



Waitakere City Council
Te Taiao o Waitakere

Cost allocation and cost recovery methodology: Wastewater

This document supports the draft development contributions and financial contributions policy
April 2009
Supporting information: Document B06

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 Wastewater 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 wastewater, these factors have generated a methodology in which:

- Relevant growth related projects are individually analysed, under programmes for network upgrades (including historic projects), infiltration and inflow, and projects specific to the NorSGA growth areas;
- The levels of service reflect regionally accepted wet weather overflow standards (to protect public health and minimise adverse environmental effects);
- 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.

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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

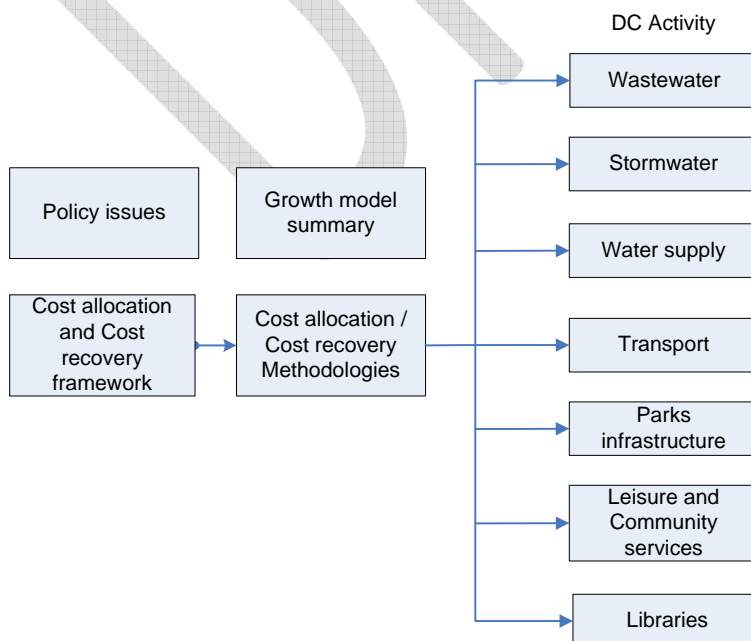
This document sets out the approach the council has taken to cost allocation and cost recovery for wastewater. It therefore:

- 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 Wastewater activity

2.1 Definition of the activity and its assets

The wastewater activity caters for wastewater management within Waitakere City including services delivery, management, maintenance, renewals and capital works for the city's wastewater network, and a pump-out service for rural on-site wastewater systems. Key assets include pipes, manholes, and pump stations. The Council's network discharges to the network operated by Watercare Services Ltd, where wastewater is conveyed to their treatment plant.

The growth related programmes included within this activity are:

- Wastewater network upgrade programme, which includes:
 - Network upgrade projects;
 - Pump station storage upgrade projects;
 - Wastewater network modelling;
 - Birdwood and Babich growth area projects;
 - Wastewater historic projects (2004–2008).
- Wastewater infiltration and inflow programme;
- NorSGA capital expenditure for wastewater.

2.2 Purpose and Community outcomes

The purpose of this activity is to provide a wastewater service for properties in the urban area (as is a statutory requirement under the Auckland Metropolitan Drainage Act 1961). It also includes having an overview of all wastewater services in the City (both public and private) and working to improve, promote and protect public health within the council's district. Wastewater services are to be provided in accordance with the current levels of service.

Sustainable alternatives to conventional wastewater infrastructure will be pursued where appropriate.

The wastewater 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;
- Waiora - Environmental Protection.

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 wastewater activity plan.

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

- Providing capacity in accordance with Councils' Code of Practice for City Infrastructure and Land Development;
- Compliance with Auckland Regional Council's overflow standards outlined in the Proposed Auckland Regional Plan: Air, Land and Water;
- Reducing the number of overflows occurring in the network by 50% by 2025;
- Ensuring no overflows from local pumping stations by providing up to 24 hours emergency storage.

3.0 Outline of Cost allocation approach

3.1 Outline of methodology

The wastewater 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 piped network, supported by detailed hydraulic models where necessary;
- Levels of service as defined in Section 2.3 above;
- Catchments based on the area of the city which is either reticulated currently, or planned to be reticulated within the 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 disposal of wastewater (and likely to remain so). In addition, the NorSGA areas (below) have specific wastewater 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 wastewater 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 wastewater activity (s101 (3)(a) LGA 2002). The projects and programmes carried out for the wastewater 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 wastewater 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. Wastewater 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 wastewater 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 wastewater demand, 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 wastewater 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 in any case 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 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 contribution charges.
13	When determining allocation of the costs of growth, due consideration	The provision of new and upgraded assets is driven by growth and by other drivers

	must be given to both those who cause the costs of growth and those who will benefit from increased infrastructure capacity.	(including improving existing capacity issues). New and upgraded assets will also usually provide benefits to the existing community (at least temporarily, during potential overflow events) 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 wastewater 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 serviced area), this is considered to provide an appropriate outcome.
19	Development contribution 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).