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PREFACE

The information published in this Plan has been prepared in good faith. 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 Waikato 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.



MAYOR'S MESSAGE

It gives me great pleasure to sign off this Waste Management and Minimisation Plan (WMMP) for the next six years. With consultation complete, changes made following submissions and Council's adoption, it is time to begin implementing the agreed actions in the plan.

In some cases, this will mean the community will be heavily involved, in other cases actions may be the responsibility of the council or will be directed under legislation.

Waikato District Council is committed to protecting communities and the environment in our district for future generations. We are concerned that the increasing amount of waste going to landfill is a growing challenge. So minimising waste is critical. It is with this in mind that we have set targets and clear objectives to help achieve our vision of 'Zero waste and resource recovery are an integral part of our community'.

The purpose of this WMMP 2018 -2024 is to set out a vision, targets and actions to guide us in a direction that will achieve that vision. Our new plan identifies the need for additional resource recovery, as well as the need for more improved data collection, but most importantly working in a more collaborative meaningful way with Tangata Whenua and community to achieve our vision. To help us achieve a reduction in waste to landfill, we depend on collaboration with our communities, industry and central government.

As the Council signs off on this waste plan, the landscape of waste is changing. China has signalled strongly that it is imposing restrictions on a number of waste products that were previously sent to market there, from all over the world.

There is a multitude of community campaigns across New Zealand for single-use plastic legislation and an increasing interest around container deposit legislation.

While all this creates challenges with our business as usual activities, it is also makes for a very interesting waste space that can present many opportunities that would help to reduce and divert waste.



Allan Sanson Waikato District Council Mayor

EXECUTIVE SUMMARY

Waikato District Council's first Waste Management and Minimisation Plan (WMMP) was adopted in 2012, and most of the activities from the 2012-2018 WMMP were completed.

However, the District has seen an increase in waste to landfill from all sources (council and private services combined).

Factors contributing to this increase include:

- an improved understanding of waste flows within the district.
- increased availability of solid waste data and changes in methodology around data collection.

Changes to data collection and methodology continue to improve as national industry standards (the Waste Data Framework) are developed and adopted, ensuring that waste data is collected consistently across the country. This will allow better analysis of local, regional and national trends.

Based on information provided by waste operators and facilities in the District, as well as desk-top analysis of national information, the Waikato District generates an estimated 235,844 tonnes of waste each year (including on-farm waste).

Of this, 71,000 tonnes are diverted (to recycling or composting) and 112,662 tonnes is farm waste disposed of via burning, burial or stock-piling on-farm. The remaining 52,182 tonnes of waste generated are sent to landfill. This equates to around 0.75 tonnes (750 kg) of waste to landfill per person per year.

In comparison to the 2012 WMMP, refuse volumes appear to have increased by 47% since 2012 – although this is difficult to accurately gauge due to the changes in data collection methodology associated with the implementation of the Waste Data Framework.

Our improved understanding of waste allows us to create a new baseline of waste flows, based on information in this WMMP. We will use this to assess the effectiveness of future waste minimisation initiatives.

The Waikato District Council 2018 WMMP intends to focus on the avoidance, reduction and minimisation of waste, and we will make use of opportunities created from resource recovery.

This WMMP sets out Goals, Objectives and Targets to guide us towards waste avoidance, reduction and recovery. Twenty-one activities are also detailed, and will be carried forward into our Long Term and Annual Plans to ensure the resourcing is available to deliver on our plan.

As well as continuing kerbside and other council services (such as litter and illegal dumping collections), proposed activities include:

- a review of waste services and behaviour change programmes to bring them into alignment with the WMMP (including, but not limited to, contracting of solid waste services, kerbside refuse service, inorganic collection, food waste and drop off collections)
- the development of new recycling centres
- the introduction of a Solid Waste Bylaw and a waste operator licensing system
- improved mechanisms for the collection of waste information
- to work closely with Tangata Whenua and other partners to achieve the outcomes in the WMMP
- greater co-operation with other councils in the region, community groups and the private sector
- advocating for greater Central Government leadership on waste issues such as the introduction of mandatory product stewardship and a container deposit scheme

WAIKATO DISTRICT WASTE BREAKDOWN





71,000 TONNES

are diverted to recyclir or composting



TONNES

of farm waste disposed via burning, burial or stock-piling



52,182 TONNES

of waste generated sent to landfill



per person

per year

PART A: MANAGING OUR WASTE

1.0 Introduction

This Waste Management and Minimisation Plan (WMMP) sets out how Waikato District Council intends to manage the community's waste. It has been prepared in accordance with the requirements of the Waste Minimisation Act 2008.

The 2012-2018 Waikato District Council WMMP was the first plan developed under the Waste Minimisation Act 2008 and a comparison between 2012 and 2017 suggests moderate progress has been made against the actions set out in the WMMP, but that volumes of waste to landfill have risen. Information in this WMMP will be taken as the new baseline which we will use to assess the effectiveness of future waste minimisation activities.

Indications are that per capita waste to landfill volumes have increased in the Waikato District by approximately 47% compared to 2012, while recyclable material recovered appears to have increased by approximately 67%. New information available in 2017 also suggests a high volume of rural waste is also being generated and disposed of on-farm in the region.



The high rate of increase in waste per capita is due to:

- changes in the way we collect information about waste. We now collect more information about more types of waste, from more sources than in 2012.
- private collectors of waste are less focused on reducing waste to landfill than council collection. Therefore, while council has a focus on reducing waste to landfill, many waste operators do not. As a result, waste to landfill across the whole of the District has increased.

The increase in recyclable material is likely to be a result of a combination of low estimates in 2012 and a genuine increase in recyclable recovery as kerbside recycling has expanded, markets have opened and private operators have moved to exploit these opportunities.

I.I Why do we need a waste plan?

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.

This WMMP sets the priorities and strategic framework for managing waste in the Waikato District. Once the plan is adopted, the actions will be carried forward into the Long Term and Annual Plan process to ensure the resourcing is available to deliver the plan's goals and objectives.

1.2 What does a WMMP have to contain?

The plan must meet requirements set out in the Waste Minimisation Act, including to:

- consider the 'Waste Hierarchy' (see Figure 1)
- 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' (see appendix A.3.0)
- follow the Special Consultative Procedure set out in the Local Government Act (2002).

This WMMP covers all solid waste and diverted material in the District, whether managed by council or not.

Liquid and gaseous wastes are not included except where they interact with solid waste systems. This includes hazardous wastes like chemicals and the outputs from wastewater treatment plants.

This does not necessarily mean that council will have direct involvement in the management of all waste — but there is a responsibility for council to at least consider all waste in the district, and to suggest areas where other groups, such as businesses or householders, could take action themselves.

Waste

liversion

REDUCTION

Lessening waste generation

REUSE

Further using of products in their existing form for their original purpose or a similar purpose

RECYCLE

Reprocessing waste materials to produce new products

RECOVERY

Extraction of materials or energy from waste for further use or processing, and includes, but is not limited to, making materials into compost

TREATMENT

Subjecting waste to any physical, biological or chemical process to the change the volume or character of that waste so that it may be disposed of with no, or reduced, significant adverse effect on the environment.

DISPOSAL

Final deposit of waste on land set apart for the purpose

2.0 Vision, objectives and targets

2.1 What does 'Zero Waste' mean?

'Zero Waste' is a philosophy encouraging the redesign of products so they can be reused, repaired and recycled.

Zero waste encourages designing and managing products to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. The goal is for no waste to be sent to landfills or incinerators but this is not a target.

It is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to copy cycles that can be seen in nature, where all discarded materials are designed to become resources for others to use¹.

2.2 Our Vision

ZERO WASTE AND RESOURCE RECOVERY ARE AN INTEGRAL PART OF OUR COMMUNITY

2.3 Goals

- I. our waste minimisation and management are best practice, and manage social, cultural, spiritual, economic, health and environmental impacts of waste
- 2. a reduced quantity of material entering the waste stream, increased resource recovery
- 3. our nationally recognised, innovative local resource recovery industry is growing
- 4. our collaborative partnerships with key stakeholders are growing our "zero-waste communities"
- 5. access to good information about waste in the District, in alignment with the National Waste Data Framework

2.4 Objectives

Our vision will be realised through the achievement of a set of supporting objectives set out in Table I below. We will also work with the private and community sectors, central government and territorial and regional councils to achieve regional objectives.

СО	UNCIL OBJECTIVES
_	Waste management practices manage social, cultural, spiritual, economic, health and environmental impacts of waste
2	Waste diversion is increasing and waste to landfill is decreasing including Council's waste generating activities.
3	A commitment to work with Tangata Whenua to achieve the waste minimisation outcomes set out in the WMMP.
4	Our communities are actively engaging in waste avoidance and minimisation, and becoming "zero-waste communities"
5	Partnerships with others to achieve efficient and sustainable waste minimisation and management, including joint working and co-operation with territorial and regional councils, and central government
6	Contributing to the national discussion advocating for effective product stewardship and a bottle deposit scheme

Table I: Objectives for the 2018-2024 WMMP

2.5 Targets



Table 2: Targets for the 2018 – 2024 WMMP

¹ http://zwia.org/standards/zw-definition/

3.0 What are we going to do?

3.1 Council's intended role

'The Council intends to oversee, facilitate and manage a range of programmes and interventions to achieve effective and efficient waste management and minimisation within the District.

The Council will do this through our internal structures responsible for waste management. We are responsible for a range of contracts, facilities 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 vision, goals, and objectives set out in this plan.

3.2 Proposed activities

Council proposes to address our waste issues through a combination of maintaining many of the existing services, improve some other services to better meet our waste minimisation objectives; and introduce some new initiatives (as funding allows).

Further details on how these methods will be implemented are provided in the Action Plan overleaf.

3.3 Considerations

This Action Plan outlines high level intentions for actions to meet our obligations under the WMA. Further work may be required to determine the costs and feasibility of some projects, which may impact how, when or if they are implemented. Detailed assessments of some actions will be carried out prior to their implementation.

In some instances, the delivery of the actions set out in this Action Plan will depend on the development or amendment of contractual arrangements with providers, or the availability of resources. The nature of these contractual arrangements cannot be pre-empted and may impact the nature, timing or cost of these projects.

Proposed joint working and joint procurement of waste services may lead to efficiencies, allowing us to do more within our budgets. It will be up to each of the councils to determine whether they want to enter into shared service/joint procurement arrangements with any of the other councils.

Therefore, exactly what services are delivered will ultimately depend on the outcomes of the procurement process.

3.4 Action Plan

The following Action Plan sets out how Waikato District Council intends to work towards the vision, goals, and objectives outlined in this WMMP. It aims to set out clear, practical initiatives that the Council will implement, either on our own or jointly. While the action plan forms part of the WMMP it is intended to be regularly updated to reflect current plans and progress.

Under the WMA the plans can be updated without triggering the need for a formal review of the WMMP, as long as the changes are not significant and do not alter the direction and intent of the WMMP. The Waikato District Council commits to reviewing the targets if any changes to legislation affect the plan.



Waikaretu Community beach clean up.

Services Facilities

ΞĒ	ACTIVITIES				TIMEFRAME				NEW OR	POTENTIAL	OBJECTIVES
Я		2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	MET
_	Review funding model for council services to align with waste minimisation activities (including but not limited to contracting of solid waste services, kerbside refuse, inorganic collection, food waste and drop off collections).	Plan	Plan	Implement	Implement				New	Levy, Rates	1,2,3
2	Assess the viability of other areas for kerbside services.	Plan	Implement						New	Rates	1,2,3
κ	Consider increasing the use of a social procurement approach to the procurement of waste services to achieve the objectives and targets of the WMMP.				Ongoing				New	Rates	1,2,3,4
4	Evaluate Raglan food waste service and assess suitability for expansion. Expand if suitable.	Ass	Assess	P	Plan	Implement			New	Levy, Rates (TBC)	1,2,3
5	Continue litter and illegal dumping services, while improving data collection in alignment with the Waste Data Framework.				Ongoing				Existing	Rates	1,2,3
9	Monitor, evaluate and manage council provided services and contractors to ensure they meet contractual obligations.				Ongoing				Existing	Rates	1,2,3
7	Procure council services and waste related contracts as required, ensuring new contracts are in alignment with this WMMP and utilising a social procurement approach.			Plan	Implement				Existing	Rates	1,2,3

∃∃	ACTIVITIES				TIMEFRAME				NEW OR	POTENTIAL	OBJECTIVES
Я		2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	
8	To progress Resource Recovery facilities in Huntly and to consider the development of resource recovery facilities for the Northern part of the district. This will be encouraged through collaboration and partnerships before 2024.		Plan		lmple	nplement			New	Levy, Rates (TBC)	1,2,3,4

Data and Licensing

45					TIMEFRAME				NEW OR	POTENTIAL	OBIECTIVES
В	ACTIVITIES ACTIVITI ACT	2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	' МЕТ
6	Introduce a Solid Waste Bylaw & licensing system for operators and facilities, aligning with the regional template developed by Waikato Regional Council.	Plan	Implement						New	Levy, Rates (TBC)	1,2,3,4
0	D To support the introduction of a Waste Bylaw and licensing system; develop internal waste data collection and monitoring systems to enable waste data management in alignment with the Waste Data Framework. This may require internal changes to council roles and responsibilities to account for licensing management and enforcement as well as implementation of the activities in this WMMP.	Plan	Implement						»» N	Levy, Rates (TBC)	1,2,3,4,5
=	II Undertake Waste Compositional Audit every 3-6 years			Plan & Implement				Plan & Implement	New	Levy	1,2,3,4

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TIVITES				IIMEFRAME				NEW OR	POTENTIAL FINDING	OBJECTIVES
	2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	MET
elop Event Waste Management delines and promote to events in the ict, including mandatory utilisation for its at Council facilities. This may be ertaken in partnership with other olls.	Plan	Implement			Plan	lanning	Implement	Existing	Levy, Rates (TBC)	1,2,3,4,5

Behaviour Change

43	S TIVILES				TIMEFRAME				NEW OR	POTENTIAL	OBJECTIVES
Я	צו	2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	
13	Council will provide quality behaviour change programs focused on waste minimisation, and that support the goals and objectives of this WMMP.				Ongoing				Existing	Levy	1,2,3,4,5

REF

Partnerships

SELENITOR			L	TIMEFRAME				NEW OR	POTENTIAL	OBIECTIVES	Par
ACTIVITIES	2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	МЕТ	tner
Engage in regional cooperation including appointing a Regional Coordinator to assist with joint projects. Each Council would be responsible for own jurisdiction.				Ongoing				Existing	/rev/	1,2,3,4,5,6	rships
Work closely with Tangata Whenua, community groups and private sector to enhance economic development through resource recovery.				Ongoing				Existing	Levy	1,2,3,4	
Work with business, farms, and industry organisations assisting to reduce waste, increase diversion and recycling (potentially as a sub-regional project).			Plan	u	Implement	ment		New	Levy	1,2,3,4	
Identify and support community and business champions in waste reduction and avoidance; including but not limited to initiatives focusing on e-waste and/or construction and demolition waste.				Ongoing				New	Levy	1,2,3,4	

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ACTIVITIES				IIMEFRAME				NEW OR	POTENTIAL FINDING	OBJECTIVES
	2018	2019	2020	2021	2022	2023	2024	EXISTING	MECHANISM	MET
Investigate introducing a Grants scheme (funded through the Waste Levy) for waste minimisation projects - this may be in the form of low interest loans and/or targeted grants.					Plan	Implement		New	/ve/	1,2,3,4

Advocacy

=					TIMEFRAME	111				POTENTIAL	OBIECTIVES	
ВE	R ACTIVITIES	2018	2019	2020	2021	2022	2023	2024	EXISTING	FUNDING MECHANISM	MET	
6	Advocate for effective product stewardship and regulation and support independent organisations advocating for similar outcomes.				Ongoing				» Z	Levy	1,2,3,4,6	,

REF

REF

4

Partnerships

43	ACTIVITIES				TIMEFRAME				NEW OR	POTENTIAL	OBJECTIVES
В		2018	5019	2020	2021	2022	2023	2024	EXISTING		
20	Ensure that services provided by Council are in line with and promote current health and safety guidelines; and meet legislative obligations.				Ongoing				Existing	Levy	1,2,3,4
21	Undertake Waste Assessment and develop and adopt 2024 - 2030 WMMP (by June 2024).						Plan & Implement	ہ ر ment	New	Levy, Rates (TBC)	1,2,3,4
22	Investigate alternate treatments to Council wastewater sludge and other Council's waste generating activities.	Investigate	Plan	Plan		Imple	Implement				1,2,3,4

PART B: THE CHALLENGE - OUR WASTE

The Waikato District generates an estimated 235,844 tonnes of waste each year (including farm waste). Of this approximately 52,182 tonnes are sent to landfill, 71,000 tonnes are diverted (to recycling or composting) and approximately 112,662 tonnes is farm waste disposed of via burning, burial or stock-piling on-farm. This equates to around 0.75 tonnes (750 kg) of waste to landfill per person per year.

Refuse volumes per capita appear to be increasing, with an estimated 47% increase since 2012, despite the implementation of activities set out in the 2012-2018 Waste Management and Minimisation Plan. However, much of this apparent increase will be related to differences in measuring data — as some waste streams were not included in 2012 figures. While 2017 data is still of low quality, it is significantly better than data available in 2012.

3.5 How much waste is disposed of to landfill?

An estimated total of 52,182 tonnes of solid waste was disposed of to landfill from Waikato District in the 2016-17 year. Waste disposed of to landfills comprised 22% of the total, and was equivalent to approximately 0.75 tonne per person.

This excludes waste to non-levied landfills, (as this amount is unknown) and waste disposed of at the privately owned North Waikato landfill at Hampton Downs (as this accepts waste overwhelmingly from outside of the District – with less than 0.4% of waste accepted being sourced within the District).

The reliability of the estimates for different types of waste varies. Some waste to landfill data comes unverified from private waste operators, while other waste data and sludge tonnages have been provided by WDC staff or council contractors.

WASTE DISPOSED OF TO LANDFILL	TONNES	% OF TOTAL WASTE COLLECTED	TONNES/ CAPITA/ ANNUM		
Levied waste to Class I landfills					
Council kerbside refuse	7,522	3.2%	0.11		
General waste to landfill	20,000	8%	0.29		
Special	60	0%	0.00		
Wastewater screenings	24,600	10%	0.35		
Total waste to landfill	52,182	22%	0.75		

Table 4: Estimated waste disposed of to landfill from the Waikato District

Of the general waste to landfill, only 3.2% was related to council-controlled services. Kerbside refuse was 7,522 tonnes in 2016-17, an average of 110kg per capita per annum. As a proportion of total waste to landfill, kerbside refuse is only 14%. The average per capita rubbish generation appears to have been steadily increasing since 2012, from 0.51 to 0.75 t/per capita/ per annum (47% increase).

3.6 How much are we diverting from landfill?

Material that is recovered from landfill and re-used, recycled or composted is called 'diverted material'. An estimated 57% of all waste collected (excluding farm waste) is estimated to be recycled or otherwise diverted - this drops to 30% of all waste if farm waste is included in the total waste generated.

WASTE DIVERTED FROM LANDFILL	TONNES	% OF TOTAL DIVERTED	TONNES/ CAPITA/ ANNUM
Kerbside recycling	3,631	5%	0.0
Other recycling or diversion	65,669	93%	0.94
Composted	1,700	2%	0.02
Total	71,000	100%	1.02

Table 5: Waste diverted from landfill (estimated)

Of the waste diverted from landfill, 5% was from council kerbside services and 92% from private facilities and services. Only 2% was composted in either council or private facilities.

3.7 What difficulties do we face?

The Waste Assessment used as a basis for this WMMP looked across all aspects of waste management in the District and identified the main areas where we could improve our effectiveness and efficiency in managing and minimising waste.



3.7.1 Issues facing the Waikato District

Issues identified during the development of this Waste Assessment are:

- an increasing quantity of waste to landfill generated by the whole District
- the need to ensure effective and affordable provision of waste services
- poor data quality and management
- the potential for greater joint working in Council service delivery and regional and sub-regional collaboration
- the potential for greater community partnership, engagement and understanding of waste issues
- insufficient resource recovery infrastructure in the District to meet future demand and the aims and objectives of this WMMP
- inconsistent infrastructure provision for resource recovery while the Raglan area is well serviced for resource recovery, other areas are lacking access to resource recovery, reuse and repair facilities
- variable commitment to waste minimisation from the private sector, with some private waste operator activities being contrary to waste minimisation objectives.

3.7.2 Regional and sub-regional issues

Other significant issues have been identified where regional or sub-regional co-operation can improve outcomes, for example:

• Data compatibility

There is a need to improve access to, quality and management of data. Accessible, reliable, nationally and regionally consistent data enables better decision making.

• Shared Services / Joint Working

There is likely to be unrealised potential for greater joint working in Council service delivery to create efficiencies in service provision and / or infrastructure development. Key to improving regional and sub-regional collaboration is the development of compatible funding and management models across councils.

Projects may include:

- joint organic waste management measures
- joint rural waste infrastructure
- joint resource recovery infrastructure
- joint litter and illegal dumping management measures or behaviour change programmes

Some waste streams have been identified as national or regional issues which the council has little control over, for example:

Cleanfills

There is a lack of good information about the number of cleanfills and the tonnages and materials they accept. The ability to manage cleanfills better will require changes to legislation.

Producer responsibility

Waste streams such as E-Waste, agricultural chemicals and their containers; and tyres require Central Government to activate product stewardship and other regulatory mechanisms in order to achieve better waste management outcomes.

Council will use its influence, and work collaboratively with regional and national organisations to address these issues.



E-Waste being disassembled.

3.7.3 Long term and global considerations

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

Much of the recycling collected in New Zealand 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 may 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.

3.7.4 National 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:

- I. 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, business and the public to adopt waste management and minimisation principles in a consistent fashion.

a) National Waste Data Framework Project (NWDF)

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 this WMMP aim to align our data collection and use with the NWDF.

b) National Standardisation of Colours for Bins

Until recently, councils and businesses in New Zealand had 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. The Waikato District will align to these standardised colours with council provided services, and we will encourage private collectors to do the same.

3.7.5 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 (SIG's), industry groups, DHBs and the community.

b) Consistent education and 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 10 or 20 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 wheelie bins 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.

3.8 Tangata whenua worldview of waste management

Our tangata whenua seek to ensure that waste management is best practice and manages the social, cultural, spiritual, economic, and environmental effects of waste. This Waste Management and Minimisation Plan is in alignment with this view.

3.9 How do we know all this?

This Waste Management and Minimisation Plan is based on a Waste Assessment (WA) completed in February 2018. 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.

The 2018 Waste Assessment is attached in Appendix 3 and details:

- a description of the collection, recycling, recovery, treatment, and disposal services provided within the district
- a forecast of future demands
- · a statement of options
- a statement of the council's intended role in meeting demands
- a statement of the council'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.

4.0 How well did we do in the last WMMP?

The lack of accurate data from private waste operators makes it difficult to assess the exact quantities of waste – both during the development of the first WMMP and the development of the 2018 WMMP. Indications are that per capita waste to landfill volumes have increased by approximately 47% compared to 2012. While kerbside refuse has decreased in some council areas, the overall trend for councils and private services combined is an increase.

Recyclable material recovered appears to have increased from 0.03 per capita to 0.05-a 67% increase compared to 2012. The increase in recyclable material is likely to be a result of a combination of low estimates in 2012 and a genuine increase in recyclable recovery as markets have opened and private operators have moved to take advantage of these opportunities.

For both waste to landfill and diverted materials, 2012 figures were estimates based on audits and regional reports, whereas 2017 figures are based on data obtained via voluntarily provision from operators. In addition, 2017, some waste streams were included in the assessment, which were not included in 2012.



Food waste diverted from landfill and made into compost.

4.1 Future demand

The factors likely to impact future demand for waste minimisation and management include:

- overall population growth
- · economic activity
- changes in lifestyle and consumption
- changes in waste management approaches

In general, the factors that have the greatest influence on potential demand for waste and resource recovery services are population and household growth, construction and demolition activity, economic growth, and changes in the collection service or recovery of materials. The population of Waikato District is projected to grow 27.5% by 2033, with 22.2% of the population aged over 65 years of age by that time (compared to 12.2% in 2013). This population change, along with expected economic growth, are likely to drive moderate increases in the amount of waste generated, but no dramatic shifts are expected.

The biggest changes in relation to waste demand are likely to come through changes within the waste industry, with economic and policy drivers leading to increased waste diversion and waste minimisation.

In order to achieve effective and efficient waste management and minimisation, an assessment of what could change and what services and facilities would be needed was undertaken as part of the 2017 Waste Assessment.

The following potential issues for the Waikato District were identified:

- insufficient systems in place for obtaining waste data from private operators in the District
- increasing population affecting waste streams and waste reduction messaging
- infrastructure to manage increased quantities and some waste streams may be insufficient to meet future demand
- potential for improved services targeting the rural sector and construction and demolition waste
- opportunities for improved sub-regional, regional and national collaboration to achieve reduction and minimisation of waste
- insufficient leadership from central government to address national waste issues

The Actions in this WMMP are anticipated to address these issues and meet future demand for waste services and facilities, to the extent possible within regional, national, and international influences; and while ensuring effective and efficient use of council funds.

5.0 Funding the plan

The Waste Minimisation Act 2008 (s43) (WMA) requires that the Council includes information about how the implementation of this Plan will be funded, as well as information about any grants made and expenditure of waste levy funds.

5.1 Funding local actions

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

- uniform Annual General Charge (UAGC) a charge that is paid by all ratepayers
- user Charges includes charges for user-pays services as well as transfer station gate fees²
- targeted rates a charge applied to those properties receiving a particular council service
- waste levy funding The Government redistributes funds from the \$10 per tonne waste levy to local authorities on a per capita basis. By law 50% of the money collected through the levy must be returned to councils. This money must be applied to waste minimisation activities
- waste Minimisation Fund Most of the remaining 50% of the levy money collected is redistributed to specific projects approved by the Ministry for the Environment. Anyone can apply to the WMF for funding for projects
- 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 undertake to fund/supply certain waste minimisation activities, for example in order to look to generate income from the sale of recovered materials etc. Council may look to work with private sector service providers where this will assist in achieving the WMMP goals.

Funding considerations take into account a number factors including:

- · prioritising harmful wastes
- waste minimisation and reduction of residual waste to landfill
- full-cost pricing 'polluter pays'
- public good vs. private good component of a particular service
- 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.

The potential sources of funding for each of the actions are noted in the tables on pages 8-9 of the WMMP. Budgets to deliver the activities set out in this plan will be carefully developed through our Annual Plan and Long-Term Plan processes.

The approach taken will be to implement as many of the activities as possible while controlling costs and, where possible, taking advantage of cost savings and efficiencies.

It is anticipated that by setting appropriate user charges, reducing costs through avoided disposal, more efficient service delivery from joint working, and targeted application of waste levymoney, the increased levels of waste minimisation as set out in this WMMP will be able to be achieved without overall additional increases to the average household cost.

5.2 Funding regional, sub-regional and national actions

There are a range of waste issues that make sense to collaborate on at a sub-regional, regional or national level where efficiencies can be made through collaborative funding.

These include:

- regionally aligned data collection and reporting systems
- regionally compatible funding and management models
- · regional consolidation and analysis of data
- delivery of sub regional, regional, national education initiatives
- development of regionally consistent bylaws
- monitoring, reporting, and coordination of regional efforts including the development of future Waste Assessments and WMMPs
- investigation of regional and sub-regional projects e.g. joint organic waste management measures; infrastructure; joint litter & illegal dumping management measures or behaviour change programmes.

Each Council will provide funding towards agreed regional projects through their Annual and Long-Term Plans. 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 an agreed criterion for funding of regional initiatives.

² Most councils in the region own transfer stations and or landfills and are able to set the fees at these facilities and can derive income from these activities. In accordance with s46 (2) of the Act, the Councils can charge fees for a facility that are higher or lower than required to recover the costs to provide the service, providing the incentives or disincentives will promote waste minimisation.

5.3 Waste levy funding

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 \$255,184 per annum. The WMA requires that all waste levy funding received by Councils must be spent on matters to promote waste minimisation and in accordance with their WMMP.

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 promoting and advocating for waste minimisation, policy research and reporting, to provide grants, to support contract costs, or as infrastructure capital.

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.

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.



Te Kauwhata Primary School - feeding the worm farm

6.0 Monitoring evaluating and reporting progress

The Waikato District Council Infrastructure Committee will oversee the development and implementation of the WMMP.

The Committee is scheduled to meet seven times per year, or more frequently as required. Review of progress and decision making in respect to the WMMP and its implementation will be considered by the Committee as required.

Approval for projects with budget implications may be considered at full council meetings. Two of the actions will contribute to the development of a set of standard indicators for reporting purposes.

These are:

- introduce a Solid Waste Bylaw and licensing system for operators and facilities, aligning with the regional template developed by Waikato Regional Council
- introduce a waste data collection and monitoring system for council services that is in alignment with the Waste Data Framework and in alignment with the licensing system Specific metrics for each action will be developed and agreed as part of their implementation.

PART C: SUPPORTING INFORMATION

A.I.0 Glossary of Terms

See Waste Assessment – Appendix 2

A.2.0 Waste Assessment

Attached