



Waitakere City Council
Te Taiao o Waitakere

Cost allocation and cost recovery methodology: Stormwater

This document supports the draft development contributions and financial contributions
policy
April 2009
Supporting information: Document B04

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 Stormwater 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 stormwater, these factors have generated a methodology in which:

- Relevant growth related projects are individually analysed, under programmes for network upgrades (including historic projects), stormwater quality, and projects specific to the NorSGA growth areas;
- The levels of service reflect stormwater servicing, flood protection and water quality measures;
- Capacity is based on network capacity (both for the reticulated network and overland flow paths).

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 Stormwater 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

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| 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

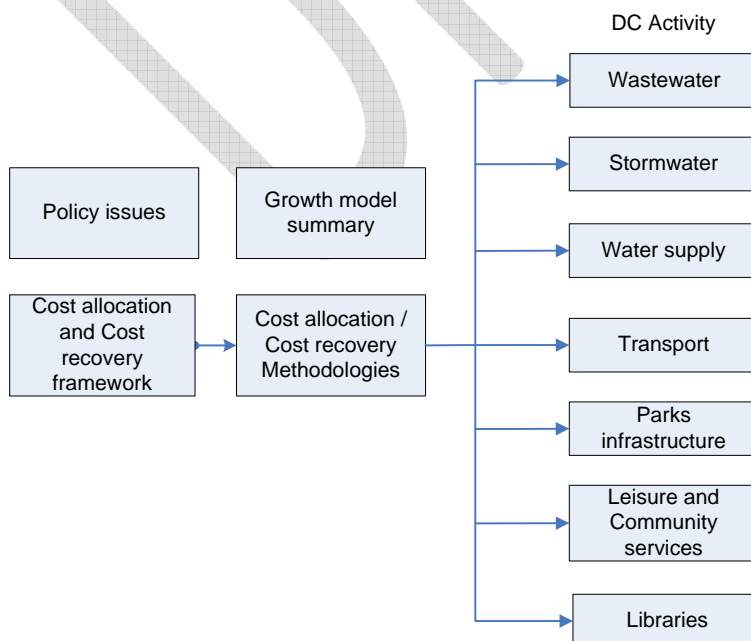
This document sets out the approach the council has taken to cost allocation and cost recovery for stormwater. It therefore:

- 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 Stormwater activity

2.1 Definition of the activity and its assets

The stormwater activity caters for the stormwater management within Waitakere City including streams, water courses and the piped system while providing more sustainable solutions in mitigating flood hazards. Key assets include pipes, manholes, watercourses, inlets and outlets and stormwater treatment devices.

The various programmes under this activity cater for both quality (water quality) and quantity (conveyance, flooding) elements of stormwater management. The work carried out as part of this activity also recognises the potential to use stormwater as a resource.

The growth related programmes included within this activity are:

- Stormwater network upgrade programme, which includes:
 - Stormwater network upgrade projects;
 - Stormwater modelling;
 - Catchment capacity management studies;
 - Birdwood and Babich Growth area projects;
 - Stormwater historic projects (2004–2008).
- Stormwater quality device programme;
- NorSGA capital expenditure for stormwater.

2.2 Purpose and Community outcomes

The purpose of this activity is the provision of stormwater services for all residents and businesses in Waitakere City, and the achievement of specified levels of service for stormwater.

The stormwater activity contributes in particular to the following community outcomes:

- Green Network - He tuituitanga kakariki;
- Mauri Ora - Access to Maori resources;
- Strong Communities - He iwi kaha;
- 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 stormwater activity plan.

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

- Planning for the 1 in 100 year rainfall event (including overland flow paths);

- The pipe network is designed for a 1 in 5 year or a 1 in 10 year event standard (depending on location);
- Stormwater quality treatment is at Auckland Regional Council (ARC) standards¹.

3.0 Outline of Cost allocation approach

3.1 Outline of methodology

The stormwater 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 (and including watercourses and overland flow paths where relevant), supported by detailed hydraulic models where necessary;
- Levels of service as defined in Section 2.3 above;
- That stormwater services are provided across the entire city, and hence a largely citywide catchment approach has been taken, with the NorSGA area (where intensive stormwater investment is required) being treated separately;
- Four catchments as follows:
 - 1) Citywide, 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.
- That stormwater runoff is directly attributable to impervious areas, and that an increase in impervious areas caused by growth will result in increased stormwater flows;
- Estimates of existing design capacities to evaluate backlog components;
- That stormwater contaminants are generated from both impervious areas and non-point pollution sources such as road traffic;
- Asset valuations to determine renewal splits and the value of assets abandoned as part of capital projects.

The cost allocation approach leads to stormwater 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 stormwater activity (s101 (3)(a) LGA 2002). The projects and programme carried out for the stormwater 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.

¹ Auckland Regional Council Technical Publication 10, July 2003.

4.0 Outline of cost recovery approach

4.1 Basis of demand

Demand for stormwater services and assets arises from impervious surface area (ISA), that is land that has been covered so that stormwater can not flow through it or soak into the ground. This includes paved areas and roofs of buildings; run off from these surfaces must be managed appropriately.

This source of demand applies equally to residential and non-residential developments.

Residential developments are assessed on the basis of the number of household units (HHU) they include. Each HHU is charged the same amount. While the extent of ISA varies for different dwellings, it is not administratively practical or sustainable to charge different sized dwellings different amounts for this activity, and hence a “standard” household impervious area has been adopted.

Non-residential developments are assessed on the basis of the extent of the impervious surface area they provide for. This is converted to household equivalent units (HEUs) on the basis of one HEU = 270m² (which is considered a representative figure for the ISA associated with a typical dwelling). This means that (on average) residential and non-residential developments pay the same amount for stormwater, per square metre of ISA.

4.2 Use of information from the growth model

The growth model delivers projections for ISA for each catchment, which is 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 | The methodology excludes costs associated with past development from the cost of growth to be recovered through |

| | created by future growth. | development contributions. |
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| 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 ISA are considered to reasonably relate to demand. |
| 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 all projects the methodology determines the distribution of costs between growth, backlog and levels 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. |
| 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 and water quality issues). New and upgraded assets will also usually provide benefits to the existing community (at least temporarily, during storm events) as well as the growth |

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| | | 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. By charging non-residential developments on the basis of HEUs (representing ISA), the relationship between demand from these two types of developments is preserved. |
| 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 impervious surface area, which can be converted to HEUs. |
| 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, this is considered to provide an appropriate outcome. Administrative (and fairness) elements are part of the reason for assessing the same charge on dwellings of different sizes. |
| 19 | Development contributions methodologies should avoid incentives that may inadvertently affect development trends in an inappropriate way. | There is a wide variety of stormwater systems and development configurations. 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. |