

2024

Solid Waste

Waste Management and Minimisation Plan

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ABBREVIATIONS

Bylaw	Waitomo District Council Solid Waste Bylaw 2014
Council	Waitomo District Council
CRS	Container Return Scheme
C&D	Construction and demolition waste
District	Waitomo District
EnviroNZ	EnviroNZ Services Ltd (previously EnviroWaste)
E-waste	Electronic waste
ETS	Emissions Trading Scheme
ICI	Industrial, commercial, institutional waste
MfE	Ministry for the Environment
MOH	Medical Officer of Health
MRF	Materials Recovery Facility
Organic	Food waste, greenwaste, cardboard and paper, some C&D waste
SWAP	Solid Waste Analysis Protocol survey and audit
WA	Waste Assessment 2023
WDL	Waitomo District Landfill (Te Kuiti landfill)
WMA	Waste Minimisation Act 2008
WMMP	Waste Management and Minimisation Plan (this document)
WRC	Waikato Regional Council
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

Why do we need a plan?

This Waste Management and Minimisation Plan (WMMP) sets the direction for our waste activities until 2030. It is focused on accelerating our transition to a circular economy by providing practical, cost-effective and achievable actions that can be implemented at a local level. This WMMP will encourage our community to reduce the amount of waste they generate in the first instance, reuse and recycle as much as they can, repair and refurbish materials for use by others, and to dispose of any residual waste in an environmentally safe manner.

The landfill levy has increased incrementally over the past few years and will increase to \$60 per tonne in 2024. Our increasing revenue from the National Waste Levy Fund provides Council with potential to add services and / or infrastructure that may have previously seemed unaffordable. This WMMP is key to Council being well positioned to strategically spend our increasing levy revenue.

How well are we doing?

- In 2023 our per capita waste to landfill was 528kg, well below the national average of 680kg per capita
- We diverted 2,100 tonnes from landfill, comprised primarily of recycling, greenwaste and concrete
- Nearly 37% of the waste disposed at WDL is from out-of-district
- We received a total 7,810 tonnes of waste at WDL for the 2022-23 year, but 2,400 tonnes of that could be recycled, recovered or composted
- We collected 411 tonnes of waste from kerbside rubbish bags, but half of that was organic waste that could have been composted

We made progress against many of the objectives identified in the WMMP 2018, but we are not diverting as much waste from landfill as we could. This WMMP has a greater focus on waste awareness across all sectors of our community and reflects the national and global movement towards a circular economy. A circular economy (make-use-recycle, *repeat continually*) rather than the existing linear model (take-make-use-dispose) is the cornerstone of MfE waste policy and will make a significant impact towards a sustainable future, creating local job opportunities, providing long term cost savings and reducing the amount of waste generated

Our targets 2024-2030

- 1. Waste education is provided to 50% of primary schools by 2026**
- 2. Waste minimisation information is readily available to 100% of the district's communities by 2028**
- 3. The diversion rate is increased to 50% of the districts waste to landfill by 2030**

This document has three components:

Part A – Strategy

Part A outlines Councils commitment to manage and minimise waste in ways that meet statutory requirements. It identifies the plan’s goals, objectives and targets to provide our community with the services and infrastructure to meet those targets.

Part B – Action Plan

Part B sets out the action plan with detailed information about activities that will be undertaken to achieve the objectives and targets identified in in Part A. The action plan includes proposed timelines, options for funding, and the objective that each action will meet. It forms the roadmap for solid waste activity over the next six years.

Part C – Appendices

Part C includes supporting information, including the Waste Assessment 2023.

Part A STRATEGY

1 INTRODUCTION

Every year the world dumps a massive 2.01 billion tons of waste on the planet, both on land and into the ocean, with developed nations being the worst offenders. The fastest growing regions of sub-Saharan Africa, South Asia and the Middle East and North Africa, are expected to double or triple their waste generation over the next few decades. The World Bank predicts that our global waste will have risen to 3.4 billion tonnes per year by 2050, and nearly half of that will be food waste and greenwaste.

In 2019 the Global Waste Index placed New Zealand in one of the shameful three top spots of nations with the worst waste management. In 2022, we moved to a slightly better ranked position, but as a nation we generated 17 million tonnes of waste, of which 13 million ended up in our landfills. This means we lose the value of over two-thirds of the materials we use.¹

1.1 Purpose of this plan

Managing and minimising waste is a key Council responsibility. Under the Waste Minimisation Act 2008² (WMA), Council is required to regularly review the way we manage our waste services. In the five years since the last WMMP there have been limited measurable changes to our local waste and recycling infrastructure and service delivery. But during that same period, the national and global waste focus has shifted dramatically. This is a combined result of the worldwide pandemic which shocked economies, acknowledgement that we are already in a climate crisis, and an increasing environmental awareness of the impact of our relentless consumerism. We need to be rethinking how we use our resources and how we can move towards a circular economy that helps keep our resources in use, rather than becoming waste.

Development of this WMMP is guided by the WMA and Te rautaki para, Waste Strategy 2023.

¹ Hon David Parker, Minister for the Environment

² New waste legislation is being developed to replace the WMA and the Litter Act, and should be enacted in 2025

Section 44 of the WMA requires us to give regard to the Waste Strategy when preparing our WMMP. This WMMP considers all aspects of waste within the district in line with the order of priority stated in legislation i.e. reduce, reuse, recycle, recover and dispose. Waste is defined as 'waste to landfill', and the term 'diverted materials' refers to materials collected for recycling, recovered for composting, and all other recovered or treated materials that are diverted from landfill.

1.2 Current status of plan

The WMA requires a WMMP to be reviewed every six years. There are three stages to the WMMP review process:

- i. *Solid Waste Analysis Protocol (SWAP) survey and audit:* A SWAP survey provides the comprehensive data (volume, source, composition) that Council needs to make informed choices about future waste issues. The 2023 survey was undertaken by specialists WasteNot Consulting and took place over a week in May 2023, measuring waste at kerbside and at Te Kuiti Transfer Station.
- ii. *Waste Assessment 2023:* The SWAP data is essential to the detailed development of the Waste Assessment, which is a technical document covering the current waste situation, including waste flows, waste infrastructure and services, and forecast of future demand. It develops goals, objectives and targets, and identifies options to meet the forecast demands of the district.
- iii. *Waste Management and Minimisation Plan – this document.* This WMMP is the third stage and is the strategy document which guides all Councils solid waste activities for the next six years. Although it is structured on the Waste Assessment, the political uncertainty around environmental policy following the recent change in central government may impact some of our proposed actions or timelines and we have introduced some flexibility to allow for potential policy changes. The Action Plan provides the detailed information about activities required to achieve the agreed objectives and targets and how they will be carried out and resourced.

This WMMP, once formally adopted, will remain relevant until 2030. However, new waste legislation is expected in 2025 and may include a change to the WMMP review process and frequency of review.

1.3 Review of our previous plan

Councils last WMMP was developed in 2018 and delivered in a combined document with the Solid Waste Asset Management Plan. This had the inadvertent result that the WMMP did not address all the regulatory requirements, and specifically did not contain targets, or an action plan, which has made it difficult to measure progress since 2018.

Two strategic goals were included in the 2018 WMMP, and the first goal of ensuring the safe disposal of waste to protect our natural environment was achieved, without any health and safety breaches or resource consent non-compliance. The second goal of minimising waste disposal within the district was not achieved as waste generated within the district and disposed to landfill increased from 3,829 to 4,917 tonnes, an increase of 28%.

Many of the 2018 objectives are completed on an annual basis and are ongoing. We can improve in the areas of waste education in schools and for our community, diverting more material from household rubbish bags and from our waste to landfill, streamlining our data collection methods, and

collaborating with our neighbouring councils for the provision of some waste services such as kerbside collection.

2 THE WASTE SITUATION

This section outlines key factors that influence the opportunities and challenges which drive this strategy. It also provides a summary of the volume and composition of our waste and diverted materials, and an overview of our existing services and infrastructure. Our district-specific issues are discussed.

2.1 Key factors influencing our current waste situation

Te para rautaki – Waste Strategy

Local governments are encouraged to use the new strategy as a starting point for their next WMMP (this plan), by looking for opportunities to work with other councils on new or expanded services and facilities, supporting local community groups and NGO's with their initiatives to reduce waste, ensuring planning and consenting processes take account of the need for waste management and minimisation, and planning and resourcing the work needed to identify and manage vulnerable landfills and other contaminated sites.

Waste Assessment 2023 (also refer to Attachment 1)

Our Waste Assessment identified the preferred options for managing and minimising our waste. From these options we have developed the specific activities which are required to meet the objectives and targets of this WMMP. We have introduced flexibility into some of our targets to allow for potential environmental policy changes following the recent change in central government. These activities are detailed in the Action Plan in section 11.

Emissions Reduction Plan

Government released the first Emissions Reduction Plan in 2022, which requires actions across every sector of the economy. Changing the way we think about waste, alongside improving our services and infrastructure, will enable communities and businesses to build resilience. At a practical level, there are growing economic opportunities in the repair and refurbish sectors where the benefits flow back into our local community.

In 2019, 94% of waste emissions were biogenic methane, largely generated by the decomposition of organic waste such as food, greenwaste, paper and wood waste. Although waste contributes a small percentage of our total emissions, biogenic methane has a warming effect 28 times greater than carbon dioxide. This WMMP aligns with the objectives of the Emissions Reduction Plan.

The Emissions Reduction Plan includes the following key focus areas for waste:

- Enable households and businesses to reduce organic waste
- Increase the amount of organic waste diverted from landfill
- Reduce and divert construction and demolition waste to beneficial use
- Explore bans or limits to divert more organic waste from landfill
- Increase the capture of gas from landfills
- Improve waste data and prioritise a national licensing scheme

“One third of all food produced globally goes to waste – that’s 1.3 billion tonnes per year”

The global waste and recycling markets

The global recycling market is volatile and is impacted by geopolitical as well as economic factors. The National Sword policy implemented by China in 2018 sent international recycling markets tumbling and was a wakeup call to New Zealand to refocus on our own recycling infrastructure.

New Zealand recyclers can process glass, tyres, cardboard, mixed wastepaper, #1, #2, #5 plastics, and tin / aluminium cans, although some #1 plastics, cardboard, and mixed wastepaper is sent offshore to reputable recyclers in SE Asia and Indonesia.

“Around the world, one million plastic bottles are purchased every minute, and five trillion plastic bags are used worldwide every year.”

UN Environment Programme

The global waste and recycling services market was worth \$60.41 billion in 2022 and is projected to be \$88.01 billion by 2030. The key factors driving the growth are

- Industrialisation of developing economies
- Increased awareness of need for recycling and waste services
- Moving up the waste hierarchy from landfill and energy-from-waste to recycling and circular economy models

Climate change impacts

The Fox River landfill disaster of March 2019 was the result of extreme weather washing out an old dump on the Fox River in the Westland District. Waste was strewn across 21 km of riverbed and 51 km of coastline and took five months and half a million dollars to clean up, plus 3,000 days of Conservation Department staff, military personnel and volunteer time.

The lesson that all councils can take from this is to determine the vulnerability of their closed and operational landfills to extreme weather events such as coastal erosion or river flooding. The consequences would be major, with the release of dissolved nitrogen, heavy metals, glass, plastics, and asbestos leading to potentially cascading consequences for public health, ecosystems and the economy. Research has identified that freshwater flooding of landfills can quadruple toxic metal release. WDC has one closed landfill on a floodplain that could potentially be scoured out by severe floodwaters.

Climate change has accelerated the need to find ways to reduce the generation of waste in the first instance and manage the waste we do create. Avoidance, refusal, reduction and reuse of waste materials will help reduce the pressure on earth’s natural resources while also reducing emissions of greenhouse gases created through mass production and the burning of fossil fuels to create plastic. Yet, the OECD reports that the amount of plastic waste produced globally is on track to almost triple by 2060, with less than a fifth recycled by that time.

“With only 9% of annual plastic waste recycled, the myth that we can recycle our way out of a mounting plastic pollution crisis doesn’t add up”.

Stuart Braun

SWAP audit and survey findings

The SWAP audits identified organic waste as the primary composition of waste to landfill and in the rubbish collected at kerbside. Removing organic waste, including food waste, from the waste stream has multiple benefits, is a component of the Waste Strategy and Emissions Reduction Plan, but has yet to be legislated, and this is reflected in our actions and targets.

The other significant waste types to landfill are timber (component of C&D waste) and rubble & concrete (component of C&D waste). Central government recognise that the benefits of addressing C&D waste from a national viewpoint are preferable to a piecemeal approach by each local authority, and Council is supportive of this approach.

Contracts for our waste and recycling services

Council has contracts with EnviroNZ to provide kerbside rubbish and recycling services, transfer of waste from the rural transfer stations to WDL, collection of recyclables from all transfer stations and transport to Hamilton for processing, plus the operation and maintenance of the WDL. Council is discussing collaboration with Otorohanga District Council for provision of kerbside services which should contribute to a more efficient and economical service for both councils.

Circular economy principles

A circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources.

When a products component materials are reused rather than landfilled, not only is that material no longer waste but new raw materials are not required to be extracted.

MfE 'Why transition to the circular economy'

The circular economy is based on three principles, driven by design:³

- Eliminate waste and pollution
- Circulate products and materials (at their highest value)
- Regenerate nature

³ Ellen MacArthur Foundation



Figure 1: Key concepts in a circular economy, image courtesy of the Ellen MacArthur Foundation

2.2 Summary of the volume and composition of waste and diverted materials

The composition of the wastes being disposed at the WDL is key to identifying which waste streams to target for recycling and diversion.

Waste tonnes and composition - WDL

Tonnage to the landfill has decreased over the past five years primarily because out-of-district wastes from South Waikato and Ruapehu are no longer disposed at the site. Waste flows are price-sensitive and are not constrained by geographic boundaries. Variance in regional gate fees, preferential pricing for commercial operators, acceptance of special wastes influences where waste eventually settles. Similarly, waste disposed at WDL does not represent all waste generated in Waitomo District, nor is it comprised only of waste generated within the district.

In the financial year 2022-23 a total of 7,810 tonnes of waste was received at WDL, with the two main sources being ICI waste (3,133 tonnes) and C&D waste (1,970 tonnes) as shown graphically in Figure 2 below. Of the total disposed, 37% was from out-of-district (2,893 tonnes).

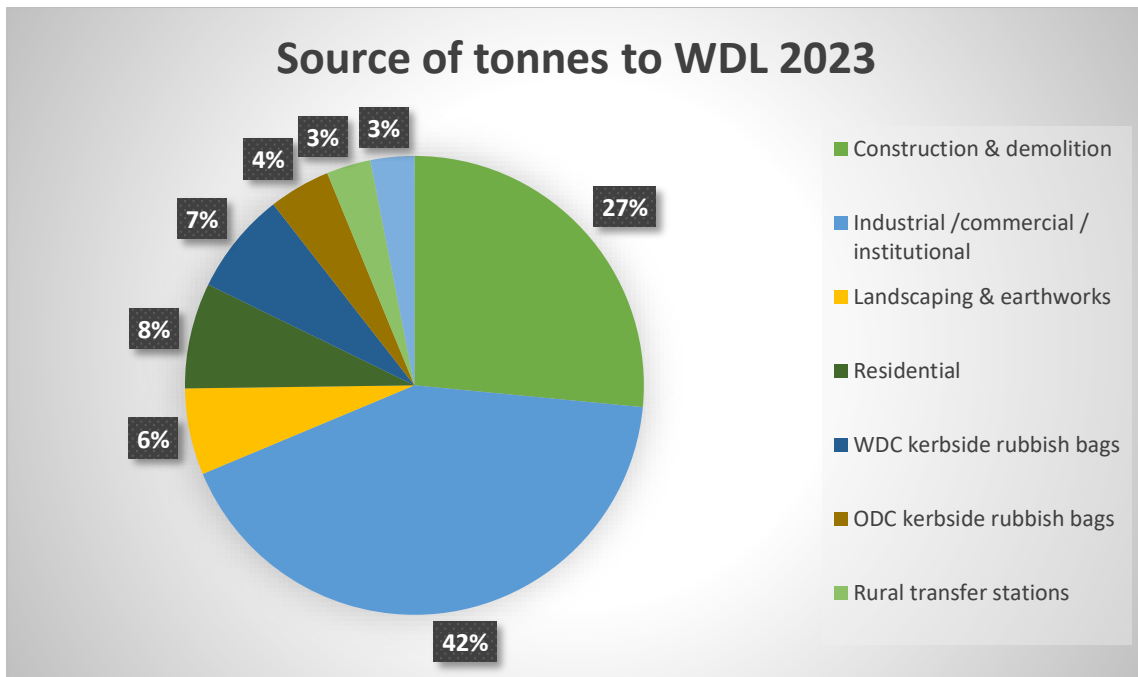


Figure 2: Source of tonnes to landfill (including out-of-district waste)

Of the general waste disposed at WDL, theoretically 43% or 3,378 tonnes per year could be diverted from landfill by recycling, recovery or composting. The two biggest components that could be diverted are food waste (864 tonnes per year) and cleanfill (733 tonnes per year). This must be factored into the future landfill decision, as the volume of divertible material in the out-of-district waste stream, which would be diverted at source, will make a considerable difference to future volumes and revenue for WDL.

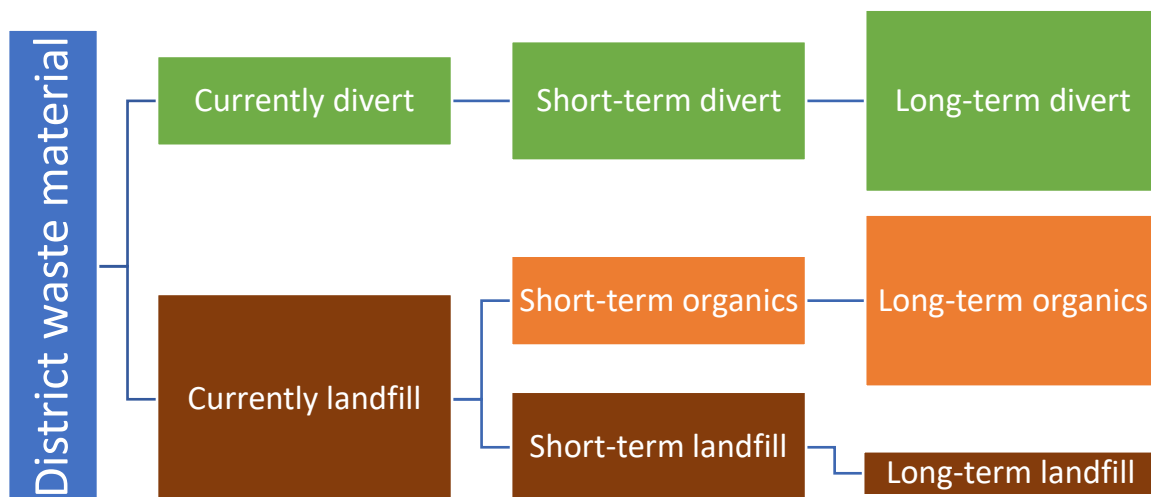


Figure 3: Potential changes to our waste streams over time

As already noted, C&D is a major component of our waste to landfill and the Emissions Reduction Plan aims to support the building and construction sector to minimise waste through research, sector support, investment in resource recovery processing infrastructure and consideration of future regulation for waste separation. This work will be scoped by MfE in collaboration with the Ministry of

Business, Innovation and Employment 'Building for Climate Change' program, and Council may have a supporting role in these national initiatives.

Waste tonnes and composition – kerbside collection

In the year to June 2023, 416 tonnes of kerbside waste were collected, with organic material, primarily kitchen waste, making up 51.1 % of the total for urban and rural collections. Kerbside organics consist of:

Kitchen waste	87%
Greenwaste	5%
Other organics	8%

The next largest components were sanitary paper 14.4%, plastics 10.6% and paper 9.3%. Overall, 59% by weight, of materials in kerbside bags could have been recycled or composted. This equates to 242 tonnes per annum and is a theoretical maximum, as no system can divert all material.

If kitchen waste can be removed from the kerbside waste stream either by kerbside organics collection, or home and community composting, it may be possible to reduce the kerbside rubbish collection to fortnightly as most of the malodorous waste has been removed.

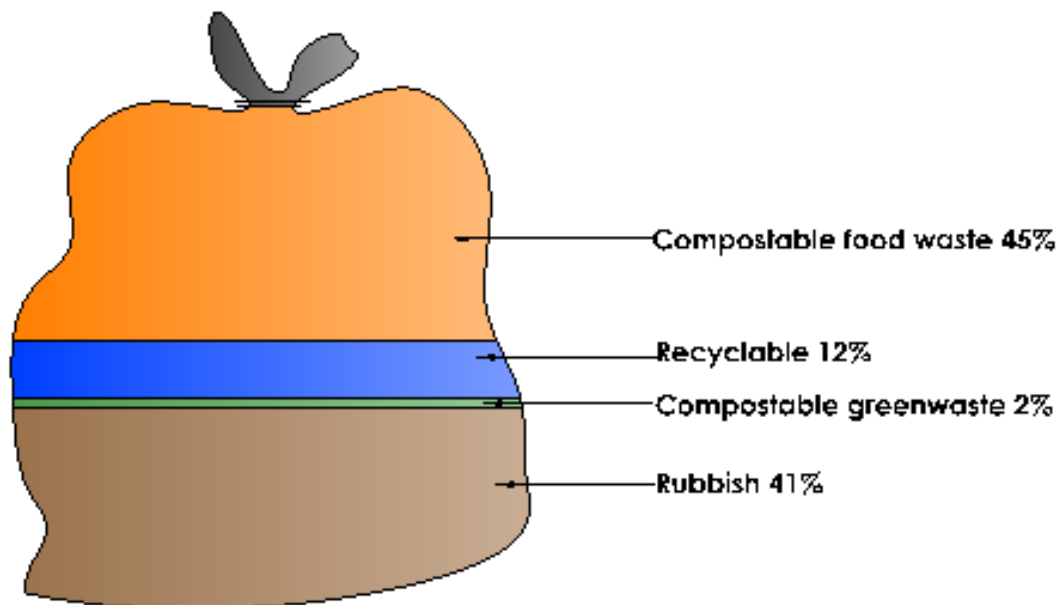


Figure 4: Diversion potential of kerbside rubbish bags

External impacts on kerbside recycling collection

MfE are introducing changes to support a low-emissions, low-waste circular economy, including standardisation of some kerbside services, increased diversion of household waste, and improved reporting from the private waste sector to provide a more complete picture of our national waste situation. These changes are not currently supported by legislation, but council will follow these guidelines where appropriate for our district. The private waste sector and territorial authorities also recognise that the recent change in central government may result in some dismantling of these MfE requirements and may apply pressure for a reduction or reversal of policy, where it is advantageous to do so.

Diverted tonnes and composition

In 2023 our overall diversion rate as a percentage of our disposal was 43.5% (2,137 tonnes of diverted materials as a percentage of 4,917 tonnes of within-district waste to landfill). Diverted material was primarily recycling, greenwaste and concrete. Other materials diverted at the Transfer Station include batteries, gas bottles, oil, paint, gas heaters, tyres and whiteware but cannot reliably be included in the table and graph below as they were not measured in tonnes.

Improvements to our data collection methods for diverted materials are included in our Action Plan. This will allow us to accurately measure tonnage of all diverted materials. Out-of-district waste to our landfill is not included in the diversion calculation as council has no control over waste generated in other districts nor is it responsible for diversion activities in other districts.

Table 1: Measuring our diversion

	2016-17	2018-19	2020-21	2022-23
Diverted material (tonnes)	2,136	1,884	2,342	2,137
District waste landfilled (tonnes)	6,797	3,829	4,115	4,917
Diverted as a percentage of landfilled	31%	49%	57%	43%

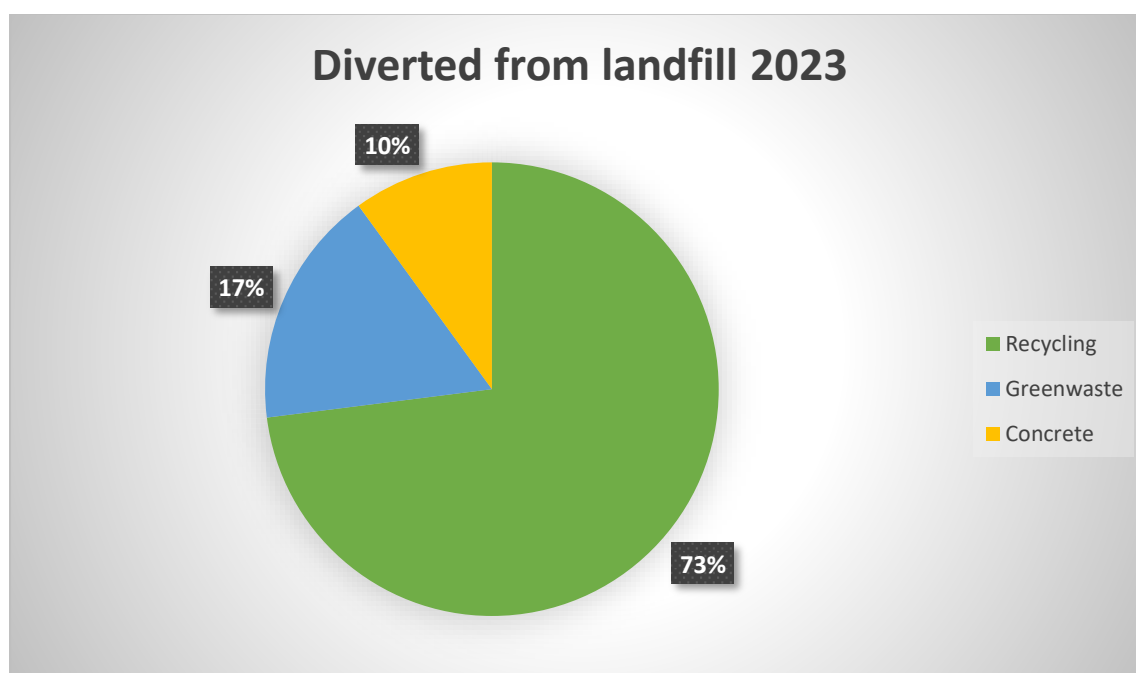


Figure 5: Composition of diverted materials

Diversion can be achieved through small, targeted programmes such as collection networks for batteries, cell phones, and household medical waste. Although the volumes collected are never going to be significant, batteries contain corrosive materials and heavy metals that can pose a health and

safety risk and cause contamination of the environment. The valuable materials in cell phones can be extracted for reuse.

The average New Zealander produces more than 20kg of e-waste each year, making us one of the biggest per capita amounts globally. E-waste contains a mixture of valuable materials that can be recycled (but usually aren't), and toxic materials such as lead, cadmium and mercury which can be hazardous to our health and to the environment. E-waste is a growing environmental and political problem with an estimated 57.4 Million tonnes generated globally in 2021, with less than 20% collected and properly recycled. E-waste is one of six priority products to be regulated under the MfE product stewardship programme. Other priority products are packaging, tyres, agricultural chemicals and their containers, farm plastics, refrigerants and synthetic greenhouse gases.

Targeting the biggest offenders in our overall waste stream will quickly produce results. Initiatives can be directed at a specific material type from a specific activity source, such as rubble and cleanfill in C& D waste.

Table 2: Our best opportunities for diversion

Divertible material	Activity source	Tonnes per year
Rubble – cleanfill	Construction & demolition	666
Compostable greenwaste	Landscaping & earthworks	379
Food waste	Kerbside rubbish	211

MfE will also require commercial businesses to divert food waste from landfill by 2030. Business waste is not a core council activity, although Council may want to take a facilitation role, particularly with smaller businesses.

2.3 Overview of existing waste infrastructure and services

Council owns five closed landfills (Aria, Benneydale, Piopio, Mokau, Walker Road Te Kuiti), one operational landfill (Waitomo District Landfill, William St), one central transfer Station (Te Kuiti), and five rural transfer stations (Benneydale, Piopio, Marakopa, Kinohaku and Mokau/Awakino). The facilities provide environmentally compliant, safe and convenient locations for residents and businesses to dispose of waste and recyclable materials. The facilities are managed, operated and maintained in accordance with resource consent conditions, contractual requirements and industry best practice.

Council has two waste service contracts in place which include

- Maintenance and operations of WDL
- Kerbside rubbish and recycling collection
- Transfer of waste from Te Kuiti Transfer Station and five rural transfer stations to WDL
- Collection of recyclables from Te Kuiti Transfer Station and five rural transfer stations
- Transport all recyclable material to Hamilton MRF for processing

2.4 Summary of district-specific challenges

The Waste Assessment identified a number of challenges that are specific to our district. These broadly include:

- The need for further support and education to make our communities more waste-aware

- Encouragement to turn our declining recycling volumes around
- Providing kerbside organics collection in urban Te Kuiti
- An assessment of the financial viability of our rural transfer stations
- The necessity to get an understanding of our farm waste and how we can manage it

These and other challenges are addressed in the Action Plan section 11.

3 POLICIES, PLANS AND REGULATIONS

3.1 Summary of guiding policies, plans and legislation that affect the WMMP

National legislation and local policy that informs this WMMP includes:

Te rautaki para, Waste Strategy 2023

MfE released the new Waste Strategy in March 2023. Councils will be guided by the new strategy, which will be backed up by legislation by 2025. The strategy has three phases:

- By 2030, the building blocks are in place to enable change; more activity is circular, and less waste is produced; and emissions and other environmental indicators are improving.
- By 2040, circular management of materials is normal, expected and well supported; residual waste is minimal; and emissions and other environmental indicators keep improving.
- By 2050 New Zealand has a low-emission low-waste circular economy and is helping other countries make the change; domestic systems are as circular as possible; we are contributing to regional and global circular networks; and our management of materials does not harm the environment.

Section 44 of the WMA requires us to give regard to the Waste Strategy when preparing our WMMP.

Waste Minimisation Act 2008 (WMA)⁴

The WMA emphasises and promotes waste minimisation. The purpose of the WMA is to 'encourage waste minimisation and decrease waste disposal to protect the environment from harm; and to provide environmental, social, economic and cultural benefits.'

The WMA outlines the responsibilities of territorial authorities in relation to waste management and waste minimisation including:

- Review its existing WMMP every six years and develop and adopt a new one
- Promote effective and efficient waste management and minimisation within their districts
- Spend the funding provided by the national waste levy on matters to promote or achieve waste minimisation in accordance with their WMMP

Also relevant to waste management and minimisation on a broader scale are:

- Local Government Act 2002
- Resource Management Act 1991
- Hazardous Substances and New Organisms Act 1996
- New Zealand Emissions Trading Scheme
- Litter Act 1979
- Health and Safety at Work Act 2015

⁴ Government is expected to introduce new waste legislation to replace the WMA 2008 and the Litter Act 1979 in 2025

- Health Act 1956

There are several key international agreements that New Zealand is party to which may impact our domestic legislation for waste minimisation and disposal, including:

- Montreal Protocol
- Basel Convention
- Stockholm Convention

3.2 Statutory requirements

In preparing this WMMP, Council has

- Given regard to Te rautaki para – Waste Strategy 2023
- Considered the waste hierarchy
- Considered the requirements of the LGA in assessing and making decisions on the best and most practicable options for addressing the community's waste management needs
- Given regard to the Waste Assessment when developing our Action Plan
- Considered the effects on exiting services, facilities and activities of using waste levy funding for our waste minimisation initiatives
- Considered the potential future impact of the recent change in central government

4 VISION, GOALS, OBJECTIVES AND TARGETS

4.1 Our vision

Council is developing a new vision to reflect how it will facilitate the promotion of the four well-beings (social, cultural, environmental and economic) and what it aims to achieve for the District.

Councils proposed vision for our district is **“Shaping our district together”**, and it is this vision which will guide our provision of waste management and minimisation services and infrastructure.

4.2 Our goals and objectives

To help achieve our vision, we have developed the following goals and objectives

Goal 1 Education – encourage our community to become more ‘waste aware’

Objective 1.1 Provide structured waste education, information and resources to our schools and marae

Objective 1.2 Engage our community and provide information and resources to support positive waste action

Goal 2 Minimise waste to landfill –reduce the harmful effects of waste to our health and environment.

Objective 2.1 Reduce the quantity of waste disposed to landfill, with an initial focus on wastes that create the most harm

Objective 2.2 Investigate and implement new services and facilities that will encourage minimisation of waste through increased opportunity to divert waste materials

Goal 3 Increase diversion – support resource recovery businesses at a local level where the benefits flow directly back into our community

Objective 3.1 Consider the implementation of kerbside organic waste collection in our urban community

Objective 3.2 Ensure our waste infrastructure encourages increased diversion through reduction, reuse, recycling and resale

Goal 4 Circular economy – a resilient district that is good for business, people and the environment.

Objective 4.1 Collaborate with iwi, local businesses, community groups, neighbouring councils and central government to support a transition to a circular economy

Objective 4.2 Ensure our waste services and infrastructure are safe, compliant, resilient and have flexibility to meet the changing needs of our community

4.3 Our targets 2024-2030

Our targets provide a clear and measurable way to determine how well Council is achieving its goals:

- 1. Waste education is provided to 50% of primary schools by 2026**
- 2. Waste minimisation information is readily available to 100% of the district's communities by 2028**
- 3. The diversion rate is increased to 50% of the districts waste to landfill by 2030**

4.4 Councils intended role

Council will continue to provide a range of services under contract to the private waste sector. These contracts may be in collaboration with our neighbouring councils to obtain economies of scale. The services should prove safe, efficient and effective ways for our residents to dispose of waste and recyclable materials at transfer stations and recycling drop-off points, and through kerbside collection.

Council will continue to provide or facilitate education and waste awareness programs for our communities. We will support national waste initiatives and will advocate to central government on specific waste issues that impact our ability to meet our goals.

Council will continue to build relationships with Iwi, businesses, neighbouring councils, education providers, charitable trusts, local industrial recyclers and the private waste sector to improve the district's ability to meet its goals for waste management and minimisation.

4.5 Protecting public health

The Health Act 1956 requires Council to ensure the provision of waste services adequately protects public health. When considering Council-provided waste and recycling services, public health issues will be addressed through setting appropriate performance standards for waste services contracts. Council will ensure performance is monitored and reported on, and that contract structures can address issues that may arise.

Privately provided services can be regulated through local bylaws. From July 2024, all private waste operators must record all their waste data and will commence reporting this to MfE in 2025. This will form part of the national licensing requisite for waste operators.

The Medical Officer of Health was consulted on the draft Waste Assessment, and their review is included at the end of Attachment One. Valuable feedback was provided by the MOH and has helped inform the development of this WMMP. The political uncertainty around environmental policy following the change in central government may impact some of our proposed actions or timelines. However, we consider that the proposals identified in this WMMP will adequately protect public health.

5 PROPOSED METHODS TO ACHIEVE EFFECTIVE AND EFFICIENT WASTE MANAGEMENT AND MINIMISATION

5.1 Key waste and diverted material streams and how they are currently managed

The key waste and diverted material streams have been identified through weighbridge data and SWAP survey and are included in the WA (Appendix One).

The current methods of managing waste and diverted materials in the district are summarised here:

Table 3: Current management of waste and diverted materials

Waste stream / service	How these are currently managed
Residential waste	<ul style="list-style-type: none"> ▪ Council contracted kerbside collection in 1 urban area (Te Kuiti) and 3 rural (Waitomo, Piopio and Mokau) ▪ Te Kuiti Transfer Station ▪ Five rural transfer stations ▪ Private waste collection or bin services
Residential recycling	<ul style="list-style-type: none"> ▪ Council contracted kerbside collection in 1 urban area (Te Kuiti) and 3 rural (Waitomo, Piopio and Mokau) ▪ Council recycling drop-off centres at Te Kuiti Transfer Station and five rural transfer stations.
Commercial waste	<ul style="list-style-type: none"> ▪ Private waste collection ▪ Te Kuiti Transfer Station ▪ Waitomo District Landfill
Commercial recycling	<ul style="list-style-type: none"> ▪ Private recycling collection ▪ Take-back schemes with suppliers
Greenwaste	<ul style="list-style-type: none"> ▪ Te Kuiti Transfer Station ▪ Private greenwaste collectors
Litter and illegal dumping	<ul style="list-style-type: none"> ▪ Litter bin servicing ▪ Removal of illegally dumped waste ▪ Removal of abandoned vehicles under Council contract.
Hazardous waste	<ul style="list-style-type: none"> ▪ Te Kuiti Transfer Station accepts and stores domestic quantities for collection, treatment and disposal off-site by authorised hazardous waste contractor ▪ Commercial quantities deal directly with an authorized hazardous waste contractor.
Farm waste	<ul style="list-style-type: none"> ▪ Private waste collection ▪ Bury or burn on-farm ▪ Landfill ▪ Agrecovery for agricultural plastics recycling www.agrecovery.co.nz ▪ Plasback for a variety of farm plastics www.plasback.co.nz

Cleanfill	<ul style="list-style-type: none"> ▪ Landfill ▪ Private clean fills ▪ Other private disposal
Waste education	<ul style="list-style-type: none"> ▪ Support for Paper for Trees recycling program in schools ▪ Support for WRC's EnviroSchools program
Waste oil	<ul style="list-style-type: none"> ▪ Te Kuiti Transfer Station accepts and stores waste oil. This is collected and recycled or treated by waste oil operators.
Tyres	<ul style="list-style-type: none"> ▪ Collected by Waste Management to be chipped for inclusion in manufacture of cement.
E-waste	<ul style="list-style-type: none"> ▪ The e-waste diverted at Te Kuiti Transfer Station is stockpiled and collected by E-cycle for recycling.
Information	<ul style="list-style-type: none"> ▪ Other reuse, recycle, recovery and treatment services provided locally will be listed on Council's website 'What goes where'. This project is underway and will be updated on an on-going basis as new services arise.

5.2 Options for the future

The WA (Appendix One) assessed the options for future waste infrastructure and services for the district. A common set of categories for comparing options was used in the assessment. It provided a broad comparison of the sustainability of the various options by including an economic, environmental, social and cultural, and operational assessment.

The options assessment is summarised here and provides the framework for our Action Plan in Part B.

Table 4: Summary of options assessment

Key area	Options	Council's role	Possible funding sources
Services	Implement standardised kerbside collection in line with MfE guidelines	Service provider	Opex budget
Services	Investigate use of wheelie bins for kerbside collection of rubbish and / or recycling in the urban areas	Service provider	Targeted rate, Waste levy
Services	Introduce pre-collection recycling bin inspections, and wider community education to reduce recycling contamination	Service provider	Opex budget Waste levy
Services	Divert organic waste to beneficial use through kerbside organics collection and support for home composting and community-garden composting	Service provider	Waste levy, Targeted rate

Infrastructure	Council explores all options for the future of the Waitomo District landfill	Owner and Service provider	Full financial assessment required
Infrastructure	Council upgrades the functionality of Te Kuiti Transfer Station to encourage increased diversion of materials from the waste stream	Owner and Service Provider	Rates, Waste levy
Infrastructure	Review all rural transfer stations to identify any financial efficiencies that can be made, and explore alternative scenarios	Owner and service provider	Rates, Waste Levy
Infrastructure	Review all closed landfills to identify risks and threats posed by climate change and the resultant extreme weather events. Identify any high-risk sites and prioritise for action	Owner and service provider	Financial assessment required
Infrastructure	Improve capacity for 'disaster waste' by ensuring space is available to store / sort / transport disaster waste	Owner and service provider	Opex Rates
Education	Introduce a structured waste education program into primary and intermediate schools	Service provider	Waste levy
Education	Provide all residents with clear, consistent and local information on what to do with their waste and recyclable materials, and why and how to do it, using long term behaviour change initiatives	Educator and facilitator	Opex Waste levy
Education	Support a collaborative waste education program for all marae	Educator and facilitator	Waste levy
Education	Introduce a targeted campaign to local shops and businesses to encourage sustainability in all areas of their business	Educator and facilitator	Waste levy
Data	Understand the generation and management of other specific waste streams such as farm and rural waste	Educator and facilitator	Waste levy
Data	Improved process to measure diverted materials ensuring accurate reporting of diversion targets	Service provider	Opex budget
Regulation	Review Solid Waste Bylaw 2014 to ensure alignment with new waste legislation expected by 2025, to replace Waste Minimisation Act 2002 and Litter Act 1979	Enforcement	Opex budget
Partnerships	Look for opportunities to work with neighbouring councils on new or expanded facilities and services that will contribute towards a circular economy	Partner and facilitator	Financial assessment required
Partnerships	Support local community groups and NGOs with their waste minimisation projects	Partner and facilitator	Waste levy
Partnerships	Link with MfE national waste programs to expand the reach of our local activity	Partner and facilitator	Opex budget

6 FUNDING THIS PLAN

Council has a range of options available to fund our waste activities and these are summarised below. Proposed funding sources for individual programs of action, services or initiatives is documented in the detailed Action Plan in Part B.

6.1 Plan implementation funding

The options available to fund our waste activities include:

General rates – a rate that is paid by all ratepayers

User charges – paying for services you use e.g. transfer station gate fees

Targeted rates – a rate that is set to fund a particular activity. It can align to the provision of availability of service

Waste Levy Funding – MfE distributes 50% of the funds raised from the waste disposal levy to local authorities on a population basis. The money must be applied to waste minimisation activities identified in the Council's WMMP

Waste Minimisation Fund – MfE allocates the remaining 50% of the levy money on funding projects. Anyone can apply to the WMF for funding.

Private sector funding – the private sector may undertake to fund certain waste activities where it is financially sound to do so. Council may collaborate with the private waste sector where a partnership is likely to deliver better value for ratepayers and will assist in achieving the goals of the WMMP

Sales of recovered materials – revenue from the sale of materials for recycling, reuse or recovery could partially offset the cost of some initiatives

6.2 Waste Levy

The waste levy is currently set at \$50 per tonne (excluding GST) on all waste disposed at a Class 1 landfill (WDL is Class 1). The rate has progressively increased over the past few years and will be \$60 per tonne by July 2024. Although there is no current indication of further increases to the levy beyond 2024, new waste legislation to be enacted in 2025 will address this. All Councils receive a share of the waste levy revenue irrespective of what waste infrastructure they may or may not own.

Our revenue from the levy was \$75,000 for the 2022-23 year and is expected to exceed \$140,000 by the 2024/25 year. If the waste levy continues to increase beyond 2024 then Council could be able to provide waste services and infrastructure that would previously be deemed unaffordable.

7 MONITORING, EVALUATION AND REPORTING PROGRESS

Progress against each of the actions detailed in the Action Plan section 11 will be reported to Council through annual reports. Reporting to MfE on expenditure of council's waste levy revenue will be undertaken annually as per MfE requirements.

Indicative measures for each of the key action areas are tabled below. Specific measures for each action will be developed and agreed as part of the implementation of the WMMP.

Table 5: Monitoring and Reporting

Theme	Indicative Measures	Progress reported
Services	Customer surveys KPI's SWAP audits Weighbridge reports Service requests	Annual report Council reports KPI reporting MfE waste levy expenditure report
Infrastructure	Customer surveys KPI's SWAP audits Weighbridge reports Service requests	Annual report Council reports KPI reporting MfE waste levy expenditure report
Behaviour Change	Education program outcomes Service requests Contract compliance	Annual report MfE waste levy expenditure report Contract records
Data	All waste data collected in accordance with the National Data Waste Framework and Waste Levy Fund reporting	MfE waste levy expenditure report Annual report KPI reporting
Regulation	Service requests	Annual report
Partnerships and Collaboration	Details of support and collaboration agreed Contract compliance	Annual report Council reports Contract records

Part B ACTION PLAN

8 INTRODUCTION

The Action Plan sets out the programme of action for achieving the vision, goals, objectives and targets of the WMMP, as described in Part A Strategy. The Action Plan has been developed from the Statement of Options identified in the Waste Assessment, through internal staff workshops. A change in central government since the Waste Assessment was completed has meant that some actions in this WMMP have been worded to allow for flexibility should the incoming government dismantle the current MfE guidelines and proposed waste legislation. However, we still expect the tabled actions to meet the forecast demand for services and support the goals and objectives for waste management and minimisation.

The Action Plan tabled in section 11 sets out all the activities we may take, the proposed timeline, how each activity can be funded, and the objectives which the activity will address. Actions provided here are for services and initiatives that Council already provides or intends providing over the six-year term of this WMMP.

9 FUNDING STRUCTURE

Our waste, recycling resource recovery and waste education services are funded through rates, providing flexibility for different service levels, fees and charges, levy revenue and external funding including the contestable Waste Minimisation Fund. The rates set for 2023-24 are:

Solid Waste Collection – Service Charge:

Te Kuiti	\$73 per property per annum
Waitomo	\$74 per property per annum
Piopio	\$158 per property per annum
Mokau	\$154 per property per annum

Solid Waste Rate – Service Charge: \$242 per property, per annum

10 TARGETS AND MEASUREMENT

Tabled below are the proposed methods of measuring our three targets, which allows Council to determine how well it is achieving its goals.

Table 6: Methods of measuring our targets

Target	Method of measure
Target 1: Waste education is provided to 50% of primary schools by 2026	<ul style="list-style-type: none"> ▪ Contract for waste education provider, or in-house resource ▪ Number of schools visited and number of participating classes ▪ Feedback from schools
Target 2: Waste minimisation information is readily available to 100% of the district's communities by 2028	<ul style="list-style-type: none"> ▪ Online use of Councils waste information and resources pages ▪ Service requests ▪ Council rates newsletter distribution data ▪ Participation data from resource recovery activities at transfer station
Target 3: The diversion rate is increased to 50% of the districts waste to landfill by 2030	<ul style="list-style-type: none"> ▪ Weighbridge data – all diverted materials and all waste to landfill from within district ▪ Data from resource recovery centre and shop at transfer station

11 ACTION PLAN TABLES

The Action Plan provides immediate actions that we can take in the short term as well as our longer-term approach to managing our waste and meeting the challenges that may impact our progress towards a circular economy. The actions are grouped into the same key areas as the options assessment in the Waste Assessment.

11.1 Services

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
1	Provide kerbside collection of rubbish and recycling in our urban areas	Existing	Ongoing	Rates Levy	3.2 4.2
2	Implement standardised kerbside recycling collections in line with MfE guidelines requiring all councils to collect the same standard set of materials	New	February 2024	Rates	2.2 3.2 4.2
3	Review existing kerbside rubbish and recycling service and identify opportunities to improve recycling rates and reduce recycling contamination	New	2025	Rates Levy	2.1 2.2 3.2 4.2
4	Divert organic waste to beneficial use through support for home composting and community-garden composting	New	2027	WMF	2.1 2.2 3.1 4.1 4.2
5	Consider kerbside organics collection for the main urban area if financially viable and environmentally sustainable to do so	New	2030	WMF	2.1 2.2 3.1 4.1 4.2

11.2 Infrastructure

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
6	Provide residents with access to transfer stations for waste disposal, resource recovery, and recycling drop-off	Existing	Ongoing	Rates User charges	2.1 3.2 4.2
7	Investigate all options for the future of Waitomo District Landfill, and implement the final decision by 2026	Existing	2026	Rates	3.2 4.2
8	Upgrade the functionality of Te Kuiti Transfer Station to improve resource recovery and recycling options. Retain flexibility to meet demand as new markets develop for recoverable materials	New	2026	Rates WMF	1.2 2.1 3.2 4.2

9	Review the operation of all rural transfer stations to identify any financial and logistical efficiencies, and assess any alternative options for these communities	New	2028	Rates	1.2 3.2 4.2
10	Expand the range of domestic hazardous waste that can be safely received and stored at Te Kuiti transfer station for appropriate disposal. This could include domestic medical waste and medical sharps	New	2027	Rates	2.1 2.2 4.2
11	Undertake risk assessments of all closed landfills to identify any potential failure posed by extreme weather events. Identify any high-risk sites for preventative remediation work	New	2028	Rates	4.2
12	Identify the capacity for 'disaster waste' at transfer stations or landfill. Identify sites that have sufficient space to store / sort / transport disaster waste. Update Emergency Management Plans as necessary	New	2024	Rates	4.2

11.3 Behaviour change

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
13	Introduce a structured waste education program into primary schools	New	2026	Levy Rates WMF	1.1 4.1
14	Encourage our iwi community's commitment to waste minimisation through the Pare Kore program Oranga Taiao zero waste marae	New	2029	Levy WMF	1.1 1.2 4.1
15	Promote an online waste directory which is comprehensive and practical and includes all available local services for resource recovery, recycling and the safe disposal of waste materials within the district	Existing	Ongoing	Levy	1.2 3.2
16	Support all national waste education initiatives from MfE and adapt as necessary for our community	Existing	Ongoing	Rates Levy	1.1 1.2 4.1
17	Encourage local retail and businesses to consider circular economy principles in all areas of their business	New	2030	Rates Levy	1.2 4.1

11.4 Data

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
18	Improve our waste data collection process to enable measurement of all diverted materials by tonnes, ensuring accurate reporting of diversion targets, and KPIs	New	2024	Rates	2.1 3.2
19	Undertake SWAP audits for transfer station waste and kerbside collection every three years, and after significant service changes	New and Existing	2026	Rates	2.1 3.2 4.2
20	Liaise with other councils, MfE or farming industry groups to identify the specific waste problems faced by our farmers and the wider rural community, and how they currently manage their waste.	New	2027	Rates WMF Levy	1.2 2.1 4.1

11.5 Regulation

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
21	Continue to manage illegal dumping through enforcement action, education, and using consistent messaging to drive behaviour change	New and Existing	2024 ongoing	Rates	1.2 2.1
22	Review Solid Waste Bylaw 2014 to ensure it aligns with new waste legislation (2025) and national Te rautaki para Waste Strategy (2023)	New and Existing	2027	Rates	4.1 4.2

11.6 Partnerships and Collaboration

#	Action	New or Existing	Timeframe	Potential funding source	Objectives
23	Link with MfE national waste programs to expand the reach of our local activity	Existing	Ongoing	Rates	1.2 4.1
24	Consider all opportunities to work with neighbouring councils for new, or expanded, facilities and services	Existing	2024 ongoing	Rates	2.2 4.1
25	Support local community groups, iwi, and non-government organisations to implement resource recovery activities that will enhance local economic development	New	2029	Rates Levy	1.2 2.2 4.1

Part C APPENDICES

12 WASTE ASSESSMENT 2023