who cause the costs of growth and those who will benefit from increased infrastructure capacity.	The provision of new and upgraded assets is driven by growth and by other drivers (including improving existing capacity). New and upgraded assets will also usually provide benefits to the existing community (at least temporarily) as well as the growth community. Accordingly, costs should be shared by both of these groups. The

		methodology delivers this outcome.
14	The unit of demand for those activities that are charged on non-residential as well as residential developments must apply equally to both types of development.	This activity is charged on residential and non-residential developments. Charging non-residential developments on the basis of HEUs (representing estimated water supply demand), ensures a relationship between demand from these two types of developments.
15	The cost of growth should be apportioned across the years over which capacity generated by the investment is used up.	The methodology takes account of the appropriate recovery period for each project.
16	The cost of growth and cost recovery approaches must be clear, fair, meet activity specific requirements and reflect a cost effective use of resources.	The methodology is described in detail in the framework document, and takes account of the nature of this activity as described in this document. This activity typically has a number of projects, each of which is evaluated individually.
17	The unit of demand should be simple to apply and able to be consistently applied to the various stages of both actual and proposed developments using readily available information and requiring minimal subjectivity.	Household units are a classic measure of the size or scale of a residential development, and so can be readily determined. Non-residential developments will typically have a figure for gross floor area.
18	The cost of growth methodology should take a prudent approach to estimating the cost of growth. A conservative approach, such as aggregating or averaging, may be necessary in allocating costs, whether between the existing community and the growth community or between sectors of the growth community.	The methodology is largely based on quantifiable information. Together with the chosen catchment arrangement (including recognising the supplied area), this is considered to provide an appropriate outcome.
19	Development contributions methodologies should avoid incentives that may inadvertently affect development trends in an inappropriate way.	The methodology provides a good linking with demand for most developments and so is not considered to introduce any inappropriate incentives for particular types of developments or development patterns (except as noted above for water-intensive industrial uses that may be undercharged by the standard assessment procedure).