

Waste Management and Minimisation Plan 2011-2017

Adopted by Council on 16 December 2011

Foreword

Every house, every business, every organisation and even schools in our district make waste. Whether it's recycling, or rubbish that can't be recycled and goes to the landfill or whether it goes in your worm farm or compost heap, it's waste and there's a cost. There are also choices about how we deal with that waste.

Responsibility for ensuring those choices deliver value and well being for the community, that they don't impinge on our environment and that they fulfil visitor expectations sits with each and every one of us. The Queenstown Lakes District is about 'living' the 100% pure New Zealand brand. What we do here impacts not only on us but our national and global reputation.

In 2003 the Council of the day adopted the first Waste Management Strategy resulting in a shift in the way that this community deals with waste. It led to services like kerbside recycling, a new Wakatipu recycling centre, green waste and mulching services, using crushed glass to build roads, seven rural refuse and recycling sites and a landfill diversion rate shift from 10% in 2006 to 29% in 2011- all with Central Government's zero waste mantra in mind and a community desire to do better.

In 2011, the Central Government drivers are now more about making waste have less impact on the environment and about being more 'resource efficient' - in other words smarter.

It was timely now - eight years on from the first strategy - that the Council consulted with the community on a revised guiding document to reflect not only a shift in drivers and awareness but to test the commitment (financially) Council has made to waste management.

Our community has realised the importance of investing in waste minimisation and recycling initiatives not only for the wellbeing of our communities and the protection of our environment but also to meet visitor expectations.

A big part of that, on-going, will be education and a willingness to change the way we do things. An example of this is pre-cycling, which means to choose recyclable packaging and lobby for producer responsibility.

This revised strategy enables us to work towards providing value to ratepayers, not only by reducing costs by doing things smarter but also by reducing the harmful effects of waste in our district.

Through this year's review the community has provided the Council with guidance and ongoing input as to what shape this journey will take. My thanks to those who took the time to help shape this new driving document.

Vanessa

Queenstown Lakes District Council

Waste Management and Minimisation Plan

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Executive Summary

This document presents the new Waste Management and Minimisation Plan (WMMP), which sets a new direction for the Queenstown Lakes District in regard to waste management and minimisation over the next 6 years. It supersedes the operative Waste Management Strategy, which was adopted in April 2003.

The vision of this WMMP is:

Towards Zero Waste and a Sustainable District

The vision is consistent with Council's community outcomes which are:

- Sustainable growth management
- Quality landscapes and natural environment and enhanced public access
- A safe and healthy community that is strong, diverse and inclusive for people of all age groups and incomes
- Effective and efficient infrastructure that meets the needs of growth
- High quality urban environments respectful of the character of individual communities
- A strong and diverse economy
- Preservation and celebration of the district's local cultural heritage.

The two goals of the WMMP are:

Goal 1: Improving the efficiency of resource use, and Goal 2: Reducing the harmful effects of waste.

The aim of these two goals is to *"provide direction to the council, businesses (including the waste industry), and communities on where to focus their efforts in order to deliver environmental, social and economic benefits to all New Zealanders"*.

The guiding principles of this document are:

- Global Citizenship
- Kaitiakitanga/Stewardship
- Product Stewardship
- Full-cost Pricing
- Life cycle Principle
- Precautionary Principle.

The guiding principles emphasise the responsibilities of our community as consumers and producers and advocate a relationship approach to reach our vision and goals.

The WMMP contains objectives, policies and methods which provide the Council with tools to reach the goals and the vision.

Goal	Objective	Policy	Method
GOAL 1 : IMPROVING THE EFFICIENCY OF RESOURCE USE			
	Objective 1. Services provided for the collection, processing, marketing and beneficial use of diverted material are effective and affordable.		
	Policy 1: The Council will continue to provide waste minimisation services.		
		Method 1: The Council will continue to provide services and facilities for diverted materials including the kerbside recyclables collection services, transfer stations, the recycling centre, and drop-off points, and to procure services including the operation of the facilities, by contract or as otherwise approved by the Council.	
		Method 2: The Council will provide recycling litter bins alongside public litter bins where practical and cost effective.	
		Method 3: The Council will fund waste management and minimisation activities as described in the “Funding the Plan”.	
		Method 4: The Council will review the questions in the annual community surveys so that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.	
		Policy 2: The Council will consider waste minimisation services and waste management services as components of an integral system.	
		Method 5: The Council will review the levels of service set in the Long Term Plan (LTP) so as to ensure that they are consistent with the WMMP.	
		Method 6: The Council will review the introduction of a kerbside organic material collection system and composting facility as proposed in the Queenstown Lakes District Council Community Plan 2009/2019.	
		Policy 3: The Council will recognise the benefits of collaborating with other parties in the provision of waste minimisation services and meeting future demands.	
		Method 7: The Council will advocate that the government investigate and introduce legislation, levies and regulations, especially in relation to products, to encourage cleaner production, product stewardship, container deposits and other means of waste minimisation.	
		Method 8: The Council will work proactively with local organisations, other territorial authorities and specifically Central Otago District Council, the regional council, and private sector parties on matters relating to waste management and minimisation.	
		Method 9: The Council will, in any review of its procurement policy, consider the use of methods designed to achieve effective and efficient waste management and minimisation.	
		Method 10: The Council will continue to work with residents, businesses and community organisations in the District so as to encourage and promote waste minimisation and optimal resource use in the District.	
	Objective 2. Opportunities for avoiding or reducing waste at source will be improved.		
		Policy 4: The Council will promote waste minimisation, the source separation of diverted material and a reduction in the contamination of diverted material.	
		Method 11: The Council will promote and encourage waste minimisation by continuing to support waste education and promotional programmes for the general public, visitors, businesses, and in schools, such as Enviroschools, Zero Waste Education and Paper for Trees programmes.	
		Method 12: The Council will promote and encourage the beneficial reuse of organic material through public facilities and home composting.	
		Method 13: The Council will work with designers, developers, architects and builders to minimise construction and deconstruction waste and it will promote the REBRI (Resource Efficiency in the Building and Related Industries) Guidelines.	
		Method 14: The Council will create, maintain and make available to the public a schedule of diverted material types including actual and potential services for collecting and processing diverted material available within the District, in New Zealand and internationally that will include details of the end product.	
		Method 15: The Council will review its kerbside recycling service contracts when appropriate so as to optimise the quantity and quality of diverted material through	

Goal	Objective	Policy	Method
GOAL 1 : IMPROVING THE EFFICIENCY OF RESOURCE USE			
			source-separation where it is cost effective.
			Method 16: The Council will encourage private operators to provide waste minimisation services in areas where there are no such services provided by the Council, for example a service to collect and process discarded organic material such as kitchen scraps and greenwaste.
			Method 4: The Council will review the questions in the annual community surveys so that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.
	Objective 3. The quality of diverted material will be improved, where it is cost effective.		
		Policy 5: Improve collection, storage and handling of diverted material.	
			Method 17: The Council will monitor the need to extend services in terms of both diverted material types, such as organic material and the geographical extent of services. This will include the need for source separation of diverted material, such as at construction and demolition sites and providing more accessible drop-off areas for diverted material.
			Method 18: The Council will submit as appropriate on waste and diverted material issues in the next District Plan Review. This will include submitting in support of provisions for kerbside waste and diverted material collections in road and sub-divisional design and provisions for on-property waste and diverted material storage and access to such storage in medium or high density developments and the central business districts.
			Method 19: The Council will include provisions for monitoring the quality of diverted material against specified performance measures in contracts for the operation of resource recovery centres.
	Objective 4. The community and its visitors will be informed about waste management and minimisation and their responsibilities in improving the efficiency of resource use.		
		Policy 6: The Council will promote producer and consumer responsibilities.	
			Method 20: The Council will lobby for product stewardship (producer responsibility) as provided for in the Waste Minimisation Act 2008.
			Method 21: The Council will advocate that the Government facilitate the development of national and global markets for diverted materials.
			Method 22: As part of its waste education programme, the Council will prepare a document for the community and visitors that explains waste minimisation opportunities and consumer responsibilities.

Goal	Objective	Policy	Method
GOAL 2: REDUCING THE HARMFUL EFFECTS OF WASTE			
	Objective 5. Cost effective services are provided for the safe, secure and affordable collection, treatment, storage, handling, disposal and diversion of waste.		
		Policy 7: The Council will provide leadership in the provision of waste management services.	
			Method 23: The Council will provide kerbside refuse collection in residential areas and additional areas as it may decide and will continue to provide transfer stations and drop-off points for waste. The Council will procure these services from suitably qualified contractors or otherwise obtain service delivery as approved by the Council.
			Method 24: The Council will provide public litter bins for waste in accordance with its responsibilities under the Litter Act (1979) and consider the introduction of litter bin guidelines.
			Method 25: The Council will monitor complaints about waste management and minimisation and will improve the data capture in its Request for Service database to enable effective tracking of waste management and minimisation complaints.
			Method 3: The Council will fund waste management and minimisation activities as described in the "Funding the Plan".
			Method 4: The Council will review the questions in the annual community surveys so

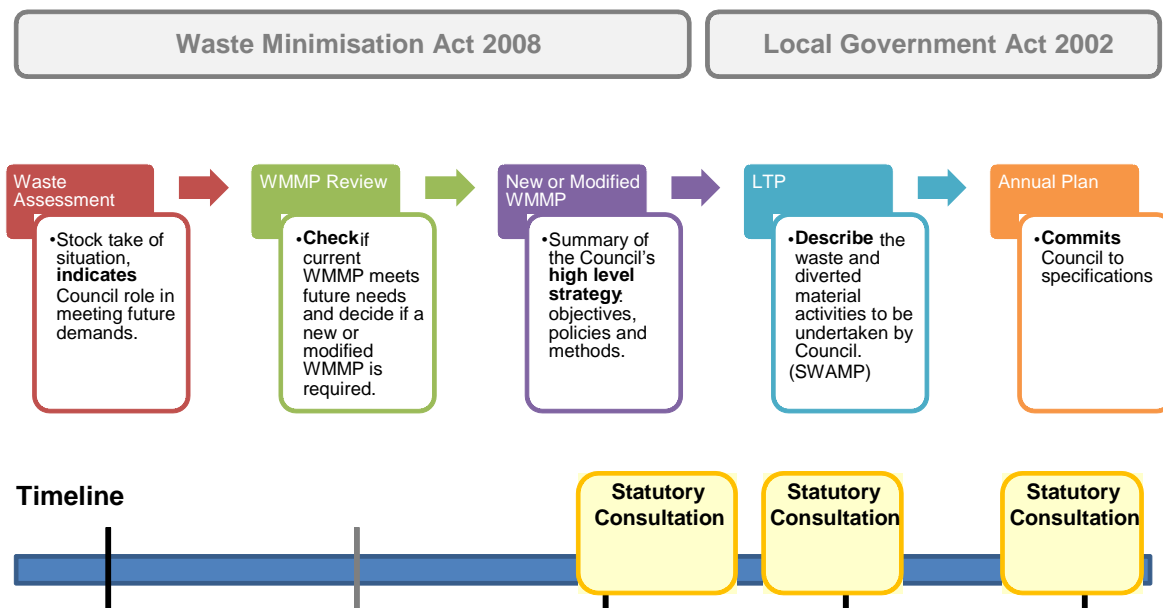
Goal	Objective	Policy	Method
GOAL 2: REDUCING THE HARMFUL EFFECTS OF WASTE			
			that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.
		Policy 8: Council will maintain a user-pays charge system for waste collection and disposal that provides cost recovery as well as incentives and disincentives to promote the objectives of the WMMP.	
			Method 26: The Council will maintain a user-pays basis for waste services to ensure that, as far as practicable, waste generators meet the costs of the waste that they produce.
			Method 27: The Council will continue with the local landfill levy to part fund waste minimisation services and will review the amount of the levy from time to time.
		Policy 9: The Council will implement services that cannot be funded by user charges where a public good outcome can be demonstrated.	
			Method 28: The Council will review annually the provision of non-user pays services in terms of the public good they provide and the costs of the services.
	Objective 6. Any adverse public health and environmental effects of the collection, treatment, storage, handling and disposal of solid waste and diverted material will be avoided or mitigated.		
		Policy 10: The Council will ensure that there is landfill capacity for the safe disposal of waste over the period of this WMMP.	
			Method 29: The Council will continue with the waste disposal services provided at the Victoria Flats landfill.
			Method 30: The Council will monitor the capacity of the Victoria Flats landfill and search for alternative disposal options should the capacity decrease below a safe future-proof level.
		Policy 11: The Council will ensure that solid waste facilities and closed landfills are managed so as to meet the requirements of their resource consent conditions.	
			Method 31: The Council will check and maintain resource consent compliance at all waste handling facilities and closed landfills for which it holds resource consents particularly with regard to harmful effects such as leachate and gas discharges.
			Method 32: The Council will carry out audits periodically of private waste facilities that hold resource consents so as to monitor compliance with resource consents.
	Objective 7. The harmful effects of waste are reduced by minimising waste through a process of reduction, reuse, recycling and recovery where it is effective and efficient to do so.		
		Policy 2: The Council will consider waste management services and waste minimisation services as components of an integral system.	
			Method 33: Hazardous waste drop-off facilities will be provided at the Council transfer stations for household hazardous waste and agrichemicals to an extent that they are affordable and complement national schemes or services.
			Method 5: The Council will review the levels of service set in the Long Term Plan (LTP) so as to ensure that they are consistent with the WMMP.
		Policy 12: The Council will consider the use of other instruments, such as bylaws and/ or the District Plan, to manage the adverse effects of waste where these effects are not covered by currently available provisions.	
			Method 34: The Council will propose a solid waste bylaw for the purpose of addressing issues identified in the Waste Assessment as being suitably addressed by a bylaw including the licensing of persons providing waste and diverted material services and requiring event organisers and film production companies to submit waste management and minimisation plans prior to carrying out activities in the district..
			Method 18: The Council will submit as appropriate on waste and diverted material issues in the next District Plan Review. This will include submitting in support of provisions for kerbside waste and diverted material collections in road and sub-divisional design and provisions for on-property waste and diverted material storage and access to such storage in medium or high density developments and the central business districts.

Goal	Objective	Policy	Method
GOAL 2: REDUCING THE HARMFUL EFFECTS OF WASTE			
		Policy 13: The Council will adopt a collaborative approach in implementing the WMMP where this may result in improvements in efficiency or environmental outcomes.	
		Method 35: The Council will consult with the Victoria Flats landfill operator about the Climate Change (Waste) Regulations 2010 and associated regulations, their implementation and the implications for the District.	
		Method 8: The Council will work proactively with local organisations, other territorial authorities and specifically Central Otago District Council, the regional council, and private sector parties on matters relating to waste management and minimisation.	
	Objective 8.	The health and safety risks during the collection, handling, processing and transport of waste will be avoided or mitigated.	
		Policy 14 The adoption of current good practice health and safety guidelines for the solid waste and resource recovery sector will be a minimum standard for Council when selecting service providers.	
		Method 36: The Council will promote current health and safety guidelines and ensure that services provided by the Council are in line with these guidelines.	
	Objective 9.	The community and its visitors will be informed about waste management and minimisation and their responsibilities in reducing the harmful effects of waste.	
		Policy 15: The Council will actively seek to reduce waste management and minimisation issues through community education and awareness.	
		Method 37: The Council will continue to support waste education and promotional programmes for the general public, visitors, businesses and include school education programmes that raise awareness about the harmful effects of waste.	
		Method 38: The Council will continually monitor for potential opportunities to treat unwanted material, such as sewage sludge, as diverted material rather than as waste.	

Goal	Objective	Policy	Method
GOALS 1 and GOAL 2			
	All Objectives		
		Policy 16: The Council will gather information about diverted material and waste in the District so as to improve waste management and minimisation planning.	
		Method 39: The Council will monitor the District's waste and diverted material streams using information sourced from Council services and information sourced from persons providing private waste management and minimisation services including the monitoring of quantities and compositions of waste streams, and origins and destinations of waste.	
		Method 40: The Council will monitor the need for control of identified problematic waste and will investigate methods of control when a need is established, including advocating priority product status under the WMA.	
		Method 25: The Council will monitor complaints about waste management and minimisation and will improve the data capture in its Request for Service database to enable effective tracking of waste management and minimisation complaints.	
		Method 34: The Council will propose a solid waste bylaw for the purpose of addressing issues identified in the Waste Assessment as being suitably addressed by a bylaw including the licensing of persons providing waste and diverted material services and requiring event organisers and film production companies to submit waste management and minimisation plans prior to carrying out activities in the district.	

The WMMP provides direction for the Long Term Plan, Annual Plans, and community responsibilities for waste management and minimisation.

The diagram below illustrates the statutory planning requirements that the Council is required to follow. The WMMP will provide direction for the development of the Long Term Plan (LTP).



Note: SWAMP = Solid Waste Activity Management Plan

A Long Term Plan (LTP) is prepared every three years in accordance with the Local Government Act 2002 (LGA 2002) and sets the framework that shapes community development. It also presents how the Council will fund services over the ten year period. Included in the LTP are outcomes that the Council aims to achieve in order to promote the social, economic, environmental, and cultural well-being of its district, in the present and for the future (QLDC Council Community Plan 2009-2019).

The Council will in its provision of waste management and minimisation services:

- Maintain a user-pays charging system to provide cost recovery and a system of incentives and disincentives to promote the objectives of the Council's WMMP
- Fund the services from targeted rates, user charges, the waste disposal levy, fees, and/ or general rates.

Waste disposal levy money received by the Council will be spent on matters to promote or achieve waste minimisation in accordance with the WMMP and in accordance with the Waste Minimisation Act 2008 section 32.

Part 1: Introduction

1. About this Document

This document is presented in three parts. Part 1 is the introduction which summarises the need for the plan. Part 2 presents: the vision, guiding principles, goals, objectives, policies and methods of the plan; how it will be funded and the performance measures against which progress with the plan will be assessed. Part 3 provides background information into the scope of the plan and a summary of the waste assessment. This document presents the new Waste Management and Minimisation Plan (WMMP), which sets a new direction for the Queenstown Lakes District in regard to waste management and minimisation over the next 6 years. It supersedes the operative Waste Management Strategy, which was adopted in April 2003.

2. Why a New Waste Management and Minimisation Plan

The Strategy has been a success, with most of the targets being achieved. It is time to look further into the future and see where and how we, as a community, can do better.

The Strategy provided for the introduction of high-performing kerbside recycling collection services in the residential areas of the District and the construction of a resource recovery centre in Queenstown for processing recyclable materials.

The Strategy has resulted in other great achievements such as the establishment of rural refuse and recycling drop-off points, providing litter bins, a green waste drop-off and mulching service, crushing glass and using it in the District's roadbase, a hazardous waste amnesty, collection of large inorganic items (such as whiteware), composting initiatives including home composting promotion, the introduction of a landfill levy to fund waste minimisation initiatives, the introduction of event waste management requirements and district-wide waste education.

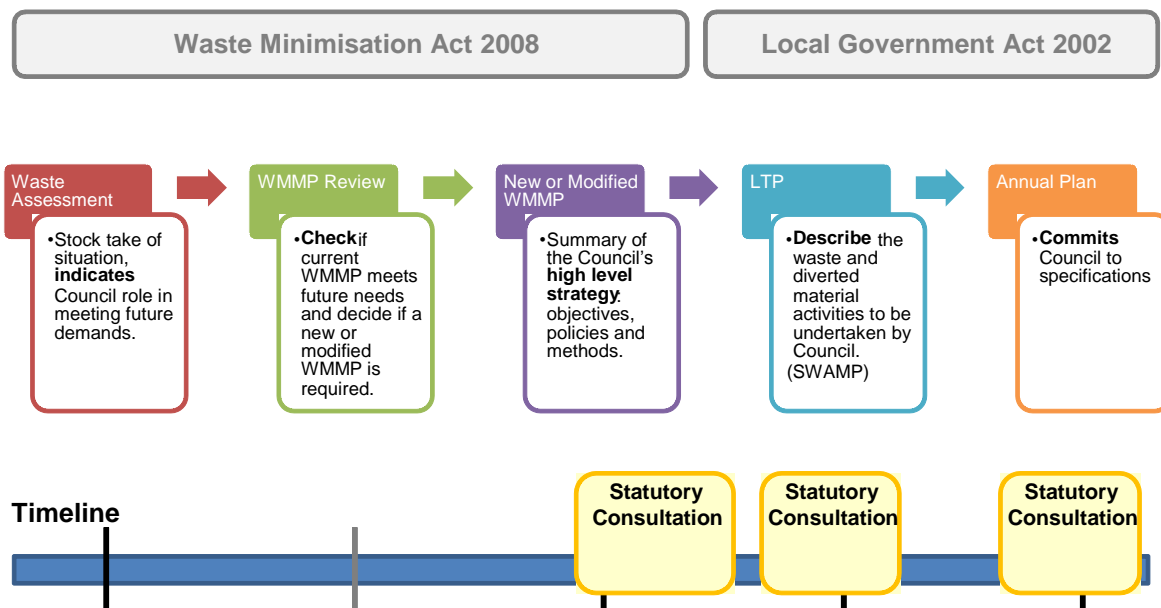
Targets set in the Strategy that have not yet been achieved include the establishment of a kerbside organic material collection service and the construction of a composting facility. Research has been carried out in the past 8 years on these matters and the Council has recommended introducing the service in 2013.

3. Purpose

The Queenstown Lakes District Council (the Council) has a statutory responsibility to "*promote effective and efficient waste minimisation*" and, for this purpose, to "*adopt a waste management and minimisation plan*" (Waste Minimisation Act 2008).

As required by the Waste Minimisation Act 2008 (WMA), the Council has carried out a Waste Assessment (WA) and a review of the Strategy (deemed a WMMP under the WMA). The decision of the Council was to renew its WMMP. This document presents the new WMMP.

The diagram below illustrates the statutory planning requirements that the Council is required to follow. The WMMP will provide direction for the development of the Long Term Plan (LTP).



Note: SWAMP = Solid Waste Activity Management Plan

A Long Term Plan (LTP) is prepared every three years in accordance with the Local Government Act 2002 (LGA 2002) and sets the framework that shapes community development. It also presents how the Council will fund services over the ten year period. Included in the LTP are outcomes that the Council aims to achieve in order to promote the social, economic, environmental, and cultural well-being of its district, in the present and for the future (QLDC Council Community Plan 2009-2019). The LGA, in the 2010 amendments, requires that any variation between the LTP and the Waste Assessment and the WMMP be identified and explained in the LTP.

Part 2: Waste Management and Minimisation Plan

1. Vision

The Vision of the District in relation to waste management and minimisation is:

Towards Zero Waste and a Sustainable District

The vision sets a new way of thinking about waste and the opportunities of environmental, social, economic and cultural benefits through avoiding waste. Zero waste challenges the idea that waste is inevitable and unavoidable.

The vision is consistent with Council's community outcomes¹ which are:

- Sustainable growth management
- Quality landscapes and natural environment and enhanced public access
- A safe and healthy community that is strong, diverse and inclusive for people of all age groups and incomes
- Effective and efficient infrastructure that meets the needs of growth
- High quality urban environments respectful of the character of individual communities
- A strong and diverse economy
- Preservation and celebration of the district's local cultural heritage.

2. Goals and Guiding Principles

2.1 New Zealand Waste Strategy

The New Zealand Waste Strategy (NZWS) 2010 sets two goals. This Waste Management and Minimisation Plan (WMMP) incorporates these goals as:

- Goal 1: Improving the efficiency of resource use, and
- Goal 2: Reducing the harmful effects of waste.

The aim of these two goals is to *"provide direction to local government, businesses (including the waste industry), and communities on where to focus their efforts in order to deliver environmental, social and economic benefits to all New Zealanders"*.

2.2 Guiding Principles

Six core principles² have been adopted to guide the Council in its implementation of this WMMP.

Global Citizenship

Our responsibility to protect the environment extends beyond New Zealand's borders.

This principle recognises our responsibility to consider the consequences of our actions in generating and managing waste and diverted material. High quality source separated diverted material produces higher quality recycled materials. Processing high quality recycling in New Zealand is preferable to sending materials off-shore.

¹ Queenstown Lakes District Council: Council Community Plan – 2009/2019

² Former New Zealand Waste Strategy 2002.

Kaitiakitanga/ Stewardship

All members of society are responsible for looking after the environment, and for the impact of products and wastes they make, use and discard.

The relationship of Maori with their ancestral resources is a matter of national importance under the Resource Management Act and the management and disposal of waste is an important issue for both Ngai Tahu and Kai Tahu. The planning for and activities associated with waste management should recognise and provide for the relationship of Ngai Tahu and Kai Tahu with the natural and cultural resources of the District.

Product Stewardship

Producers have responsibility for their products throughout the product's life-cycle, from production through to final disposal.

This principle promotes the responsibility of using resources in products so that they can be recovered and re-used, and of minimising the amount of packaging. Choices that consumers make have the potential to influence producer responsibility towards more sustainable production. Moreover, the consumers have a responsibility to purchase in line with this principle.

Full-cost Pricing

The environmental effects of production, distribution, consumption and disposal of goods and services should be consistently costed and charged as closely as possible to the point they occur.

This principle encourages minimisation of environmental effects by ensuring full environmental costs are reflected in product and service prices, and paid as closely to their source as possible.

Life-cycle Principle

Products and substances should be designed, produced and managed so all environmental effects are accounted for and minimised during generation, use, recovery and disposal or re-assimilation as a manufacturing resource.

This principle requires consideration of all the environmental effects of production, use and disposal on our land, air and water. This includes the generation of greenhouse gases and use of non-renewable energy.

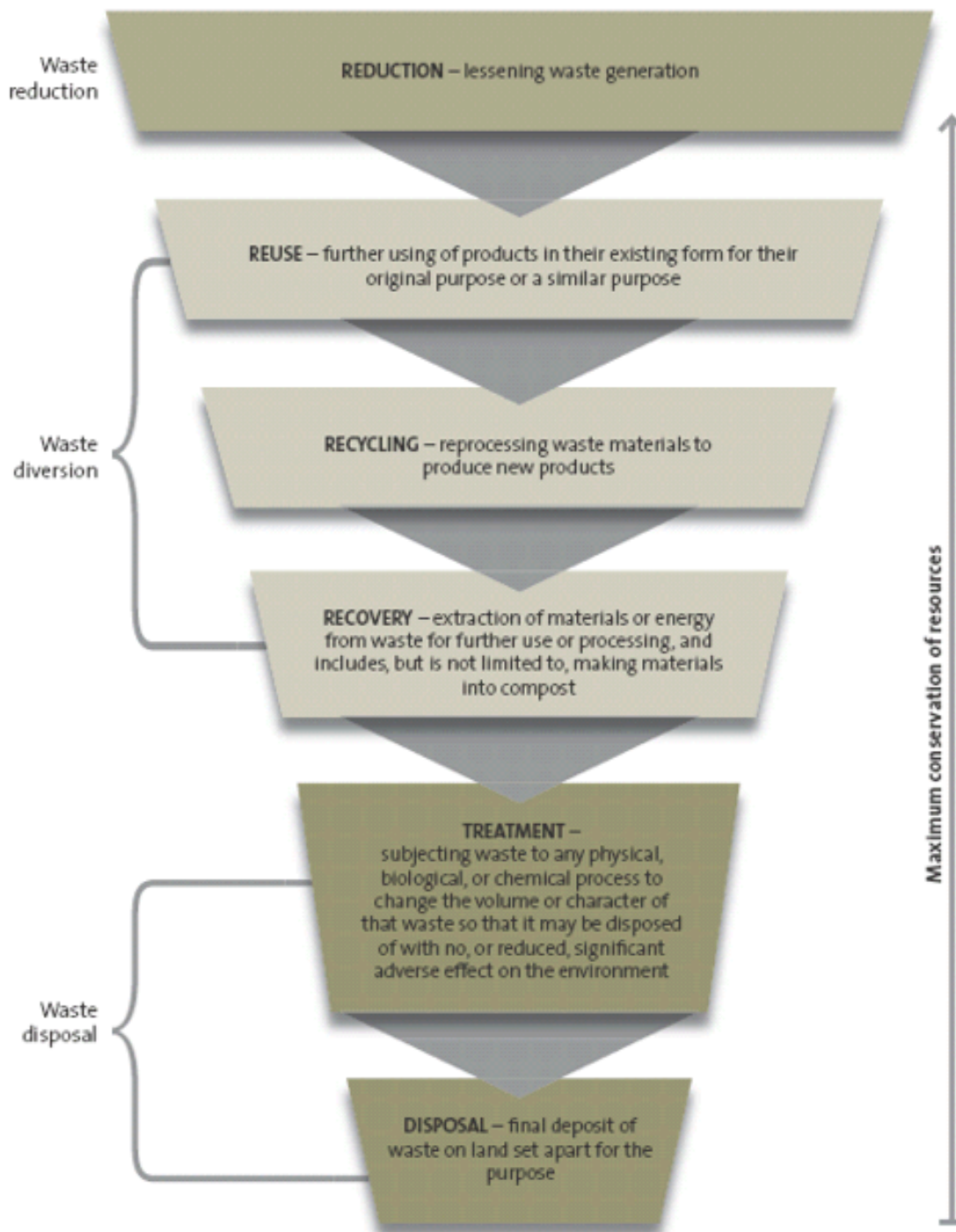
Precautionary Principle

Where there is a threat of serious or irreversible damage, lack of full scientific certainty should not be a reason for postponing cost-effective measures to prevent environmental degradation or potential adverse health effects.

Where decision-makers have limited information or understanding of the possible effects of an activity, and there are significant risks or uncertainties, a precautionary approach should be taken.

2.3 Waste Hierarchy

The Waste Minimisation Act 2008 (WMA) states that in developing the waste management and minimisation plan (WMMP), the waste hierarchy must be considered. The hierarchy in decreasing order of importance is as presented in the following diagram.



The waste hierarchy has always been at the forefront when the Council has looked at prioritizing waste management and minimisation initiatives and will continue to be considered.

This WMMP ensures that the collection, transport, and disposal of waste does not, or is not likely to, cause a nuisance.

3. Future Waste Management and Minimisation Activities

The Waste Assessment (Appendix C) identifies future demands for waste management and minimisation services in the District and related issues, and states the Council's intended role in meeting these demands and addressing the issues.

Roles for the Council include but are not limited to:

- Provision of services – providing or facilitating the provision of a waste management or minimisation services
- Governance – a more detailed assessment of options to meet the demands
- Regulator – utilisation of legal mechanisms to facilitate waste management and waste minimisation
- Community leader – providing information and promoting awareness and involvement in waste management and minimisation activities, e.g. waste report, education activities in schools and at events
- Advocate – promoting actions to address waste reduction and waste management issues at local, regional and national levels.

Waste management and minimisation activities may be generally categorised in terms of the goals adopted for the WMMP i.e:

- Waste minimisation activities to promote the efficiency of resource use
- Waste management activities to reduce harm from waste.

Activities to promote the efficient use of resources include: kerbside collection of recyclables, drop-off centres, resource recovery park facilities for reusable goods and recyclable materials, materials recovery facility, organic material processing and beneficial use of composted organic material, information/education services and lobbying.

Activities to reduce harmful effect from waste include: kerbside collection of refuse, transfer stations, drop-off centres, waste transfer to and disposal at Victoria Flats Landfill, public litter bins, hazardous waste drop-off facility, aftercare of closed landfills, collection of illegally dumped material, street litter collection services, information/education services and lobbying.

Objectives, policies and methods for achieving waste management and minimisation within the District are presented in terms of:

- Goal 1 - improving the efficiency of resources use (Section 4), and
- Goal 2 - reducing the harmful effects of waste (Section 5).

4. Goal 1: Improving the Efficiency of Resource Use

The objectives, policies and methods for improving the efficiency of resource use are as follows:

4.1 Objective1, Policies & Methods

Objective 1: Services provided for the collection, processing, marketing and beneficial use of diverted material are effective and affordable.

Explanation: Cost effective and affordable services will stimulate higher diversion rates and higher quality diverted material.

Policy 1: The Council will continue to provide waste minimisation services.

Explanation: The Council has established effective and efficient services that are rated highly by the community. The Council-provided services enable the Council to control its diverted material streams, respond to legislative and/or market changes, provide economies of scale, competitive tendering, security of contractor payment, and efficiency of customer billing.

Method 1: The Council will continue to provide services and facilities for diverted materials including the kerbside recyclables collection services, transfer stations, the recycling centre, and drop-off points, and to procure services including the operation of the facilities, by contract or as otherwise approved by the Council.

Method 2: The Council will provide recycling litter bins alongside public litter bins where practical and cost effective.

Method 3: The Council will fund waste management and minimisation activities as described in the "Funding the Plan".

Method 4: The Council will review the questions in the annual community surveys so that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.

Policy 2: The Council will consider waste minimisation services and waste management services as components of an integral system.

Explanation: Waste minimisation services need to complement the waste management services with incentives provided to users in order to divert material from becoming waste.

Method 5: The Council will review the levels of service set in the Long Term Plan (LTP) so as to ensure that they are consistent with the WMMP.

Method 6 The Council will review the introduction of a kerbside organic material collection system and composting facility as proposed in the Queenstown Lakes District Council Community Plan 2009/2019.

Policy 3: The Council will recognise the benefits of collaborating with other parties in the provision of waste minimisation services and meeting future demands.

Explanation: Collaboration with other parties has the potential to realise mutual benefits.

Method 7: The Council will advocate that the government investigate and introduce legislation, levies and regulations, especially in relation to products, to encourage cleaner production, product stewardship, container deposits and other means of waste minimisation.

- Method 8:** The Council will work proactively with local organisations, other territorial authorities and specifically Central Otago District Council, the regional council, and private sector parties on matters relating to waste management and minimisation.
- Method 9:** The Council will, in any review of its procurement policy, consider the use of methods designed to achieve effective and efficient waste management and minimisation.
- Method 10:** The Council will continue to work with residents, businesses and community organisations in the District so as to encourage and promote waste minimisation and optimal resource use in the District.

4.2 Objective 2, Policies and Methods

Objective 2: Opportunities for avoiding or reducing waste at source will be improved.

Explanation: Efficient use of materials during manufacture and packing will result in reduced quantities of waste.

Policy 4: The Council will promote waste minimisation, the source separation of diverted material, and a reduction in the contamination of diverted material.

Explanation: Reduction relies upon changes in the way people utilise materials and consumer practice. Efficient resource recovery is dependent on personal commitment to source-separate diverted material and to avoid contamination and the provision of resource recovery centres to process the material.

- Method 11:** The Council will promote and encourage waste minimisation by continuing to support waste education and promotional programmes for the general public, visitors, businesses and in schools such as Enviroschools, Zero Waste Education and Paper for Trees programmes.
- Method 12:** The Council will promote and encourage the beneficial reuse of organic material through public facilities and home composting.
- Method 13:** The Council will work with designers, developers, architects and builders to minimise construction and deconstruction waste and it will promote the REBRI (Resource Efficiency in the Building and Related Industries) Guidelines.
- Method 14:** The Council will create, maintain and make available to the public a schedule of diverted material types including actual and potential services for collecting and processing diverted material available within the District, in New Zealand and internationally that will include details of the end product.
- Method 15:** The Council will review its kerbside recycling service contracts when appropriate so as to optimise the quantity and quality of diverted material through source-separation where it is cost effective.
- Method 16:** The Council will encourage private operators to provide waste minimisation services in areas where there are no such services provided by the Council, for example a service to collect and process discarded organic material such as kitchen scraps and greenwaste.
- Method 4:** The Council will review the questions in the annual community surveys so that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.

4.3 Objective 3, Policies and Methods

Objective 3: The quality of diverted material will be improved, where it is cost effective.

Explanation: Ensuring the quality of material requires quality assurance from the outset. With diverted material this means source separation and maintaining material quality throughout the ensuing material flow.

Policy 5: Improve collection, storage and handling of diverted material.

Explanation: Adequate collection, storage and handling of diverted material are important to maintain and increase the quality and value of the diverted material.

Method 17: The Council will monitor the need to extend services in terms of both diverted material types, such as organic material and the geographical extent of services. This will include the need for source separation of diverted material, such as at construction and demolition sites and providing more accessible drop-off areas for diverted material.

Method 18: The Council will submit as appropriate on waste and diverted material issues in the next District Plan Review. This will include submitting in support of provisions for kerbside waste and diverted material collections in road and sub-divisional design and provisions for on-property waste and diverted material storage and access to such storage in medium or high density developments and the central business districts.

Method 19: The Council will include provisions for monitoring the quality of diverted material against specified performance measures in contracts for the operation of resource recovery centres.

4.4 Objective 4, Policies and Methods

Objective 4: The community and its visitors will be informed about waste management and minimisation and their responsibilities in improving the efficiency of resource use.

Explanation: An informed community is better placed to take responsibility in all aspects of waste minimisation with consequential improved diverted material diversion rates and quality.

Policy 6: The Council will promote producer and consumer responsibilities.

Explanation: In order to improve the effectiveness of waste minimisation activities, participation rates in material diversion need to increase and producers need to design their products and the manufacturing systems so as to minimise the generation of waste during product lifecycles.

Method 20: The Council will lobby for product stewardship (producer responsibility) as provided for in the Waste Minimisation Act 2008.

Method 21: The Council will advocate that the Government facilitate the development of national and global markets for diverted materials.

Method 22: As part of its waste education programme, the Council will prepare a document for the community and visitors that explains waste minimisation opportunities and consumer responsibilities.

5. Goal 2 - Reducing Harmful Effects of Waste

The objectives, policies and methods for reducing the harmful effects of waste are as follows.

5.1 Objective 5, Policies & Methods

Objective 5: Cost effective services are provided for the safe, secure and affordable collection, treatment, storage, handling, disposal and diversion of waste.

Explanation: Cost effective services help reduce the harmful effects of waste as they encourage people to utilise these services, and enable economies of scale to be gained and reduce the use of other less effective or inappropriate methods of dealing with waste.

Policy 7: The Council will provide leadership in the provision of waste management services.

Explanation: The Council has established effective services that are rated highly by the community. These services enable the Council to control and effectively manage waste streams, respond to legislative or market changes, provide economies of scale, enable competitive tendering, ensure security of contractor payment, and achieve efficient customer billing.

Method 23: The Council will provide kerbside refuse collection in residential areas and additional areas as it may decide and will continue to provide transfer stations and drop-off points for waste. The Council will procure these services from suitably qualified contractors or otherwise obtain service delivery as approved by the Council.

Method 24: The Council will provide public litter bins for waste in accordance with its responsibilities under the Litter Act (1979) and consider the introduction of litter bin guidelines.

Method 25: The Council will monitor complaints about waste management and minimisation and will improve the data capture in its Request for Service database to enable effective tracking of waste management and minimisation complaints.

Method 3: The Council will fund waste management and minimisation activities as described in the "Funding the Plan".

Method 4: The Council will review the questions in the annual community surveys so that answers can be used to provide a better understanding of how the community views the waste management and minimisation services available in the District.

Policy 8: Council will maintain a user-pays charge system for waste collection and disposal that provides cost recovery as well as incentives and disincentives to promote the objectives of the WMMP.

Explanation: Users of waste services, such as kerbside collection services, drop-off points and transfer stations, should pay the full cost for the handling, storage, transport and disposal of the waste. A user-pays charge system will provide an incentive for waste minimisation activities.

Method 26: The Council will maintain a user-pays basis for waste services to ensure that, as far as practicable, waste generators meet the costs of the waste that they produce.

Method 27: The Council will continue with the local landfill levy to part fund waste minimisation services and will review the amount of the levy from time to time.

Policy 9: The Council will implement services that cannot be funded by user charges where a public good outcome can be demonstrated.

Explanation: Some services, like the provision of public litter bins, are funded through rates and costs are not recoverable from users. The Council will evaluate investment in services with non-recoverable costs taking account of any public good.

Method 28: The Council will review annually the provision of non-user pays services in terms of the public good they provide and the costs of the services.

5.2 Objective 6, Policies and Methods

Objective 6: Any adverse public health and environmental effects of the collection, treatment, storage, handling and disposal of solid waste and diverted material will be avoided or mitigated.

Explanation: Waste creates the risk of adverse public health and environmental effects and this objective requires that such effects are considered and addressed at all stages of WMMP implementation.

Policy 10: The Council will ensure that there is landfill capacity for the safe disposal of waste over the period of this WMMP.

Explanation Having landfill capacity provides an environmentally secure repository for waste.

Method 29: The Council will continue with the waste disposal services provided at the Victoria Flats landfill.

Method 30: The Council will monitor the capacity of the Victoria Flats landfill and search for alternative disposal options should the capacity decrease below a safe future-proof level.

Policy 11: The Council will ensure that solid waste facilities and closed landfills are managed so as to meet the requirements of their resource consent conditions.

Explanation: Resource consents are required for waste handling facilities and these provide for management so as to avoid, mitigate or reduce adverse environmental effects. Closed landfills have discharges of leachate and landfill gas that, if not appropriately managed, may have adverse environmental effects.

Method 31: The Council will check and maintain resource consent compliance at all waste handling facilities and closed landfills for which it holds resource consents particularly with regard to harmful effects such as leachate and gas discharges.

Method 32: The Council will carry out audits periodically of private waste facilities that hold resource consents so as to monitor compliance with resource consents.

5.3 Objective 7, Policies and Methods

Objective 7: The harmful effects of waste are reduced by minimising waste through a process of reduction, reuse, recycling and recovery where it is effective and efficient to do so.

Explanation: Reducing the actual quantity of what is considered 'waste' actually reduces the risk and costs associated with ensuring the harmful effects of waste are avoided or mitigated.

Policy 2: The Council will consider waste management services and waste minimisation services as components of an integral system.

Explanation: Waste management services need to complement waste minimisation services and incentives are needed for the users to divert material from being waste.

Method 33: Hazardous waste drop-off facilities will be provided at the Council transfer stations for household hazardous waste and agrichemicals to an extent that they are affordable and complement national schemes or services.

Method 5: The Council will review the levels of service set in the Long Term Plan (LTP) so as to ensure that they are consistent with the WMMP.

Policy 12: The Council will consider the use of other instruments, such as bylaws and/ or the District Plan, to manage the adverse effects of waste where these effects are not covered by currently available provisions.

Explanation: The waste assessment identified lack of space for waste storage on private property and the consequential use of public space as an issue.

Method 34: The Council will propose a solid waste bylaw for the purpose of addressing issues identified in the Waste Assessment as being suitably addressed by a bylaw including the licensing of persons providing waste and diverted material services and requiring event organisers and film production companies to submit waste management and minimisation plans prior to carrying out activities in the district..

Method 18: The Council will submit as appropriate on waste and diverted material issues in the next District Plan Review. This will include submitting in support of provisions for kerbside waste and diverted material collections in road and sub-divisional design and provisions for on-property waste and diverted material storage and access to such storage in medium or high density developments and the central business districts.

Policy 13: The Council will adopt a collaborative approach in implementing the WMMP where this may result in improvements in efficiency or environmental outcomes.

Explanation: The Council has an agreement under which the Central Otago District Council uses the Victoria Flats Landfill.

Method 35: The Council will consult with the Victoria Flats landfill operator about the Climate Change (Waste) Regulations 2010 and associated regulations, their implementation and the implications for the District.

Method 8: The Council will work proactively with local organisations, other territorial authorities and specifically Central Otago District Council, the regional council, and private sector parties on matters relating to waste management and minimisation.

5.4 Objective 8, Policies and Methods

Objective 8: The health and safety risks during the collection, handling, processing and transport of waste will be avoided or mitigated.

Explanation: Recognising and addressing health and safety risks during all waste management and minimisation activities will enable the protection of employees and the public.

Policy 14 **The adoption of current good practice health and safety guidelines for the solid waste and resource recovery sector will be a minimum standard for Council when selecting service providers.**

Explanation *Waste management and minimisation is an industry that involves recognised health and safety risks and these need to be reduced as far as practicable.*

Method 36: The Council will promote current health and safety guidelines and ensure that services provided by the Council are in line with these guidelines.

5.5 Objective 9, Policies and Methods

Objective 9: The community and its visitors will be informed about waste management and minimisation and their responsibilities in reducing the harmful effects of waste.

Explanation: An informed community is better placed to take responsibility in all aspects of waste management.

Policy 15: **The Council will actively seek to reduce waste management and minimisation issues through community education and awareness.**

Explanation: *Personal and community awareness of the harm that waste can do and the costs of not reducing waste contributes to effective waste management.*

Method 37: The Council will continue to support waste education and promotional programmes for the general public, visitors, businesses and include school education programmes and visitor waste education programmes that raise awareness about the harmful effects of waste.

Method 38: The Council will continually monitor for potential opportunities to treat unwanted material, such as sewage sludge, as diverted material rather than as waste.

5.6 Policies and Methods applicable to all Objectives

Policy 16: **The Council will gather information about diverted material and waste in the District so as to improve waste management and minimisation planning.**

Explanation: *The NZWS 2010 notes that the lack of waste data hampers waste management and minimisation planning. Gathering information can contribute to improved waste management contracts, to improved monitoring of the effects of waste and improved understanding of the District's waste minimisation needs. The WMA has a provision under which bylaws may provide for the licensing of persons carrying out waste services and bylaw conditions may require each licensee to provide information to the Council.*

- Method 39:** The Council will monitor the District's waste and diverted material streams using information sourced from Council services and information sourced from persons providing private waste management and minimisation services including the monitoring of quantities and compositions of waste streams, and origins and destinations of waste.
- Method 40:** The Council will monitor the need for control of identified problematic waste and will investigate methods of control when a need is established, including advocating priority product status under the WMA.
- Method 25:** The Council will monitor complaints about waste management and minimisation and will improve the data capture in its Request for Service database to enable effective tracking of waste management and minimisation complaints.
- Method 34:** The Council will propose a solid waste bylaw for the purpose of addressing issues identified in the Waste Assessment as being suitably addressed by a bylaw including the licensing of persons providing waste and diverted material services and requiring event organisers and film production companies to submit waste management and minimisation plans prior to carrying out activities in the district..

6. Funding the Plan

6.1 Overview

The Council will in its provision of waste management and minimisation services:

- a. Maintain a user-pays charging system to provide cost recovery and a system of incentives and disincentives to promote the objectives of the Council's WMMP
- b. Fund the services from targeted rates, user charges, the waste disposal levy, local landfill levy, fees, and/ or general rates.

Waste disposal levy money received by the Council will be spent on matters to promote or achieve waste minimisation in accordance with the WMMP (refer to Waste Minimisation Act 2008 s32).

6.2 Waste Disposal Levy Spending

The Council has identified that the following services can be funded by waste disposal levy income.

- Waste education programme and public outreach
- Waste minimisation grants
- Hazardous waste services where these services contribute to the avoidance of hazardous waste or the reuse or recycling of hazardous waste (eg waste oil recovery programme, E-waste programme)
- Collection, processing, consolidation and marketing of recyclable material
- Collection, processing and marketing of compostable organic material that may otherwise become waste.

Details of the service delivery costs and sources of funding for any year will be included in the Council's Annual Plan or Long Term Plan.

6.3 Summary of Funding Methods

A summary of the methods of funding the Council's waste management and minimisation services is presented in the following table.

Funding Methods for Current Council Services

Council Service	Proposed Council Role	Proposed Funding Mechanism
Kerbside collection of diverted material	Continue service	Rates - Uniform annual charge Landfill levy Waste disposal levy
Kerbside collection of refuse	Continue service	User charges
Transfer Stations in Queenstown and Wanaka for residual waste and diverted material	Continue service	Gate charges Rates Landfill levy Waste disposal levy
Resource Recovery Centres in Queenstown and Wanaka for recyclable materials and reusable items	Continue service	Rates Landfill levy Waste disposal levy
Refuse and Recycling Collection Points	Continue service	Rates Landfill levy Waste disposal levy

Council Service	Proposed Council Role	Proposed Funding Mechanism
Victoria Flats Landfill	Continue service	Gate charges
Closed landfill aftercare	Continue service	Rates
Hazardous Waste	Continue role	Rates Landfill levy Waste disposal levy User charges
Cleanfill control through resource consent requirements	Continue role and to be investigated	Rates
Provision of litter bins and their maintenance	Continue service and to further investigated additional measures	Rates
Event waste management control through resource consent requirements	Continue role	Resource Consent Application Fee
Green waste drop-off points and processing	Continue role	Rates Gate charges
Waste Education Programme	Continue role	Rates Landfill levy

Summary of Funding Methods for Proposed Council Services

Demand/Issue	Proposed Council Role	Proposed Funding Mechanism
Waste and diverted material information from private operators	Bylaw provisions	Licensing fee
Information on private waste and diverted material operator activities	Bylaw provisions	Licensing fee
Construction and Demolition Industry waste minimisation	To be investigated	To be investigated
High Density Developments (Arrowtown, Queenstown and Wanaka CBD ³ & elsewhere) – Lack of On-property storage and access for collection vehicles issues	District Plan Change	To be investigated
Cross boundary flow of waste (i.e. loss of income for District landfill) and potential issues where requirements of adjacent districts differ from those of QLDC	To be investigated	To be investigated
Use of products that have limited or no potential as diverted material or are inefficient use of resources i.e. multi layer packaging such as tetrapak or individually wrapped fruit pieces.	To be investigated	To be investigated

³ CBD – central business district

7. Grants

The Waste Minimisation Act 2008 s43 and s47 allows a Territorial Authority, if authorized to do so by its WMMP, to make grants or advances of money to any person, organisation, group, or body of persons for the purpose of promoting or achieving waste minimisation.

Under this plan the Council is authorised to make such grants or advances of money on any terms and conditions it thinks fit and provided that any application for a grant or an advance of money is supported by a description of the proposed activity for which the money would be used and a budget.

Any grants or advances of money will be consistent with the goals and objectives of this WMMP and will be identified in the council's Annual Plan.

8. Performance Measures

Performance measures are designed to monitor the effectiveness of the objectives, policies and methods of the WMMP. These are set out in the following table.

Goal	Performance measure	Actual Performance 2010/11	3 yr Target 2014/15	10 yr Target 2021/22
Improving the efficiency of resource use	Cost per tonne of waste minimisation and recycling services provided by the Council decreases	\$275/T	\$225/T	\$155/T
	The quantity of residential residual waste per capita to landfill for the district decreases	0.78 T/p	0.72 T/p	0.52 T/p
	Quantity of material diverted from landfill (recycling) increases	29%	35% - 51%	51%
	Number of rejected bins in the recycling service reduced	486	350	200
Reducing the harmful effects of waste	Number of notices from Health Protection Officer on the Council for causing nuisance (s55 of WMA)	Zero	zero	zero
	Increased regional resource consent compliance	93.50%	100%	100%
	Cost per tonne of waste collection, treatment and disposal services provided by the Council will be minimised	\$229/T	\$240/T	\$295/T
	Decreasing health and safety incidences	2	Zero	Zero
Improving the efficiency of resource use and reducing the harmful effects of waste	Number of complaints about the effectiveness of the refuse and recycling service reduce	135	100	60
	Customer satisfaction in relation to effective collection of refuse and recycling increases	Refuse = 79.7% Recycling = 84%	Refuse = 85% Recycling = 89%	Refuse = 90% Recycling = 95%

The Council will report annually on these performance measures in its Annual Report.

Part 3: Scope of the WMMP and Summary of Waste Assessment

9. Scope

The Waste Assessment involved forecasting future demands within the District for waste and diverted material services, identifying suitable options for meeting the demands and stating the Council's intended role in meeting the demands.

The WMMP must have regard for the Waste Assessment and the New Zealand Waste Strategy 2010 (NZWS 2010). The WMMP must have objectives, policies and methods, and the methods must provide for waste and diverted material services (whether by the Council or otherwise), Council facilities, and activities by the Council such as education and public awareness.

The proposed WMMP will be notified using the special consultative procedure, which gives the community an opportunity to review the Waste Assessment and proposals as presented in the WMMP.

The adopted WMMP will be used by the Council when addressing the requirements of the LGA in terms of providing solid waste services and preparing its LTP, and by the community as a reference when monitoring the Council's progress with waste management and minimization.

The scope of a WMMP is given in the WMA, section 43, which states that:

A waste management and minimisation plan must provide for the following:

- a) objectives and policies for achieving effective and efficient waste management and minimisation within the territorial authority's district:*
- b) methods for achieving effective and efficient waste management and minimisation within the territorial authority's district, including –*
 - i. collection, recovery, recycling, treatment, and disposal services for the district to meet its current and future waste management and minimisation needs (whether provided by the territorial authority or otherwise); and*
 - ii. any waste management and minimisation facilities provided, or to be provided, by the territorial authority; and*
 - iii. any waste management and minimisation activities, including any educational or public awareness activities, provided, or to be provided, by the territorial authority:*
- c) how implementing the plan is to be funded:*
- d) if the territorial authority wishes to make grants or advances of money in accordance with section 47, the framework for doing so.*

A requirement of the WMA (s50 (1)(b)) is that the WMMP is reviewed at least every six years.

The terminology used in this WMMP is that given in the WMA. A glossary is presented in Appendix A.

10. Revocation

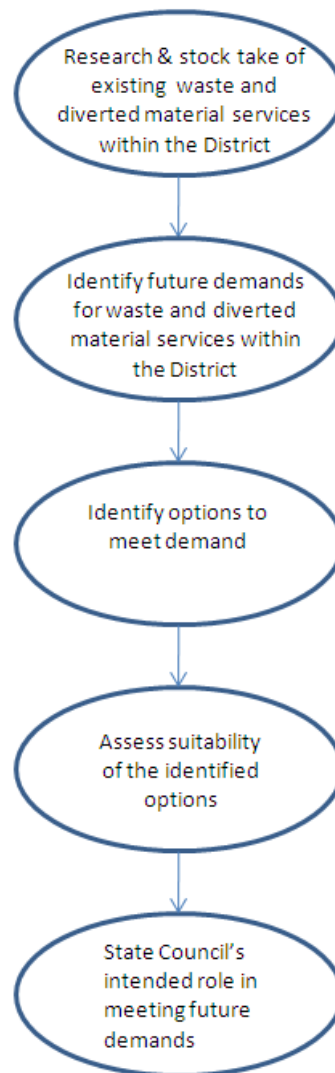
Upon the adoption of the new WMMP, the existing Waste Management Strategy (adopted in 2003) is revoked.

11. Summary of Waste Assessment

11.1 Overview

The prescribed scope of a waste assessment is given in the WMA.

The following diagram summaries the steps of the Waste Assessment.



The research and stock take of the existing waste and diverted material services included:

- Summary of Council provided services
- Researching services provided by others
- Review of waste and diverted material quantity and quality data provided by service operators, and
- Review of population forecast and predictions of future waste and diverted material quantities.

Future demands have been identified based on the following:

- Gaps between the existing services and the future demands in terms of waste and diverted material quantities
- Gaps in existing services to adequately deal with the different waste and diverted material streams that occur in the District
- The results of an on-line community survey about waste management
- Input from the Solid Waste Working Party, which included industry and community representatives, Councillors, technical advisors (statutory, policy and implementation) and the Solid Waste Manager.

Roles for the Council in meeting forecast future demands are:

- Service provider
- Governance
- Regulator
- Community leader
- Advocater
- Financier.

The full Waste Assessment including the statement of the Council's intended role meeting future demands is included in Appendix C.

11.2 Where Are We At With Our Waste Management and Minimisation Efforts

11.2.1 Successes

As a District, we have developed collection services, handling facilities and disposal facilities to deal with our waste in a manner that reduces the harmful effects of waste.

We have well performing kerbside refuse and recycling collection services for residential areas. The Council provides rural drop-off points for waste and recycling produced at rural properties.

The treatment facilities, our transfer stations and resource recovery centres, comply with current industry standards and are future-proof.

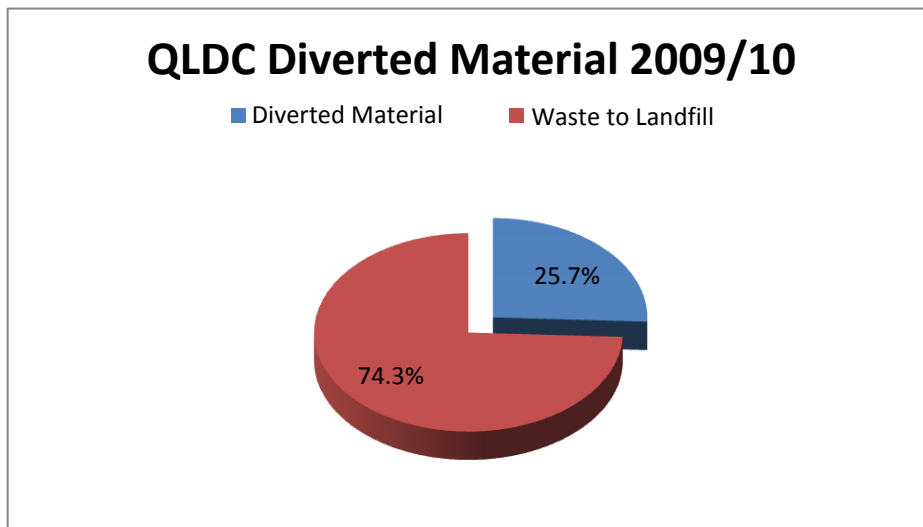
The Victoria Flats landfill is a state of art landfill with a leachate collection system to minimise adverse effects on the environment.

The landfill diversion rates increased significantly at the time of introduction of the Council's kerbside recycling collection in 2006 in Wanaka and 2007 in Queenstown. Despite the increase in recycling since 2006 and 2007, the District still relies on landfill disposal for its waste management needs. The District wide diversion rate increased from approximately 10% in 2006 to 26% in 2010, meaning that approximately $\frac{3}{4}$ of the total waste generated in the District is still landfilled.

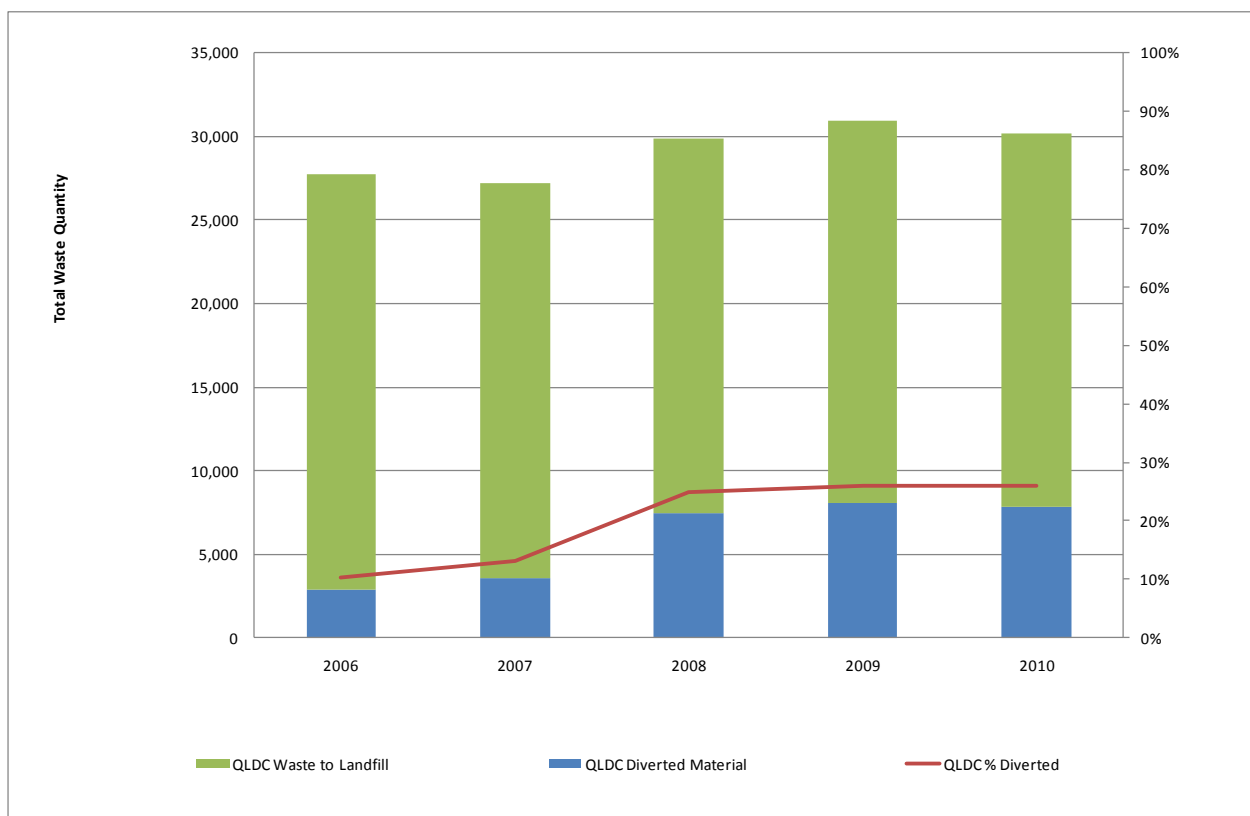
Diverted material rates in 2010 were calculated as 0.26 tonnes per capita in the Wakatipu area (21% diversion rate) and 0.4 tonnes per capita in the Wanaka area (36% diversion rate). Diverted material rates can be improved by wider participation in recycling activities and continuous improvement of waste management behaviour within the community.

11.2.2 Waste and Diverted Material Quantities

During the 2009/10 financial year, the District disposed approximately 22,000 tonnes of waste at the Victoria Flats landfill and diverted approximately 8,000 tonnes of material. The split between waste to landfill and diverted material is presented below.



The trend in waste to landfill and diverted material quantities over the last 5 years is illustrated below.



Currently, the waste per capita figure is calculated as 1.22 t/person.year (based on the District's resident population), which is the highest per capita figure of any territorial authority. If the total resident population and reported average visitor population are considered, the per capita disposal rate for the 2009/10 year was 0.77 t/person.year. Whilst this is still higher than the reported national average of 0.58 t/person.year, it illustrates the impacts of high visitor numbers on waste generation.

However, a high per capita waste production figure does not necessarily mean that the residents of this District are not playing their part in waste management and minimisation.

For each tonne of waste disposed of at the Victoria Flats landfill, the landfill operator is required to pay a waste levy to the central government. Part of this levy is returned to the Council to fund waste minimisation initiatives. The amount of levy returned to the Council is calculated on a per resident basis. Due to the high number of visitors to the District and the associated waste generation, the District is disadvantaged, i.e. the operator pays the waste levy based on the total quantity disposed of at the landfill (including the visitor waste) but the Council's share of the levy is based on the number of residents in the District.

11.2.3 Council Kerbside Collection Services

Refuse and recyclables collection services are provided by the Council in the residential areas of Queenstown, Arrowtown, Lake Hayes, Wanaka, Glenorchy, Kingston, Gibbston, Albert-Town, Hawea, Makarora and Luggate.

11.2.4 Other collection services

The private sector provides waste and diverted material collection services.

11.2.5 Resource Recovery Centres

Facilities for the processing of recyclables in the District are the:

- Wakatipu Recycling Centre; and
- Wanaka Resource Recovery Park.

The Wakatipu Recycling Centre is operated under contract to the Council and some activities at Wanaka Resource Recovery Park are carried out under contract to Council.

The Wakatipu Recycling Centre is operated by Smart Environmental Limited, and the Wanaka Resource Recovery Park is operated by Remarkable Recyclers Limited and the work is subcontracted to Wanaka Wastebusters.

11.2.6 Transfer Stations

Transfer Stations are provided under a contract with the Council at Frankton and Wanaka for the deposit of solid waste, green waste, recyclables, special and hazardous waste drop off.

11.2.7 Waste Disposal Facility

The Victoria Flats Landfill is provided under a contract with the Council for the disposal of waste.

11.2.8 Cleanfill Disposal

The private sector provides cleanfill disposal services.

11.2.9 Other Services

The Council provides additional waste management and minimisation services such as a hazardous waste amnesty, litter bins, township green waste mulching, bulky inorganic collections for townships and education programmes within the District.

11.3 The Emission Trading Scheme

From 1 January 2013 onwards, operators of waste disposal facilities must surrender New Zealand Units (NZUs) to match their emissions. The cost will be passed on to the landfill users. Based on current

quantities of waste disposed at Victoria Flats landfill, the operator will need to recover in the order of \$300,000 to \$900,000 per year from landfill users to cover the cost.

12. Potential Waste Management Demands and Issues

12.1 Introduction

The Waste Assessment forecast future demands for services and identified a number of issues and challenges facing the district that will influence future waste management and minimisation service provisions.

In the context of the Waste Assessment, a demand means a current or potential future need for a waste or diverted material service in the District.

Examples

- A future potential demand has been identified in relation to construction and demolition waste and diverting more material for use as resource material (eg wood, plastics, steel). This future potential demand may require additional services, which could be provided by the private sector or by the Council. This demand recognises the goals of the NZWS 2010 and is expected to be realised as waste disposal charges increase and as the value of diverted material increases.
- A current demand for waste disposal services is met by the kerbside collection service, transfer station service and the landfill service.

12.2 Demands on Services

12.2.1 Kerbside Recycling Collection

Based on historical information, the quantity of recycling collected by the residential kerbside recycling collection service will increase over time due to increasing population. The contracts, under which this service is provided, can accommodate future growth.

12.2.2 Kerbside Organic Material Collection

The Waste Assessment shows that a large quantity of organic material (26% of waste sent to landfill) is currently disposed at Victoria Flats Landfill. The provision of a weekly user pays organic material collection district wide has the potential to almost double the District's landfill diversion rate from 26% to 53%.

The reduction of organic material to landfill would reduce the rate of utilising the Victoria Flats Landfill capacity.

Moreover, the financial implications of the Emissions Trading Scheme would be reduced if organic material is diverted from the landfill.

12.2.3 Resource Recovery Centres

Currently, there is sufficient capacity available at the Wakatipu Recycling Centre and the Wanaka Resource Recovery Park to accommodate growth. The contracts between Council and the operators include a provision for expanding the facilities as future demand requires.

There is an increasing need for quality control of incoming material, on-site storage and processing to avoid adverse environmental effects (e.g. odour) and maintain quality control of the materials. This quality

control will have a positive effect on the quality of outgoing materials which will benefit the community through reduced service costs.

12.2.4 Composting Facility

A composting facility is required if a kerbside organic material collection service is implemented by the Council.

There is the need to develop markets for composting products and to ensure quality control. Quality control of composting product remains a significant issue for those manufacturing compost.

12.2.5 Cleanfills

Cleanfill management is currently not a Council service and cleanfills are privately owned and operated.

A cleanfill is a permitted activity in the Regional Plan: Waste for Otago provided that no sediments enter into any water body and that fill material complies with the cleanfill definition in the Regional Plan. , The ORC has obligations with respect to monitoring and enforcing compliance with this rule.

Currently, there is no definition for cleanfill in the District Plan and therefore the Council has control over cleanfill activities only as provided for under the earthworks rule.

Commercial activities taking place at cleanfills and earthworks over 1,000 m³ trigger the need for resource consents for cleanfills under the District Plan. There are eighteen cleanfills in the District that are consented under earthworks consents. However, there is the potential for cleanfills in the District that do not require earthworks consents.

Issues relating to cleanfill management include:

- limited or no monitoring of cleanfills, which means the Council has little or no information about the types and quantities of materials being disposed
- limited or no monitoring of the effects of cleanfills on the environment, which means that the Council has little or no information about loss of material by erosion, damage to water ways, slope failures, cleanfill settlement, any loss of visual amenity, and cleanfill closure and aftercare
- a need to protect land use from loss of opportunity and identify potential hazards that may relate to uncontrolled fill sites
- the need for cleanfill capacity to be available in the District so as to facilitate development
- the consenting process for the establishment and operation of cleanfills not being administered in a consistent way across the District and the risk.

12.2.6 Kerbside Refuse Collection

Based on historical information, the quantity of refuse collected by the residential kerbside refuse collection service will increase over time due to increasing population. The kerbside collection service is based on the number of households serviced. The contract, under which this service is provided, can accommodate future growth.

Potential demands relating to kerbside refuse collection are:

- Weekly rural kerbside refuse collection service instead of weekly collection from collection points in areas with high numbers of residential dwellings
- Weekly organic material collection service, which would result in a decrease in refuse to be collected.

12.2.7 Transfer Stations

Currently, there is sufficient capacity available for increasing quantities of waste at the Frankton and Wanaka Transfer Stations. The contract between Council and the operator includes provision for expanding the facilities as future demand requires.

Potential demands relating to transfer stations include:

- Increasing need for quality control of incoming material and on-site storage to meet landfill acceptance criteria
- Increased environmental controls to prevent odour, vermin, noise etc
- Increased traffic flows and vehicle movements
- Increased separation of materials
- Increased quantity of green waste
- Need to improve information services and facility instructions.

12.2.8 Waste Disposal Facility

The Victoria Flats Landfill has a landfill life expectancy of approximately 40 years if diversion rates remain at current levels and there is no unexpected influx of waste occur (e.g. natural disaster or high waste quantities than forecast).

The Council is responsible for the ongoing maintenance of the Tucker Beach, Wanaka, Hawea, Makarora, Kingston, Glenorchy and Luggate closed landfills.

12.3 Potential Other Demands or Waste Management Issues

Other forecast future demands or waste management issues were identified as:

1. the reduction of construction and demolition waste quantities to landfill
2. ensuring adequate waste storage provisions and access provisions in high density developments
3. the need to improve the appearance of the central business districts in Queenstown and Wanaka, i.e. better management of refuse and recyclable materials)
4. the need to better control cleanfills so to avoid contamination and land instability issues, and to ensure sufficient capacity
5. Litter bin abuse, i.e. commercial and household refuse placement in litter bins
6. to enhance provisions for event waste management, i.e. add strength to the provision in the District Plan so as to improve waste management and minimisation
7. Lack of Council knowledge on privately operated refuse and recycling collection and treatment services
8. Lack of detailed waste information from privately operated services available to Council
9. Lack of knowledge on cross boundary flow of waste and diverted material
10. the need for improved organic material management
11. the need for improved sewage sludge/biosolids management
12. the need for control of products that result in high quantities of waste
13. Lack of reference to current New Zealand legislation in the Strategy (ie the operative WMMP).

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Members of the Solid Waste Working Party are:

- Lyal Cocks – Councillor/Chairman
- Sue Coutts – Wanaka Wastebusters
- Mel Gazzard – Councillor
- Grant Hensman – Scope Resources
- Mark McKone – Otago Southland Waste Services
- Ricci Peyroux – Smart Environmental
- Karen Swaine – Member of Public
- Trevor Tattersfield – Councillor

Members of the Technical Advisory Group are:

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- John Cocks – MWH Senior Solid Waste Engineer
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Appendix A Glossary

Where available, definitions have been taken from the Waste Minimisation Act 2008⁴ or the EU Landfill Directive⁵.

Cleanfill/cleanfill material:	inert materials disposed of into or onto land. Materials typically include concrete, uncontaminated soil and rock.
Disposal:	means: (a) the final (or more than short-term) deposit of waste into or onto land set apart for that purpose; or (b) the incineration of waste.
Disposal facility:	means: (a) a facility, including a landfill; - (i) at which waste is disposed of; and (ii) at which the waste disposed of includes household waste; and (iii) that operates, at least in part, as a business to dispose of waste; and (b) any other facility or class of facility at which waste is disposed of that is prescribed as a disposal facility.
Diverted Material:	anything that is no longer required for its original purpose and, but for commercial or other waste minimisation activities, would be disposed of or discarded.
Greenwaste	Biodegradable waste such as tree branches and tree stumps rich in carbon and in some cases other plant waste such as grass, flower and hedge cuttings rich in nitrogen.
Refuse	Refer to Waste
Hazardous waste:	waste that is potentially harmful to human and /or environmental health. It typically has one or more of the following hazard properties: explosive, flammable, oxidising, corrosive, radioactive, toxic or eco-toxic, or it may react with air or water to have one of these properties. Hazardous waste includes used oil, unwanted agrichemicals, paint and vehicle batteries.
Household Waste:	waste from a household that is not entirely from construction, renovation, or demolition of the house.
Litter	Refer to Waste
Organic Material	Kitchen scraps, greenwaste and in some cases sludge from wastewater treatment processes
Recovery:	(a) extraction of materials or energy from waste or diverted material for further use or processing; and (b) includes making waste or diverted material into compost.
Recycling:	the reprocessing of waste or diverted material to produce new materials

⁴ 2008 Parliament of New Zealand, *Waste Minimisation Act 2008 No 89*

⁵ 1999 European Union, *Council Directive 1999/31/EC of 26 April 1999 on the landfill of waste*

- Reduction:** means:
- (a) lessening waste generation, including by using products more efficiently or by redesigning products; and
 - (b) in relation to a product, lessening waste generation in relation to the product.
- Resource Recovery Centre (RRC):** a site where diverted material and waste are collected and processed, sorted and transferred for disposal or further processing. A site may have separate facilities for different types of waste and diverted material.
- Reuse:** the further use of waste or diverted material in its existing form for the original purpose of the materials or products that constitute the waste or diverted material, or for a similar purpose.
- Solid Waste Analysis Protocol (SWAP)** a method to determine the composition of waste.
- Treatment:** means:
- (a) subjecting waste or diverted material to any physical, biological, or chemical process to change its volume or character so that it may be disposed of with no or reduced adverse effect on the environment; but
 - (b) does not include dilution of waste.
- Waste:** means:
- (a) anything disposed of or discarded; and
 - (b) includes a type of waste that is defined by its composition or source (for example, organic material, electronic waste, or construction and demolition waste); and
 - (c) to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded.
- Waste Disposal Levy:** A levy imposed under the Waste Management Act 2008 on waste disposed at a waste disposal facility.
- Waste Minimisation:** means:
- (a) the reduction of waste; and
 - (b) the reuse, recycling and recovery of waste and diverted material.

Appendix B Selected Legislation

A summary of the legislation is summarised in this appendix.

Statutory Requirements for Territorial Authorities

Legislation	Duties & Function
Waste Minimisation Act 2008 (WMA)	The purpose of the WMA is to encourage waste minimisation and a decrease in waste disposal in order to protect the environment from harm and to provide environmental, social, economic, and cultural benefits.
Local Government Act 1974 Part 31 (now repealed) and the Local Government Act 2002	<p>The provisions of the LGA 1974, Part 31, and the sanitary assessment provisions for refuse (ie, solid waste) contained in Part 7 of the LGA 2002 have been repealed, and these provisions are now largely embodied within the WMA. Existing waste management plans prepared under the LGA 1974 are deemed to be waste management and minimisation plans under the WMA (s 43[4]). These existing plans must be reviewed before 1 July 2012</p> <p>The LGA 2002 contains various provisions that may apply to TAs when they are preparing their WMMPs, including consultation and bylaw provisions. Part 8, ss 145–146, provide TAs with broad bylaw powers, including the power to make solid waste and waste management bylaws. Part 8, s 158, outline provisions for the review of bylaws. The procedure for making a bylaw and the requirement for completing a special consultative procedure when making a bylaw are contained in ss 155 and 156.</p> <p>The LGA 2002, Part 6, s 77, refers to legislative requirements for TA decision-making, including consideration of the benefits and costs of different options in terms of the present and future social, economic, environmental and cultural well-being of the district. The LGA 2002 also includes requirements for information to be included in a long term plan (LTP), including summary information about its WMMP.</p>
Hazardous Substances and New Organisms Act 1996 (the HSNO Act)	<p>The HSNO Act addresses the management of substances that pose a significant risk to the environment and/or human health, from manufacture to disposal. The Act relates to waste management primarily through controls on the import or manufacture of new hazardous materials and the handling and disposal of hazardous substances.</p> <p>Hazardous substances may be explosive, flammable, have the capacity to oxidise, toxic to humans and/or the environment, corrosive, or have the ability to develop any of these properties when in contact with air or water. Depending on the amount of a hazardous substance on site, the HSNO Regulations set requirements for material storage, staff training and certification. These requirements would need to be addressed within operational and health and safety plans for waste facilities. Hazardous substances commonly managed by TAs include used oil, asbestos, agrichemicals, LPG and batteries.</p> <p>The HSNO Act provides minimum national standards that may apply to the disposal of a hazardous substance. However, under the RMA a regional council or TA may set more stringent controls relating to the use of land for storing, using, disposing of or transporting hazardous substances.</p>
Resource Management Act 1991 (RMA)	<p>The RMA provides for the sustainable management of natural and physical resources. Although it does not specifically define 'waste', the Act addresses waste management and minimisation activity through controls on the environmental effects of waste management and minimisation activities and facilities through national, regional and local policy, standards, plans and consent procedures. In this role, the RMA exercises considerable influence over facilities for waste disposal and recycling, recovery, treatment and others in terms of the potential impacts of these facilities on the environment.</p> <p>Under s 30 of the RMA, regional councils are responsible for controlling the discharge of contaminants into or onto land, air or water. These responsibilities are addressed through regional planning and discharge consent requirements. Other regional council responsibilities that may be relevant to waste and recoverable materials facilities include managing the adverse effects of storing, using, disposing of and transporting hazardous wastes; the dumping of wastes from ships, aircraft and offshore installations into the coastal marine area; and the allocation and use of water.</p> <p>Under the RMA, TA responsibility includes controlling the effects of land-use activities that have the potential to create adverse effects on the natural and physical resources of their district. Facilities involved in the disposal, treatment or use of waste or recoverable</p>

Legislation	Duties & Function
	<p>materials may carry this potential. Permitted, controlled, discretionary, non-complying and prohibited activities and their controls are specified within district planning documents, thereby defining further land-use-related resource consent requirements for waste-related facilities.</p> <p>In addition, the RMA provides for the development of national policy statements and for the setting of national environmental standards (NES). There is currently one enacted NES that directly influences the management of waste in New Zealand – the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004 (the NES for Air Quality). This NES requires certain landfills (eg, those with a capacity of more than 1 million tonnes of waste) to collect landfill gases and either flare them or use them as fuel for generating electricity. The result is increased infrastructure and operational costs for qualifying landfills, although with costs potentially offset by the harnessing of captured emissions for energy generation.</p> <p>Unless exemption criteria are met, the NES for Air Quality also prohibits the lighting of fires and burning of wastes at landfills, the burning of tyres, bitumen burning for road maintenance, burning coated wire or oil, and the operation of high-temperature hazardous waste incinerators. These prohibitions limit the range of waste treatment/disposal options available within New Zealand with the aim of protecting air quality.</p>
Health Act 1956	<p>The Health Act 1956 places obligations on TAs to provide sanitary works for the collection and disposal of refuse, for the purpose of public health protection.</p> <p>It specifically identifies certain waste management practices as nuisances and offensive trades.</p> <p>The Health Act enables TAs to raise loans for certain sanitary works and/or to receive government grants and subsidies, where available.</p> <p>Health Act provisions for the removal of refuse by local authorities have been repealed by local government legislation. The Public Health Bill is currently progressing through Parliament. It is a major legislative reform reviewing and updating the Health Act 1956, but it contains similar provisions for sanitary services to those currently contained in the Health Act 1956.</p>
Climate Change (Emissions Trading) Amendment Act 2008	<p>The Climate Change (Emissions Trading) Amendment Act 2008 amends the Climate Change Response Act 2002 by introducing a New Zealand Emissions Trading Scheme (ETS).</p> <p>Climate Change (Waste) Regulation require landfill operators to surrender emission units to cover methane emissions generated from the landfill. Should any future solid waste incineration plants be constructed, the regulations would also require emission units to be surrendered to cover carbon dioxide, methane and nitrous oxide emissions from the incineration of household wastes. The waste sector will formally enter the ETS on 1 January 2011, when voluntary reporting can occur. Mandatory reporting requirements will apply from January 2012 and emission units will need to be surrendered as of 1 January 2013.</p>
Energy Efficiency and Conservation Act 2000	<p>The purpose of the Energy Efficiency and Conservation Act is to promote energy efficiency, energy conservation, and the use of renewable sources of energy in New Zealand through the Energy Efficiency and Conservation Authority.</p>
Litter Act 1979	<p>The Litter Act 1979 gives public authorities powers and duties to control litter and define offences and penalties. Public authorities may exercise control to prevent littering by:</p> <ul style="list-style-type: none"> • Appointing a Litter Control Officer; • Appointing Litter Wardens; • Requiring occupiers of private land to clear litter; • Imposing fines according to the Act; • Making grants to organisations and schemes for the abatement or prevention of litter; • Issuing infringement notices (retaining the infringement fee); and • Making bylaws to give effect to the provisions of the Act.

Appendix C Waste Assessment

Appendix D Waste Management and Minimisation Plan Review