

# **Waipa Waste Strategy 2017- 2035 and Waste Management and Minimisation Plan 2017-2023**

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**Preface to the Waipa Waste Management and Minimisation Plan 2017-2023**

This report was prepared by Sandra Murray of Zenzic on behalf of Waipa District Council.

The information published in this Plan has been prepared in good faith and to the best efforts of the author, taking into account the timescale and resources allocated to it by agreement by the Client. Zenzic does not guarantee or warrant the accuracy, reliability, completeness or currency of the information in this publication nor its usefulness in achieving any purpose. Readers are responsible for assessing the relevance and accuracy of the content of this publication.

This Waste Management and Minimisation Plan presents as clear a picture as possible of what activities Waipa District Council intends to carry out in order to manage and minimise waste in the district.

A Waste Assessment was completed prior to the development of this Plan and has provided the basis for the vision, goals, outcomes, activities and targets set out in this Plan.

Issue		Author	Reviewer	Date
1	Version 1	Sandra Murray	Cedric Crow & Justine Kennedy WDC	29/04/2017
2	Version 2	Sandra Murray	WCD Executive	18/05/2017
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## PART 2 - WHY WASTE WAIPA? - THE STRATEGY

### Our Vision:

#### *Building zero waste and sustainable communities*

Our Vision builds on the vision of the WDC 10-Year Plan 2015-2025, and the 2011-2017 WMMP.

The Waste Minimisation Act 2008 (WMA) places an obligation on all Territorial Authorities (Councils) to promote effective and efficient waste management and minimisation within their city or district.

This includes the adoption of a Waste Management and Minimisation Plan (WMMP) which must be reviewed at least every six years. A WMMP must:

- consider the 'waste hierarchy' which sets priorities for how we should manage waste
- ensure waste does not create a 'nuisance'
- have regard to the New Zealand Waste Strategy and other key government policies
- consider the outcomes of the 'Waste Assessment'
- follow the Special Consultative Procedure set out in the Local Government Act (2002).

Councils also have obligations under the Health Act 1956 to ensure waste management systems protect public health.

Waipa's current WMMP was adopted in 2012. Most of the activities from the 2012-2017 WMMP have been undertaken, but a reduction in waste to landfill has not occurred as a result of these activities.

Waipa District Council (Council) intends to take a longer-term view of waste management and minimisation activities by implementing an 18 year Waste Strategy (Strategy), which will guide three consecutive WMMPs.

Each WMMP, and the Strategy overall, will be based on Waste Assessments carried out prior to each WMMP being

developed. The assessments will provide feedback on progress against each WMMP.

This Strategy sets out our overall goals and a strategic framework for managing waste in Waipa over the next 18 years.

Each WMMP will detail the activities to be undertaken over the six years of each plan, in order to achieve the Strategy.

Activities to achieve the goals of the Strategy will also be carried forward into our long term and annual plans to ensure the resourcing is available to deliver the activities and targets in each WMMP; and goals and objectives set out in the Strategy.

#### 2.1.1 Our intended role

Council intends to oversee, facilitate and manage a range of activities and services to achieve effective and efficient waste management and minimisation within the district. Council will do this through our internal structures responsible for waste management.

We are responsible for a contracted recycling service, as well as partnerships and programmes to provide waste management and minimisation services to the residents and ratepayers of the district.

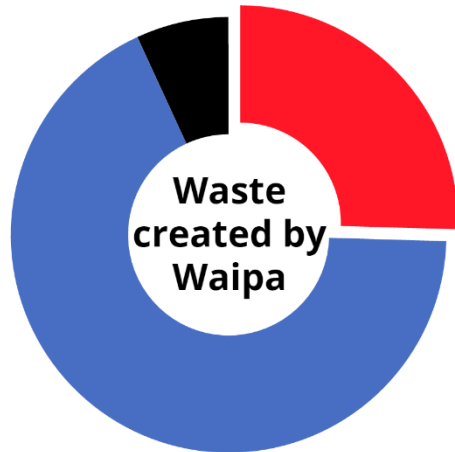
In addition, the councils in the Waikato/BOP region will continue to work together to deliver the regional goals and objectives set out in this plan.

One of the avenues through which collaboration may be facilitated is through working with the Waikato and Bay of Plenty Local Authority Shared Services organisations (WaiLASS and BOPLASS).



# our waste: the problem

How much waste are we creating?



About 22,000 tonnes of general waste is going to landfill each year. This includes kerbside refuse.

We estimate around 59,000 tonnes of waste is created by farms each year, and is being stored, buried or burned.

A smaller amount of waste comes from our wastewater plants and is being stockpiled. However this will be better managed in the future once the new wastewater systems are working.

General waste to landfill   Farm waste   Wastewater sludge



Other Waste   Food



Commercial recycling   Kerbside recycling   Greenwaste



Plastic & tins   Paper & cardboard   Glass bottles

## 9kg of refuse per household each week

Each household puts out about 9 kg of waste each week - and about a quarter of that is food waste.

Of the food waste, about 25% is fruit!

## 195kg of recycling per household each year

We collect about 3,400 tonne of recycling from our kerbside recycling collection each year. Commercial recycling from Waipa businesses collect about another 440 tonne.

## Glass & Paper make up most of our kerbside recycling

Our kerbside recycling is about 46% glass bottles, while paper and cardboard make up around 37%.

Paper volumes are reducing as fewer people buy newspapers.

### 3.1 How much waste is disposed of to land in the Waipa district?

Disposal of solid waste to land occurs in three ways:

- waste to landfills,
- farm waste disposed of onsite, and
- waste to land from wastewater sludge.

The volumes of waste disposed of to land in Waipa district is summarised in Table 2.

We estimate a total of 87,000 tonnes of solid waste was disposed of to land in the Waipa district in the 2015-2016 year.

Based on limited information provided by private waste collectors, we estimate general waste disposed of to landfills was about 22,000 tonnes - 25% of the total and approximately 0.5 tonne per person.

Farm waste disposed of on-site is approximately 68% of the total waste to land in the district.

*Table 1 Estimated waste disposed of to land in Waipa District*

Waste disposed of to land	Tonnes	% of total	Tonnes/capita/annum <sup>1</sup>
General waste to landfill	22,000	25%	0.5
Sludge – currently stockpiled	6,000 <sup>2</sup>	7%	0.1
Farm waste disposed on on-site <sup>3</sup>	59,000	68%	1.3
<b>TOTAL</b>	<b>87,000</b>	<b>100%</b>	<b>1.9</b>

### 3.2 How much recycling are we doing

The Waipa District Council kerbside recycling service collects an average of 195kg per household per annum (70kg per person per annum) – a total of 3,411 tonnes in the 2015-2016 year. This is comparable to similar councils in the Waikato region despite variable collection frequency and receptacle type.

Kg of recyclable material collected via kerbside services per household per annum	
Hauraki	181 kg
<b>Waipa</b>	<b>195 kg</b>
Matamata-Piako	200 kg
Thames Coromandel	250 kg

*Table 2 Recyclable materials per household per annum*

Private waste collectors and facilities have not provided detailed information on the volume or

composition of commercial recyclable material collected.

Private operators do not always record the council area waste is collected or received from. A truck may collect from two or more council areas in a single trip – making it difficult to attribute volumes to a particular council area.

Based on the limited information provided, approximately 440 tonnes of commercial recyclable material and 580 tonnes of green waste are handled via private operators in the Waipa district.

No information is available on recyclable material and green waste transported directly to facilities in other areas such as Hamilton, Otorohanga, Thames and Auckland. Therefore the above estimates will be lower than the actual tonnages for the district.

<sup>1</sup> Based on 2013 Census information (46,668 people in the Waipa district)

<sup>2</sup> Based on volume of sludge wastewater facilities in the district are consented to discharge to land.

<sup>3</sup> Farm waste was estimated based on national surveys<sup>4</sup> of farms carried out by Canterbury, Waikato and Bay of Plenty Regional Councils.

### 3.3 What difficulties do we face?

Compared to other councils, Waipa is about average for both the volume of waste we create and the volume of recycling we collect (on a per person basis).

However, we could improve how we manage the waste we create if we were better aligned with the 'waste hierarchy'.

The 'waste hierarchy' refers to the idea that reducing, reusing, recycling and recovering waste is preferable to disposal (which in New Zealand usually means a landfill).

The waste hierarchy is shown in Figure 1.

#### 3.3.1 Data

Throughout the development of the Waste Assessment, the issue of data availability has been raised as a concern. Council relies on private waste operators to provide waste information and data. Private operators are sometimes reluctant to provide this information leading to difficulty:

- identifying waste volumes, composition or source for all waste streams
- identifying if waste issues are improving or worsening under current waste management strategies
- planning for future demand due to a lack of knowledge about the status quo
- supporting regional or national initiatives to establish nationwide waste management systems by providing data on district waste flows.

In terms of future planning for waste minimisation, and in order to meet Council's obligations under the Waste Minimisation Act 2008, the first and most important step is to collect sufficient information to understand the waste situation.

#### 3.3.2 Other identified issues:

- high volumes of farm waste
- low recycling and resource recovery District wide
- a need for development of community operational capacity with regards to resource recovery
- potential risks with infrastructure access
- high costs and risk associated with new infrastructure and service development
- limited opportunities for the safe disposal of household hazardous waste.

### The waste hierarchy

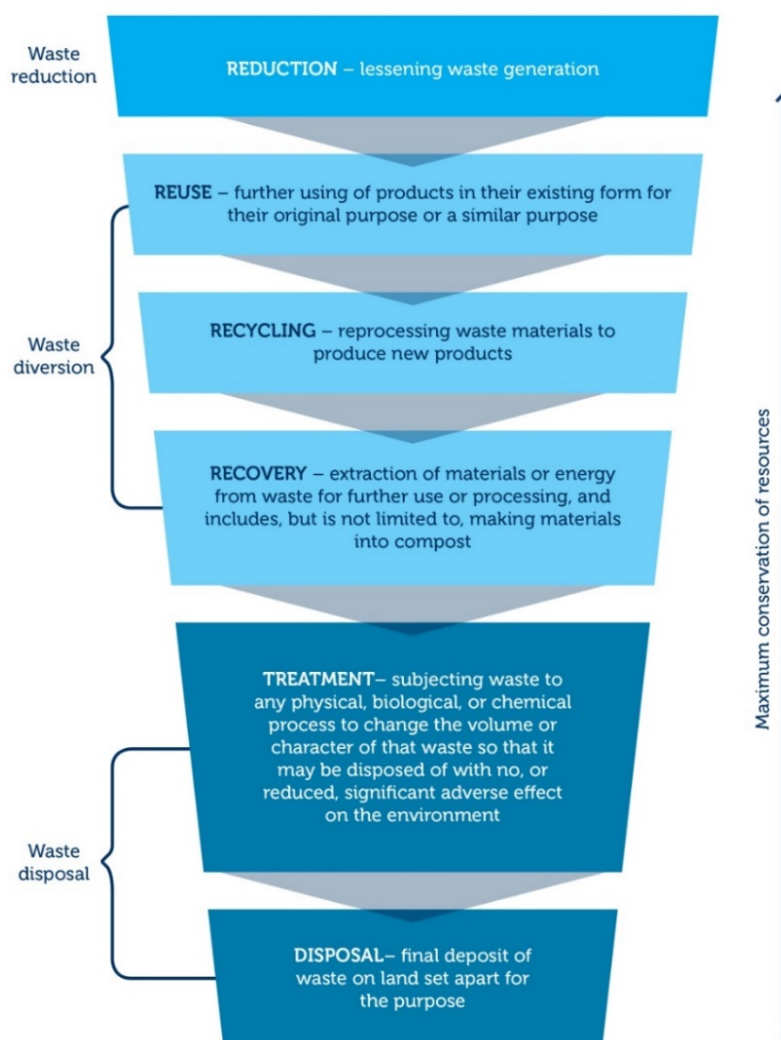


Figure 1 Waste hierarchy

## ✓ Our Challenges

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### Not enough Information

We don't have access to data and information about waste in the District because most waste services are provided by private companies



### Farm Waste

Being a rural community, Waipa has a high volume of rural waste.

While some services are available to farms, there is opportunity to help more.



### Low Recycling

While kerbside recycling has been good, recycling rates are static, and commercial recycling rates are low.

We can improve how much we recycle and reuse waste.



### Community Capacity

Community groups are interested in establishing a resource recovery centre, but there is a low level of operational knowledge which would allow the introduction of community partnerships for waste minimisation.



### Infrastructure and services

There is potential to work with other Councils to share the costs of infrastructure development, or common services like litter education



### HazWaste

There are limited opportunities for household hazardous waste disposal

## 3.4 Long term and global considerations

While they do not immediately affect Waipa's waste flows, international activities can have a big impact on New Zealand's waste industry.

Much of the recycling collected in NZ is exported to Asia, particularly China. China has in recent years tightened measures around the acceptance of recycled materials, requiring a higher standard of recycled product in order to gain approval for import into China.

Restrictions on the acceptance of recyclable

material will mean changes to collection and sorting methodologies in order to achieve export standards. This may impact the costs associated with recycling.

Also of concern are the effects of climate change and rising unrest in many countries. International conflict has the potential to disrupt recycling supply chains. As New Zealand has few processing facilities for kerbside recyclables, we are vulnerable should export markets be disrupted.



### 3.5 National and regional waste situation and activities

The 2010 New Zealand Waste Strategy: Reducing Harm, Improving Efficiency (NZWS) is the Government's core document concerning waste management and minimisation in New Zealand.

The two goals of the NZWS are:

1. *reducing the harmful effects of waste*
2. *improving the efficiency of resource use.*

The NZWS provides high-level, flexible direction to guide the use of the legislation, regulation and conventions related to the management and minimisation of waste in New Zealand.

As per section 44 of the WMA we have given regard to the NZWS when preparing their WMMP.

Two national projects have also been taken into consideration. These are intended to assist Councils, businesses and the public to adopt waste management and minimisation principles in a consistent fashion.

#### (1) National Waste Data Framework project

The National Waste Data Framework (NWDF) project intends to develop national guidelines for the collection and use of waste data and information. The goals and activities in the Waipa Waste Strategy and WMMP aim to align our data collection and use with the NWDF.

#### (2) National standardisation of colours for bins

Until recently, councils and businesses in New Zealand have used a variety of colours to indicate what waste streams can be placed in what bins. This had the potential to create confusion among residents and increase the likelihood of contamination.

There is now a standardised set of colours for mobile recycling and rubbish bins, crates and internal office bins. Waipa will align to these standardised colours with council provided services, and we will encourage private collectors to do the same.

### 3.6 Regional/sub-regional issues and opportunities:

Significant issues where national, regional or sub-regional co-operation is likely to improve outcomes for councils have been identified as:

#### (a) Shared responsibility for waste / product stewardship

The Waste Minimisation Act 2008 places the greatest responsibility for minimising and managing waste on to local councils. However, councils only control a small part of the waste stream and in order to achieve significant waste minimisation other parties need to share the responsibility.

In particular:

- manufacturers and distributors of products have the ability to control end-of-life waste at the design and manufacturing stages of the product life-cycle
- organisations responsible for product or service provision need to plan for the associated waste requirements at end-of-life e.g. agricultural chemical companies collecting old chemicals for appropriate disposal
- regional Council and Central Government have the ability to enforce regulations around appropriate storage and disposal of key materials e.g. tyres

- Central Government has the ability to implement regulatory mechanisms to control key waste streams at a national level e.g. product stewardship schemes for waste tyres, agricultural chemicals, e-waste; or other regulation such as bottle deposit schemes.

Council will have greater influence achieving shared waste responsibility, regulation or product stewardship by presenting a unified voice and working with other responsible organisations including Central Government, Regional Councils, Local Authority Shared Service (LASS), Regional Special Interest Groups (SIGs), industry groups, DHBs and the community.

#### (b) Consistent education & engagement

Providing consistent messaging across the region will support education and behaviour change outcomes. As communities often cross district and city boundaries, consistent education and engagement messages are more effective if implemented over a wider area.

Particular issues in this area include:

- a community lack of knowledge on how to minimise waste, what materials can be recycled, and what services are available for recycling

- a lack of co-ordination between industry groups, regional council, local councils and waste service providers in the provision of waste messaging and infrastructure/service provision
- a lack of markets for reclaimed materials. Although some waste materials can be recovered, there may not be a market for the end product. The barriers to market development have not been identified, and therefore it is not clear where efforts could be focused to remove barriers, promote markets for recycled products to consumers and therefore increase the value of recoverable waste materials.

### (c) Infrastructure capacity

There are gaps in our knowledge of what waste infrastructure will be required regionally in the future, and whether there will be sufficient capacity for future demand. This is particularly relevant if additional services are likely to be developed (e.g. food waste, landfills or transfer stations).

Waste infrastructure planning may need to start ten or twenty years prior to requirements and is likely to have a high cost associated with development. Therefore identifying future requirements is a key issue and it is important to identify what may be needed, who may be involved in supplying the infrastructure (public vs private) and the potential funding mechanisms for any facilities (e.g. landfills).

In order for facilities to be financially viable in the long term a minimum volume of material is often required. Smaller councils may not be able to guarantee such volumes, making local facilities financially unviable. Regional development of infrastructure may enable sufficient volume of material to achieve viability.

### (d) Inconsistent services and data hinder joint working and shared services

While councils in the Waikato and Bay of Plenty area generally recognise that collaboration and developing shared services may lead to improved

outcomes and cost savings in service provision, variability in services and data capture can hinder joint working.

For example, a sub-regional and regional contract for a waste service could potentially return costs savings to all participating councils. However, across the region councils may have different methods of provision (council provided vs private services), containers (bags vs MGBs vs crates), collection frequencies (weekly vs fortnightly) and different funding mechanisms (user pays vs rates funded).

Similarly identifying regional waste volumes can be challenging as different councils collect data and information on different waste streams, using variable methodologies.

Aligning services and data is not an activity that can occur quickly, due to the length of some waste contracts. However, a long-term aim to align services would assist in this process.

### 3.6.2 Tangata whenua worldview

Our tangata whenua, who hold kaitiaki status in Waipa, seek to ensure that waste management is best practice and manages the social, cultural, spiritual, economic, and environmental effects of waste. Our Waste Strategy is in alignment with this view and ensures:

- the full life cycle of waste from generation to assimilation/disposal is considered in developing waste management strategies
- we manage waste according to the waste hierarchy
- we promote the concept of a 'no waste' society
- waste management facilities are be sited, designed, constructed, operated, and managed to best avoid adverse environmental impacts
- we will take steps to reduce opportunities for the release of environmentally persistent hazardous chemicals, or hazardous chemicals that could bioaccumulate to a level to have chronic toxic effects on environment.

## 3.7 How do we know all this?

This Waste Management and Minimisation Plan is based on a Waste Assessment (WA).

A WA is a snapshot of waste flows, volumes, services and facilities provided by both Council and private operators.

The development of a Waste Assessment is a legislative requirement under Section 50 of the Waste Minimisation Act 2008 (WMA). The Waste Assessment sets out the information necessary to identify the key issues and priority actions that will be included in the WMMP.

In early 2017 we developed a Waste Assessment on which to base the goals and activities in the 2017-2023 WMMP.

The 2017 Waste Assessment is attached in Appendix 3 and details:

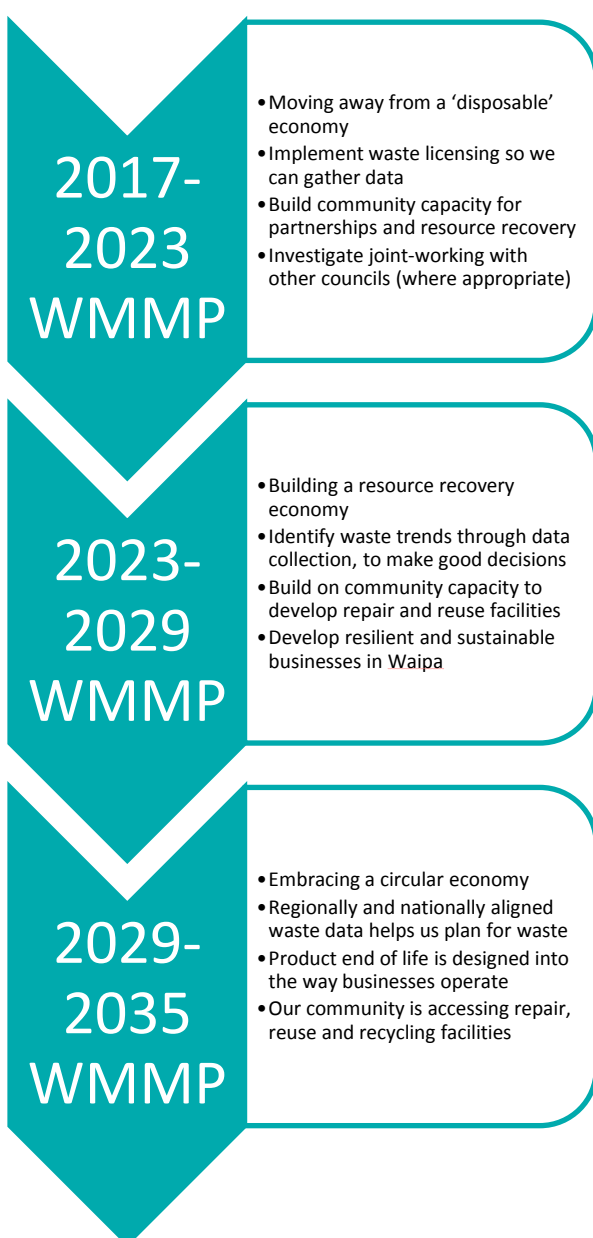
- a description of the collection, recycling, recovery, treatment, and disposal services provided within the territorial authority's district
- a forecast of future demands
- a statement of options

- a statement of the territorial authority's intended role in meeting demands
- a statement of the territorial authority's proposals for meeting the forecast demands
- a statement about the extent to which the proposals will protect public health, and promote effective and efficient waste management and minimisation.

The Waste Assessment also sets out more detail on the plans, policies and legislation we have taken into account in the development of this WMMP.

## PART 4 - WHAT ARE WE GOING TO DO?

### 4.1 In the next 18 years



Over the next 18 years (the duration of the Waste Strategy), we want to change attitudes to waste in three key areas:

- changing from viewing waste as a problem, to seeing all waste as a resource until there is no 'waste' at all
- develop and build on our resource recovery capacity, ultimately participating in a 'circular economy' where waste is continuously reused and recycled back into the economy
- collect, monitor and utilise waste and resource data information so we can make good, responsive decisions.

Initially, during the 2017-2023 WMMP, we will focus on developing capacity for waste minimisation in the Waipa community. This will be a period of laying foundations.

During the 2023-2029 WMMP we will build on the foundations we have laid, expanding and further developing a resource recovery economy. This will be a period of growth.

During the 2029-2035 WMMP Waipa will have matured resource recovery and, along with the rest of the world, be moving to embrace a circular economy where resources naturally flow back into production and reuse. Waipa will no longer view resources as 'waste' our communities will have access to repair, reuse and recycling facilities.

We have developed a set of goals designed to expand out over the next 18 years, changing and developing as we progress in our waste minimisation activity:

	2017-2023 WMMP	2023-2029 WMMP	2029 – 2035 WMMP
Goal 1:	Reduced waste and increased resource recovery	Reduced waste, increased repair and reuse, increased resource recovery	Zero waste Waipa
Goal 2:	Collect waste information for informed decision making, in line with the National Waste Data Framework	Waste information, aligned with the National Waste Data Framework, is able to identify trends and opportunities for increased resource recovery	Resource recovery information is able to identify trends and opportunities for product design changes
Goal 3:	Connect with our community by developing collaborative and enduring partnerships with key stakeholders	Our communities are actively engaged in resource recovery	Resource recovery is an everyday activity
Goal 4:	Progressive and effective waste minimisation and management services and facilities, without unreasonably burdening future ratepayers	Our communities and businesses are actively engaged in developing services and infrastructure to avoid and reduce waste, increase repair and reuse; and increase resource recovery	Communities expect, and businesses deliver, products that are part of a whole-of-life management system

Table 3 How our goals will progress through the 18 year term of the Waste Strategy

## 4.2 How well did we do in the last six years?

We completed all the activities of the 2011-2017 WMMP (other than those dependant on regional activities that did not occur).

However, we have not seen any apparent reduction in the per capita volume of waste to landfill. More detailed waste flow information from private waste collectors is needed to provide a clearer picture of Waipa's waste and help with waste planning.

### 4.2.1 Per capita waste to landfill

The Waipa district per capita per annum waste to landfill in 2014-2015 is calculated by combining Statistics NZ population estimates and the general waste to landfill.

Calculation of per capita waste to landfill	
Population (Stats NZ 2013 year estimate)	46,668
Total waste to landfill (tonnes 2015-2016 year)	22,000
Tonnes/capita/annum of waste to landfill	0.5

Table 4 Per capita annum waste to landfill – Waipa District

Our per capita waste to landfill has increased from 0.3 tonnes per capita per annum in the 2011 Waste Assessment to 0.5 in 2017. This increase is likely to be attributed to a number of factors including:

- insufficient data both in 2011 and 2017 to accurately estimate the per capita waste to landfill
- an increase in the population
- recent research into the volume of farm waste (which was not available in 2011) indicating a higher volume of farm waste than previously thought.

Improved data collection and monitoring will allow us to more accurately identify if waste volumes are increasing on a per capita basis. This will provide a better basis for making policy decisions and about the need for potentially expensive infrastructure and services.

In general however, the total quantity of waste disposed of to landfill in a given area is related to a number of factors, including:

- the size of the population and how wealthy people are

- the availability of waste and resource recovery, collection and disposal activities and services
- economic activity
- the relationship between the costs of landfill disposal and the value of recovered materials
- the availability and cost of disposal alternatives, such as lower grade landfills or cleanfills
- seasonal fluctuations in population (including tourism).

Taking these into account, Waipa has an average per capita waste to landfill compared to similar districts. While this is average compared to other councils, it is still high.

Overall waste to landfill (excluding cleanfill and cover materials)	Tonnes per capita per annum
Gisborne district 2010	0.305
Waimakariri district 2012	0.311
Ashburton district 2014-15	0.366
<b>Waipa District Council</b>	<b>0.5</b>
Taupo district 2013	0.528
Kāpiti Coast district 2015	0.584
Hamilton City	0.668
Rotorua district 2009	0.736

*Table 5 Per capita waste to landfill compared to other districts*

However, the information on waste volumes for Waipa is of low quality and excludes volumes of waste that are transported directly to facilities out of district. It is likely that (if suitable data was available) Waipa's per capita annum rate would be higher.

Due to the inability to access good information on private refuse services, we are not able to calculate a measure of the per capita kerbside refuse volume for the district.

#### 4.2.2 Per capita domestic kerbside recycling

A kerbside recycling service commenced in 2012 and Waipa households now put out an average of 195kg of recycling per year. Compared to similar Districts, this is an average-to-low volume of recyclable material in the kerbside collection, even taking into account the difference between collection containers and urban and rural collections (receptacle type and frequency of collection can influence recycling volumes, with co-mingled MGB collections generally collecting higher volumes than bags or crates).

Kg of recyclable material collected via kerbside services per household per annum	
Hauraki	181 kg
<b>Waipa</b>	<b>195 kg</b>
Matamata-Piako	200 kg
Thames Coromandel	250 kg

*Table 6 Per household recycling rates*

### 4.3 Projections of future demand

Household projections for Waipa district indicate that two parent households will decline throughout the projection period. Overall household numbers peak in 2042, increasing by 6,815.

Households with fewer people tend to produce less waste than larger households, setting out waste less frequently or using smaller receptacles. They may also arrange to share a waste collection service with neighbours in order to save money.

In addition, the age profile of residents is changing with Waipa district having one of the fastest rates of population ageing in the Waikato region. In 2013, 17% of the population is aged 65 years and

over, and this is projected to increase to 34% in 2033 and 43% in 2063.

Analysis carried out by WRAP (UK) in 2007 found older people generated approximately 25% less food waste than other age groups, when household size was controlled for<sup>4</sup>. Further research carried out by WRAP<sup>5</sup> has found that those over 65 years old are also more likely to home compost.

<sup>4</sup> WRAP "Spaghetti Soup: The Complex World of Food Waste Behaviours" October 2013

<sup>5</sup> WRAP "Household food and drink waste: A people focus" October 2014

Taking the aging population into account, it may be appropriate to tailor waste minimisation communication campaigns and waste reduction initiatives to an older age group.

Another issue that may emerge as the population ages is an increase in healthcare-related waste generated in the home as healthcare services are increasingly moved to home based healthcare.

#### 4.3.1 Future demand

The aim of waste planning is to achieve effective and efficient waste management and minimisation. The following 'gaps' have been identified:

- significant gaps in waste data for all waste flows, which makes it hard for Council to plan for future demand
- difficulty obtaining waste data from private operators in the district
- a low level of operational capacity both within council and in the community. Operational capacity is the capacity or knowledge required to implement community waste initiatives such as a community resource recovery centre
- a lack of facilities for the disposal of household hazardous waste including used oil
- potential gaps in information available for farms and elderly residents to enable them to minimise waste
- a potential future gap in resource recovery infrastructure in the Cambridge area.

## 4.4 What do we plan to do in the next six years

Over the term of the next six year Waste Management and Minimisation Plan we aim to work towards our vision of *Building zero waste and sustainable communities* by meeting the first four goals of our Waste Strategy.

Our vision represents what we want to achieve in the long-term.

Our goals represent what we need to achieve in the medium-term to achieve our vision.

To help us achieve our goals we have 11 objectives, and each activity we undertake will meet one or more of these objectives.

Our objectives represent our short-term outcomes - what we need to achieve in the short-term to achieve our goals.

Goals	
G1	Reduced waste and increased resource recovery
G2	Collect waste information for informed decision making, in line with the National Waste Data Framework
G3	Connect with our community by developing collaborative and enduring partnerships with key stakeholders
G4	Progressive and effective waste minimisation and management services and facilities, without unreasonably burdening future ratepayers

Table 7 Goals

Objectives	
Ob1	reduce the total quantity of waste disposed of to landfill
Ob2	increase resource recovery
Ob3	increased or mandatory product stewardship and a bottle deposit scheme
Ob4	ensure access to information on waste from both council and private waste collectors and facilities, in line with the National Waste Data Framework
Ob5	ensure a household refuse and recycling composition analysis is undertaken at least every three years, for both council and private kerbside services
Ob6	investigate and, where appropriate, develop partnerships, joint working and co-operation with territorial and regional councils, including shared services
Ob7	develop collaborative and enduring partnerships with community stakeholders in order to developing



	community capacity for resource recovery
Ob8	work with farms and farming organisations to achieve waste reduction
Ob9	work with local businesses and business organisations to achieve waste reduction at a local level
Ob10	investigate and develop resilient access to waste infrastructure and processing facilities within the Waikato region that minimise the impact of external market fluctuations and provide sustainable waste services
Ob11	establish community led resource recovery facilities (where appropriate)

*Table 8 Objectives*

A full time Waste Minimisation Officer will be engaged to co-ordinate work towards our goals and objectives, and the following activities.

## What we will do

Our vision, goals and key actions 2017-2023



# Goal 1: Reduced waste and increased resource recovery

## Activity 1

Continue existing kerbside recycling



Kerbside recycling will continue to be provided to households and schools in the District.

Kerbside recycling will continue to be funded via targeted rates.

We have a target of a 25% increase in resource recovery and a 10% reduction in waste to landfill by 2023.

## Activity 4

Investigate options to support businesses to reduce waste & increase recycling



Projects which support business to reduce waste and increase recycling will be investigated and where appropriate, implemented.

Business recycling initiatives will be funded by the Waste Levy.

We have a target of a 25% increase in resource recovery by 2023.

## Activity 2

Continue providing litter bins and collecting illegal dumping



Litter and illegal dumping services will continue.

Education campaigns to reduce litter and illegal dumping will also continue. These may be provided jointly with other councils in the region to increase their effectiveness.

Litter and illegal dumping will continue to be funded via general rates.

## Activity 3

Advocate for increased producer responsibility, including supporting a national debate around rural waste and agrichemicals; and a bottle deposit scheme



We will continue to call for those who manufacture, sell or use products to be responsible for the end of life of the products.

In particular we join 90% of councils in calling for a bottle deposit scheme to be introduced; and support product stewardship initiatives for rural waste.

Any advocacy activities will be funded from the Waste Levy funding received by WDC, and approved on a case by case basis as opportunities arise.



## Goal 2: Collect waste information for informed decision making

### Activity 5

#### Update the Waste Bylaw



Councils in the Waikato and Bay of Plenty have jointly developed a regionally consistent draft Waste Bylaw clauses.

A regionally consistent Bylaw is important. If Waipa has weaker waste bylaws than surrounding Councils, it may become a dumping ground for waste like used tyres.

We will introduce the new, regional Waste Bylaw within two years, funded by the Waste Levy.

### Activity 6

#### Introduce a licensing system for waste operators by 2020



By licensing all waste operators and waste facilities in the District, we will obtain data and information on waste flows, and minimise problems that may arise with private collections. Most Councils are introducing a similar licensing system, and regional alignment will make it easier for waste operators.

We will collect the same information as other councils, in the same format.

Implementation of the waste licencing system will be funded by the Waste Levy.

There may be ongoing costs associated with managing the system which will be absorbed into operational expenditure funded by rates. Working collaboratively with other Councils in the region may provide opportunities to share the costs.

### Activity 7

#### Complete compositional waste audits every three years



Waste audits are where randomly choose households to weigh their refuse and recycling. This lets us know, on average, how much of each type of waste households are putting out.

Waste audits help us to know the types of material in waste streams, and what services or education may be needed.

Regular compositional audits will be funded by the Waste Levy and provide information that will help us make better decisions about waste.

# Goal 3: Connect with our community by developing collaborative partnerships

## Activity 8

### Establish a Community Waste Forum



Our communities are eager to help increase resource recovery, but they don't always know how to help.

We will establish a Community Waste Forum which will meet quarterly commencing by July 2018 to discuss waste issues and ideas for resource recovery.

The Forum will be funded by the Waste Levy.

## Activity 11

### Continue the Waste Minimisation Community Fund



We will continue to provide a contestable Waste Minimisation Community Fund. In some years, this fund may be targeted to support other projects i.e. we will call for applications that address a particular waste stream or part of the community e.g. farms or the elderly.

The Waste Minimisation Community Fund will continue to be funded by the Waste Levy.

## Activity 9

### Investigate and, where appropriate, develop partnerships, joint working and co-operation with other councils



Councils throughout the Waikato and Bay of Plenty regions provide similar services, and need access to similar infrastructure. Where it makes sense to do, we will work jointly to share the costs of investigations, infrastructure development or services. This may include joint funding of a regional coordinator.

## Activity 12

### Promote composting and other ways to reduce food waste



Food waste is a significant part of the waste that is being sent to landfill. We will promote composting and other methods of reducing food waste to reduce waste being sent to landfill.

Food waste reduction promotion and education will be funded by the Waste Levy.

## Activity 10

### Continue to support waste education including working with farms and businesses to achieve waste reduction



We will continue to support waste education activities such as EnviroSchools and the regional waste exchange.

We will also develop targeted education and support campaigns for farms and other businesses; and the elderly.

For farms: We will work alongside farms and farming organisations to identify ways we can assist farms to manage their waste, and aim to implement a targeted education campaign for farms by 2020.

For businesses: We plan to introduce education and support programs to reduce business waste and increase recycling for at least 10 businesses annually.

Waste Education will be funded via the Waste Levy.

## Goal 4: Effective waste services and facilities

### Activity 13

Investigate and develop resilient access to waste infrastructure and processing facilities within the Waikato region that minimise the impact of external market fluctuations and provide sustainable waste services



While we have access to waste and recycling facilities, the distance to these facilities and the risk of market fluctuations can affect the cost of recycling.

By 2020, we will investigate our access to infrastructure and identify gaps and risks. Based on this work we will identify what actions can reduce risk and make access to infrastructure more resilient.

This may be undertaken jointly with other councils, and will be funded by Waste Levy funding.

Social procurement methods will also be investigated and, if appropriate, implemented for waste services and facilities.

### Activity 14

Resource recovery facilities are investigated and developed (pending feasibility study).



We will investigate the best way to increase resource recovery within the District, including options for community led initiatives, partnerships and extensions to existing services.

For all options, increasing community capacity will be valuable, so we will initially work to develop operational capacity within the community around resource recovery.

As part of this initiative, the subsidy of the Cambridge RTS will be reviewed as and when new facilities as developed.

Any resource recovery centre will be primarily funded via the Waste Levy. However other funding sources include central government, or community and industry partnerships.

More detail on a potential CRC, and associated costs, is available in section 4.5 of the 2017 Waste Assessment .

### Activity 15

Improved access to hazardous waste disposal



Waipa residents do not currently have good access to disposal opportunities for household hazardous waste.

We plan to improve provision of household hazardous waste services.

In addition, home healthcare is increasing and kerbside services are not appropriate for healthcare waste. We will work with DHB's, and regional healthcare authorities to find solutions to this growing problem.

These activities will be funded by the Waste Levy.



## PART 5 - HOW WILL WE FUND OUR ACTIVITIES

### 5.1.1 Funding WMMP activities

There are a range of options available to fund the activities set out in this plan. These include:

Funding option	Description
Waste Minimisation Fund	<p>Council receives, based on population, a share of national waste levy funds from the Ministry for the Environment. It is estimated that at the current rate of \$10 per tonne our council's total share of waste levy funding will be approximately \$178,000 per annum. The waste levy funding received by Council has not been fully spent and approximately \$500,000 has accumulated. This provides an opportunity to invest in infrastructure and subsidise the provision of ongoing services that will promote or achieve waste minimisation.</p> <p>The WMA requires that all waste levy funding received by Councils must be spent on matters to promote waste minimisation and be in accordance with their WMMP.</p> <p>Waste levy funds can be spent on ongoing waste minimisation services, new services, or an expansion of existing services. The funding can be used on education and communication, services, policy research and reporting, to provide grants, to support contract costs, or as infrastructure capital.</p> <p>We intend to use our waste levy funds for a range of waste minimisation activities and services as set out in the Action Plan – including participating in regional, sub-regional and national activities.</p> <p>In addition, we may make an application for contestable waste levy funds from the Waste Minimisation Fund, either separately, with other Councils, or with another party. The Waste Minimisation Fund provides additional waste levy funds for waste minimisation activities.</p>
Uniform Annual General Charge (UAGC)	A charge that is paid by all ratepayers
User Charges	WDC does not have any waste related user charges
Targeted rates	A charge applied to those properties receiving a council recycling service
Sale of recovered materials	The sale of recovered materials can be used to help offset the cost of some initiatives
Private sector funding	The private sector may fund or supply certain waste minimisation activities, for example to generate income from the sale of recovered materials etc. Council may work with private sector service providers where this will assist in achieving the WMMP goals.

*Table 9 Funding options for activities*

Funding considerations take into account a number factors including:

- prioritising harmful wastes
- waste minimisation and reduction of residual waste to landfill
- the impact of full-cost pricing i.e. 'polluter pays'
- public good vs private good components of a particular service
- the principle that 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 to ensure that price incentives cover all costs

- protection of public health
- affordability; and
- cost effectiveness.

Budgets to deliver the activities set out in this plan will be developed through our Annual Plan and Long Term Plan processes.

We will aim to implement as many of the activities as possible while controlling costs and, where possible, taking advantage of cost savings and efficiencies.

Some efficiencies may be obtained through joint working (with other councils, and community or business partners) and the targeted application of waste levy money.

We are confident the increased levels of waste minimisation set out in this WMMP can be achieved without overall additional increases to the average household cost.

#### 5.1.2 Funding regional, sub-regional and national activities

There are a range of waste issues that would benefit from collaboration on at a sub-regional, regional or national level.

WDC will provide funding towards agreed regional projects through the Annual and Long Term Plans on a case by case basis. To fund regional research and initiatives WDC will allocate a budget in agreement with other councils in the region. This will be funded from the waste levy funding.

There is also opportunity to leverage regional collaboration to access the contestable Waste Minimisation Fund (WMF) for larger capital projects that will support the wider region/s.

Delivery of each regional project and management of associated regional project budgets will be the responsibility of Waikato Regional Council or a Project Lead Council, who will have agreed guidelines for oversight of the project and responsibility for spending. Projects will be chosen based on agreed criteria for funding of regional initiatives.

#### 5.1.3 Funding community activities

Councils have the ability under the WMA (s47) to provide grants and advances of money to any

person, organisation or group for the purposes of promoting or achieving waste management and minimisation, as long as this is authorised by the WMMP.

We intend to continue our Waste Minimisation Community Grant program where businesses, community groups and others can apply for funding from council for projects which align with and further the objectives of this WMMP.

The Waste Minimisation Community Grant will continue to provide a \$50,000 pool each year.

Examples of projects already funded by the Waste Minimisation Community Grant include:

- Waste Education NZ (to facilitate workshops for composting and worm farms, \$9,040)
- The Nappy Lady (to run workshops on reusable nappies, \$6,358)
- Te Awamutu Chamber of Commerce (to establish battery recycling boxes, provide waste audits, \$5,850)
- South Waikato Achievement Trust (to support an electronic waste collection point in Te Awamutu, \$4,550)
- Main Stream Green (to present waste minimisation experiences at Waipa community events \$2,200)
- Pare Kore Marae (to provide resource recovery at the Tri-Maori Triathlon, \$1,980)
- Environmental Education for Resource Sustainability (to continue the Paper4trees programme, \$1,657.86)
- Maungatautari Ecological Island Trust (to purchase organic waste bins, \$147.40).

In order to encourage key areas identified in this WMMP, future Community Grant rounds may be targeted to projects which meet specific criteria such as:

- rural or farm waste
- the elderly
- business recycling
- home composting / food waste
- other education such as reusable nappies and school education programmes
- community resource recovery projects
- advocacy for Product Stewardship.

## PART 6 - HOW WILL WE MONITOR OUR ACTIVITIES?

A Solid Waste Committee, made up of three councillors and the waste officer, will be established to oversee the development and implementation of the WMMP. The Solid Waste Committee will meet quarterly, or more frequently as required, to review progress and make decisions in respect to the WMMP and its implementation.

As the Solid Waste Committee will not have delegations in respect of budgets, activities with

financial implications will be referred to a Council Committee.

A set of waste minimisation targets are shown in below, with the metrics used to monitor progress. Each of these activities and targets will be reported against in terms of progress to the Solid Waste Committee:

Target		Metric
1	A reduction in the total quantity of general waste sent to landfills from 500 kg per person per annum to 450 kg per person by 2023; and an increase in kerbside recycling of 10% relative to 2017 levels.	Progress monitored via waste data provided via waste licensing system
2	A 25% increase in the total quantity of recyclable and reusable material collected at transfer stations and other resource recovery facilities within the Waipa District by 2023 (excluding greenwaste), compared to 2017 levels set out in the Waste Assessment	Progress monitored via waste data provided via waste licensing system, and compositional audit data
3	By 2020, introduce a waste licensing system which includes a mechanism to collect regionally consistent waste information from waste collectors and facilities operating within the Waipa district	Achieved / Not Achieved
4	Council receives information on the compositional analysis of kerbside refuse and recycling, including both council and private services, every three years	Achieved / Not Achieved
5	WDC to participate in partnerships, joint-working or shared service project projects that deliver local and regional benefit, by 2023 e.g. regionally consistent education programmes, infrastructure development or advocacy projects	Achieved / Not Achieved
6	By July 2018, establish a quarterly forum where waste and resource recovery issues can be discussed with community groups involved in resource recovery; and provide advisory services for groups wanting to establish community resource recovery (CRC) facilities, to assist them to develop skills, knowledge and operational capacity sufficient to manage a CRC	Achieved / Not Achieved
7	Targeted waste education messaging is delivered for the farming sector by 2020, potentially by working with other councils or product stewardship organisations	Achieved / Not Achieved
8	A business waste reduction support program is delivered to up to 10 businesses in the district annually	Achieved / Not Achieved
9	Investigate our access to infrastructure and identify gaps and risks by 2020. Based on this work we will identify what activities can reduce risk and make access to infrastructure more resilient	Achieved / Not Achieved
10	Resource recovery facilities are investigated and developed (pending feasibility study)	Achieved / Not Achieved

Table 10 Targets and Metrics

## PART 7 - ACTION PLAN

Reference & Title	Description	New or existing action	Timeframe	Funding	Strategic Goals & Hierarchy Position	Contribution to Targets
<b>A1: Recycling</b>	Continue existing kerbside recycling	Existing action & new action	By 2023	Targeted rate Waste Levy	G1, Ob2 Recover	T1, T2
<b>A2: Litter / illegal dumping</b>	Continue providing litter bins and collecting illegal dumping; and associated litter reduction campaigns	Existing	Ongoing	General rates	G1, Ob1 Reduce	T1
<b>A3: Advocate for producer responsibility</b>	Use Council influence to advocate for increased producer responsibility, including supporting a national debate around rural waste and agrichemicals; and a bottle deposit scheme.	Existing	Ongoing	Waste Levy	G1, Ob1, Ob2 Reduce, Recover	T1; T2
<b>A4: Business recycling</b>	Investigate options to support businesses to increase recycling	New	By 2020	Waste Levy	G1, Ob1, Ob2 Reduce, Recover	T1; T2
<b>A5: Waste Bylaw</b>	Update the Waste Bylaw for regional consistency	New	By 2020	Waste Levy	G2, Ob4	T3
<b>A6: Licencing</b>	Introduce a licensing system for waste operators	New	By 2020	Waste Levy and General rates	G2, Ob4	T3
<b>A7: Waste Audits</b>	Complete compositional waste audits every three years	New	By 2020	Waste Levy	G2, Ob5	T4
<b>A8: Waste Forum</b>	Establish a Community Waste Forum	New	By 2018	Waste Levy	G3, Ob7	T6
<b>A9: Collaboration</b>	Develop partnerships, joint working and co-operation with other councils, industry and the community	Existing	Ongoing	Waste Levy	G3, Ob6	T5

<b>A10: Waste Education</b>	Continue to support waste education activities, and expand these to include farms and businesses	Existing, expanded to new areas	By 2020	Waste Levy	G1, G2, G3, Ob1, Ob2, Ob8, Ob9 Reduce, Reuse, Recover	T1,T2, T7, T8
<b>A11: Community Fund</b>	Continue the Waste Minimisation Community Fund	Existing	Ongoing	Waste Levy	G1, G2, G3, Ob1, Ob2, Ob7 Reduce, Reuse, Recover	T1, T2
<b>A12: Food Waste</b>	Promote composting and other ways to reduce food waste	New	By 2023	Waste Levy	G1, G2, G3, Ob1, Ob2, Ob7 Reduce, Reuse	T1, T2, T7, T8
<b>A13: Infrastructure</b>	Investigate and develop resilient access to waste infrastructure and processing facilities within the Waikato region	New	By 202	Waste Levy	G2, G3, G4, Ob2, Ob6, Ob10 Recover	T2, T9
<b>A14: Community Resource recovery</b>	Resource recovery facilities are investigated and developed (pending feasibility study)	New	By 2023	Waste Levy  In partnership with other funding sources TBC	G2, G3, G4, Ob2, Ob6, Ob11 Reuse, Recover	T2, T10
<b>A15: Hazardous Waste</b>	Improved access to hazardous waste disposal	New	By 2019	Waste levy	G4, G1, Ob2, Ob10 Recover	T2,T9

Table 11 Action Plan



## PART 8 - SUPPORTING INFORMATION

### 8.1 Appendix 1 Glossary of terms

See Waste Assessment – Appendix 2

### 8.2 Appendix 2 Summary of 2017-2023 WMMP – goals, objectives and targets

Summary of 2017-2023 WMMP – goals, objectives and targets					
Goal	Code	Objective	Code	Target	
<b>1 Reduced waste and increased resource recovery</b>	CO1	Reduce the total quantity of waste disposed of to landfill	T1	A reduction in the total quantity of general waste sent to landfills from 500 kg per person per annum to 450 kg per person by 2023 (10% reduction); and a 10% increase in kerbside recycling relative to 2017 levels.	
	CO2	Increased resource recovery	T2	A 25% increase in the total quantity of recyclable and reusable material collected at transfer stations and other resource recovery facilities within the Waipa district by 2023 (excluding greenwaste), compared to 2017 levels set out in the 2017 Waste Assessment	
	CO3	Increased or mandatory product stewardship and a bottle deposit scheme			
<b>2 Collect waste information for informed decision making, in line with the National Waste Data Framework</b>	CO4	Ensure access to information on waste from both council and private waste collectors and facilities, in line with the National Waste Data Framework	T3	By 2020, introduce a waste licensing system which includes a mechanism to collect regionally consistent waste information from waste collectors and facilities operating within the Waipa district	
	CO5	Ensure a household refuse and recycling composition analysis is undertaken at least every three years, for both council and private kerbside services	T4	Council receives information on the compositional analysis of kerbside refuse and recycling, including both council and private services, every three years	

3	<b>Connect with our community by developing collaborative and enduring partnerships with key stakeholders</b>	CO6	Investigate and, where appropriate, develop partnerships, joint working and co-operation with territorial and regional councils, including shared services	T5	WDC to participate in at least two partnerships, joint-working or shared service project projects that deliver local and regional benefit, by 2023 e.g. regionally consistent education programmes, infrastructure development or advocacy projects
		CO7	Develop collaborative and enduring partnerships with community stakeholders in order to developing community capacity for resource recovery	T6	By July 2018, establish a quarterly forum where waste and resource recovery issues can be discussed with community groups involved in resource recovery; and provide advisory services for groups wanting to establish community resource recovery (CRC) facilities, to assist them to develop skills, knowledge and operational capacity sufficient to manage a CRC
		CO8	Work with farms and farming organisations to achieve waste reduction	T7	Targeted waste education messaging is delivered for the farming sector by 2020, potentially by working with other councils
		CO9	Work with local businesses and business organisations to achieve waste reduction at a local level	T8	A business waste reduction support program is delivered to 10 businesses in the district annually
4	<b>Progressive and effective waste minimisation and management services and facilities, without unreasonably burdening future ratepayers</b>	CO10	Investigate and develop resilient access to waste infrastructure and processing facilities within the Waikato region that minimise the impact of external market fluctuations and provide sustainable waste services	T9	Investigate our access to infrastructure and identify gaps and risks by 2020. Based on this work we will identify what activities can reduce risk and make access to infrastructure more resilient.
		CO11	Establish community led resource recovery facilities (where appropriate)	T10	Resource recovery facilities are investigated and developed (pending feasibility study)

Table 12 Summary of Vision, Goals, Objectives and Targets

## 8.3 Appendix 3 Waste Assessment



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