

An aerial photograph of the town of Opotiki, New Zealand. The town is situated in a valley, surrounded by green fields and hills. A river flows through the town, and a large body of water is visible in the foreground. The text 'Opotiki District Council' and 'Waste Management and Minimisation Plan' is overlaid on the image.

Opotiki District Council

Waste Management and Minimisation Plan

Prepared for: Opotiki District Council

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WMMP on a page

Our vision for waste management and minimisation:

“Taking action towards a circular economy”

Goal 1: Collective responsibility for our resources and where they end up



Goal 2: Enabling systems to support the reuse, reduction and recycling of materials



Goal 3: Collaborate and innovate for a circular economy



Objectives

Objective 1:

Promote, encourage and support reduction, reuse and recycling.

Objective 2

Council, Iwi, hapu, local community and businesses work together where possible to implement projects that maximise waste diversion and effective resource recovery..

Objective 3:

Strengthen regulatory instruments and tools to support improved environmental, public health, waste and resource recovery outcomes across the district.

Objective 4:

Strengthen cost-effective and equitable collection systems and services across the district.

Objective 5:

Prioritise developing a stable foundation of waste and resource recovery facilities so that more material, and a wider range of items, can be diverted from landfill.

2030 Targets



Reduce the amount of material entering the waste management system, by 10 per cent per person.



Reduce the amount of material that needs final disposal, by 30 per cent per person.



Reduce the biogenic methane emissions from waste, by at least 30 per cent.

1 Introduction

1.1 Purpose

This draft Waste Management and Minimisation Plan (WMMP) outlines how Ōpōtiki District Council will progress efficient and effective waste management and minimisation within the district/region. It explores the implications of the Government's Waste and Resource Efficiency Strategy (2025), for Ōpōtiki District Council and proposes the district's approach to taking action towards a circular economy.

This WMMP will help to guide council in their decision-making over the next six years, and points to key focus areas and actions that are specific to the district / region.

1.2 Scope

All solid waste is considered in this plan, whether it is landfilled or diverted material, this includes items being reused, recycled, or composted.

According to Section 5 (1) of the WMA, waste is defined as:

“Anything disposed of or discarded; and includes a type of waste that is defined by its composition or source (for example, organic waste, electronic waste, or construction and demolition waste); and to avoid doubt, includes any component or element of diverted material, if the component or element is disposed of or discarded.”

Liquid and gas wastes are managed through other policies and are not in the scope of this WMMP.

The Waste Minimisation Act 2008 (**WMA**) gives councils the responsibility to promote effective and efficient waste management and minimisation

within their district. Under the WMA councils must adopt a WMMP, which must be reviewed every six years.

This WMMP also aligns with the long-term vision of the Emissions Reduction Plan (**ERP**), to reach a circular economy that keeps materials in use for as long as possible, by 2050. The ERP sets out for the waste sector to reduce biogenic methane emissions by 40% by 2035, relative to 2017 levels.

This WMMP outlines how the district will align with and contribute to the national approach.

1.3 Commencement and review

This document will be released as the draft WMMP for public consultation under the Special Consultative Procedure, in line with Council's obligation under the Local Government Act 2002 and the WMA. Council will consider the outputs of this consultation process and update the WMMP as necessary before it is finalised and formally adopted by Council.

The final document will become the 2025 Ōpōtiki District WMMP which supersedes the previous WMMP dated 2018 – 2024.

The 2025 WMMP will be reviewed and updated as required within six years from the approval date, unless it is reviewed in the interim.

2 Where are we now?

2.1 Strategic context

The role of territorial authorities in waste management and minimisation is shaped by policies, plans and regulations. This ensures progress is made towards agreed pathways and priorities at a district, regional and / or national level.

A number of statutory documents and associated policy impact on waste minimisation and management in the Ōpōtiki District. These are summarised in Figure 2.1, and further detail is provided in council's 2024 Waste Assessment (Appendix A).

Waste Minimisation Act 2008	Waste and Resource Efficiency Strategy	Climate Change Response Act 2002
Resource Management Act 1991 (under review)	Emissions Reduction Plan 2022	Health Act 1956
Local Government Act 2002	Waste Disposal Levy Expansion	National Plastics Action Plan
	Ōpōtiki WMMP 2018	Ōpōtiki Long Term Plan

Figure 2.1: Key statutory documents and policy.

The role of territorial authorities in waste management and minimisation is shaped by policies, plans and regulations. This ensures progress is made

towards agreed pathways and priorities at a district / city, regional and / or national level.

2.1.1 Waste and Resource Efficiency Strategy

The Government's Waste and Resource Efficiency Strategy details the future direction of waste management and minimisation in Aotearoa New Zealand. The strategy defines outcomes to address waste disposal, reuse/recycling, and emissions, litter, environmental and contaminated land impacts resulting from waste management (Figure 2.2).



1. Including, where relevant, consideration of impacts not just associated with disposal.

Figure 2.2: The Government's waste and resource efficiency strategy outcomes (MfE, 2025).

The strategy provides a summary of activities that will enable these outcomes to be achieved. These activities are:

- Fit-for-purpose legislation that supports:
 - An efficient market for waste management and recycling;
 - Optimal investment decisions; and

- Appropriate responsibilities across the supply chain.
- Cost-effective, outcomes-focused investment of the waste disposal levy in infrastructure, innovation and local projects.
- Working with the sector, business, iwi/Māori, local government and communities to develop and implement practical cost-effective solutions.
- Where necessary, targeted policy and regulatory measures.
- Using the waste hierarchy to guide decision-making, enabling us to keep resources in the economy at their highest value where possible.

The strategy does not mandate or propose targets and does not explicitly reference a Circular Economy Approach (refer to section 2.1.2). However, Council has decided to broadly align with the targets in the previous strategy (Te rautaki para | Waste Strategy) and a wider circular economy approach. This is given their alignment towards council's own community outcomes including those of Ōpōtiki District Council.

These targets were:

- 1 **Waste generation: reduce the amount of material entering the waste management system by 10 per cent per person.**
- 2 **Waste disposal: reduce the amount of material that needs final disposal by 30 per cent per person.**
- 3 **Waste emissions: reduce the biogenic methane emissions from waste by at least 30 per cent.**

¹ <https://environment.govt.nz/what-government-is-doing/areas-of-work/waste/ohanga-amio-circular-economy/>

2.1.2 Circular Economy

A circular economy as described by the Ministry for the Environment (MfE) is:

“an alternative to the traditional linear economy in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life.”¹

There are three core principles of a circular economy:

- 1 **Design out waste and pollution.**
- 2 **Keep products and materials in use.**
- 3 **Regenerate natural systems.**

The waste and resource efficiency strategy sets out several outcomes that are consistent with the concept of a circular economy. These include *‘reducing waste disposal per person’* and *‘Increasing reuse and recycling materials products so that we retain valuable resources in the economy’*. The strategy also notes activities to achieve the nominated outcomes including legislation that has influence *‘across the supply chain’*, and *‘using the waste hierarchy to guide decision-making, enabling us to keep resource in the economy at the highest value where possible’*. This vision is also reflected in this first Emissions Reduction Plan, which pays particular attention to organic materials as resource in a circular economy.²

2.1.3 Waste hierarchy

The Circular Economy emphasises the designing out of waste and pollution. In line with this thinking, the waste hierarchy (Figure 2.3) is a

² <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/waste/>

useful framework to prioritise waste avoidance and actions that support a Circular Economy. Where value cannot be recovered from the materials, or there is no current market for the material the focus is on safe treatment and disposal.

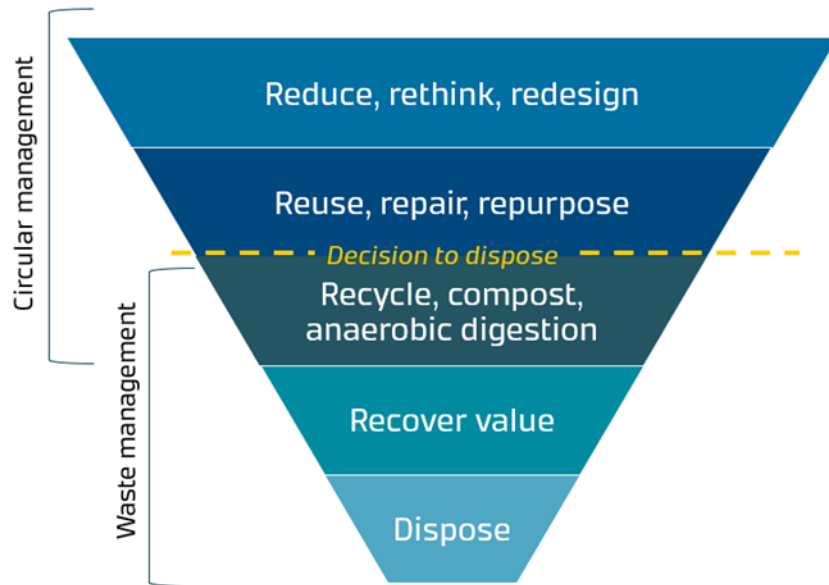


Figure 2.3: Waste Hierarchy

2.2 The waste situation

To be able to plan for the future, we first need to understand what the current situation is with waste and circular activity. This section sets out the existing infrastructure and services in the district, the performance of our current waste management system, and how we have progressed against the targets in our last WMMP. Further information on the detailed analysis can be found in the Waste Assessment (Appendix A).

It also considers how waste services may change for the district over the next six years. Further information on the detailed analysis can be found in the Waste Assessment.³

Overall, Council's focus over the last six years has been to provide economic, social, environmental and cultural well-being to its communities. In relation to waste management this means providing an effective and efficient waste collection and disposal service and facilities, focusing on waste minimisation and ensuring value for money.

2.2.1 Infrastructure and services

Table 2.1 provides a summary of waste infrastructure and services in Ōpōtiki, aligned with the waste hierarchy. These provide the basis for effective waste management, minimisation and resource recovery in Ōpōtiki.

³ Waste Assessment link

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Draft Ōpōtiki District Council Waste Management and Minimisation Plan 2025

Ōpōtiki District Council

Table 2.1: Summary of waste infrastructure and services across Ōpōtiki District

Waste hierarchy	Infrastructure / service	Council provided	Other providers
Reduce	Education	Tours of RRCs for schools.	Zero Waste Schools Policy
Reuse	Second hand trading	N/A	Second hand stores
Recycle	Collection	Kerbside collection for paper, tin, plastic and glass.	Handee Can Services Blue Rock Contractors
	Transfer stations	N/A	AgRecovery
	Resource Recovery Centres	Wellington Street being the main RRC (located in Ōpōtiki). Waihau Bay (coastal RRC). Te Kaha (coastal RRC).	Community Recycling Collection Service (CRCS), Torere by Ngāitai Iwi Authority.
	Reuse centres	N/A	N/A
Recovery	Organic waste collection / drop off	Greenwaste drop-off at transfer stations.	N/A
Treat	Hazardous waste	Collection of hazardous materials at transfer stations.	Te Whatu Ora
Dispose	Collection	Kerbside collection for rubbish.	Handee Can Services

Waste hierarchy	Infrastructure / service	Council provided	Other providers
			Blue Rock Contractors
	Transfer stations	Drop offs for rubbish.	N/A
	Landfill	N/A	Waiotahi Contractors (clean fill)

2.2.2 Kerbside waste

There are a number of non-Council waste service providers operating in the district (Table 2.2). The focus of these services is rubbish collections for households.

Table 2.2: Private kerbside waste services

Operator	Service	Locations serviced
Handee Can Services	Waste Collection – skip bins and private wheeled bins	Ōpōtiki township
Ōpōtiki Bin Hire	Waste Collection – skip bins and private wheeled bins	Ōpōtiki township
Blue Rock Contractors	Waste Collection – skip bins and private wheeled bins	Ōpōtiki township

Waste Management	Waste Collection – skip bins	Ōpōtiki township
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2.2.3 Transfer stations and resource recovery centres

Council currently operates three Resource Recovery Centres (RRC) across Ōpōtiki. As a network the RRCs provide good infrastructure that is consistent with the national approach to resource recovery networks. In addition, the network provides equitable access to opportunities for waste diversion in providing opportunities for waste diversion across Ōpōtiki's widely dispersed population. All waste from Te Kaha RRC and Waihou Bay RRC is transported to Ōpōtiki RRC (Wellington Street). The divertible materials are segregated and sent to relevant processing facilities and the general waste which is unable to be recovered is sent to Tirohia Landfill in Waikato. Figure 2.4 illustrates the location of the key waste facilities in the District.

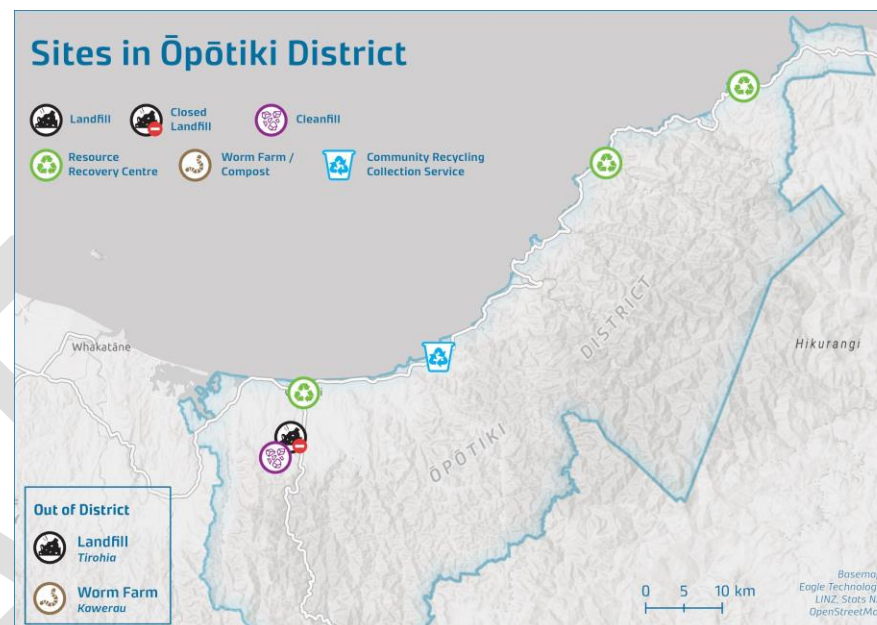


Figure 2.4: Key waste facilities in Ōpōtiki District

Tonnage data is not available from each RRCs or the kerbside collections within Ōpōtiki. Tonnage data is currently based on the consolidated waste quantities that leave the Ōpōtiki RRC for reprocessing or disposal. It is estimated that the waste leaving the district is primarily from the Ōpōtiki RRC (72%) followed by Te Kaha RRC (20%) and Waihou Bay RRC (8%).

Tonnage data is recorded against the month that payment is invoiced for the material and therefore may not accurately reflect monthly volumes transitioning through the facility.

Glass represents the largest stream of material recovered overall (by weight), followed by green waste and metals. However, the Ōpōtiki RRC

data includes both kerbside waste and commercial waste. Therefore, the lack of known spilt between kerbside and commercial waste may impact the data set compared to similar facilities which have the ability to understand the specific composition by origin.

There is no information available on the quantity or composition of material diverted outside of the Council resource recovery system or where it is taken to for recovery.

2.2.4 Waste sent to landfill

It is estimated that around 2,181 tonnes of rubbish was sent to landfill via the Ōpōtiki RRC in 2023/24. The waste sent to landfill in the district has been steady from 2021/22 to 2023/24.

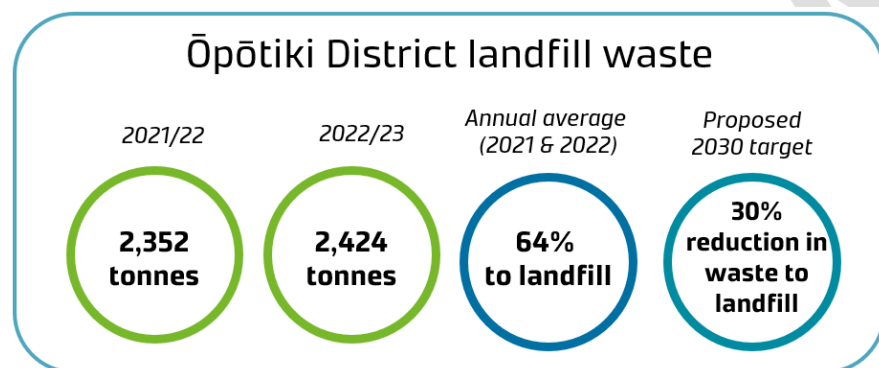


Figure 2.5: Ōpōtiki district waste to landfill

2.2.5 Overall system performance

The waste to landfill per person in Ōpōtiki is approximately 230 kg per person per annum. Relative to other similar Councils Ōpōtiki's waste to landfill is below average but in line with similar rural councils (Figure 2.6). However, it is important to note that this only reflects waste entering the

RRC's from council collection and therefore may not be showing the full picture. This is because some materials collected at kerbside or from businesses are taken to landfill via out of district transfer stations (most likely Whakatāne).

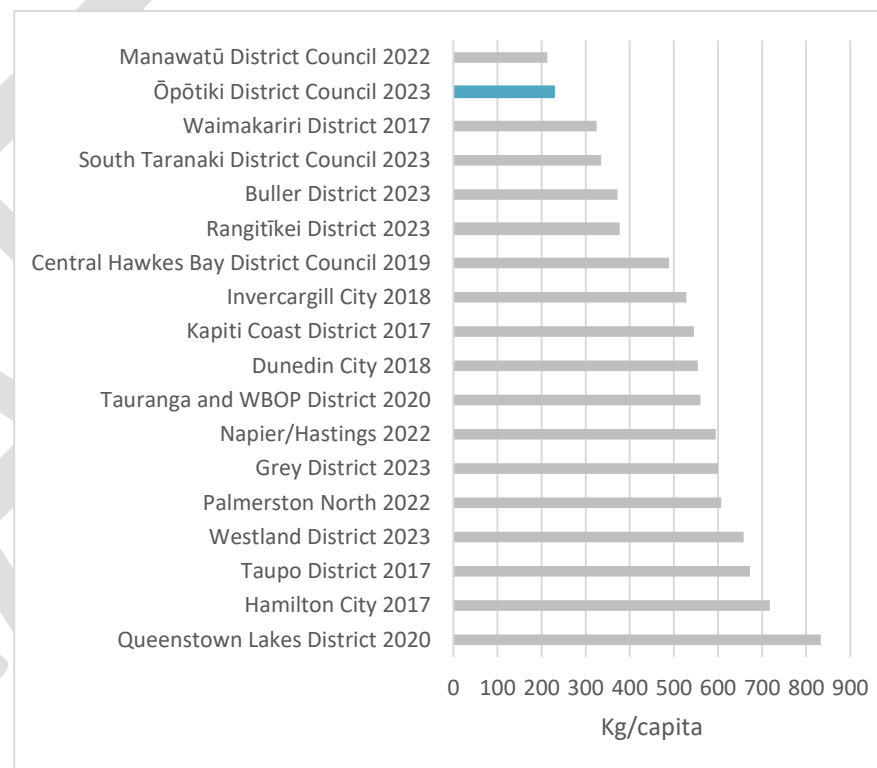


Figure 2.6: Ōpōtiki waste per capita relative to other councils.

Limited information is available as to what makes up waste in Ōpōtiki. The Waste Assessment (Appendix A) has estimated the kerbside waste composition based on existing national Solid Waste Analysis Protocol (SWAP) data and data provided by Council.

Due to the challenges in collecting accurate waste data in Ōpōtiki, Council did not set targets in the 2018 WMMP. Estimates from 2021/22 and 2022/23 suggests Ōpōtiki RRC is currently achieving a 36% diversion of waste from landfill. The increase in actual waste from 2021/22 to 2022/23 is due to no organic/green waste is recorded in 2021-22 whereas a large quantity was recorded in 2022-23 (552 tonnes). It is possible that materials may have been collected during 2021-22, however were not invoiced during that time period, rather than no material being received during this time

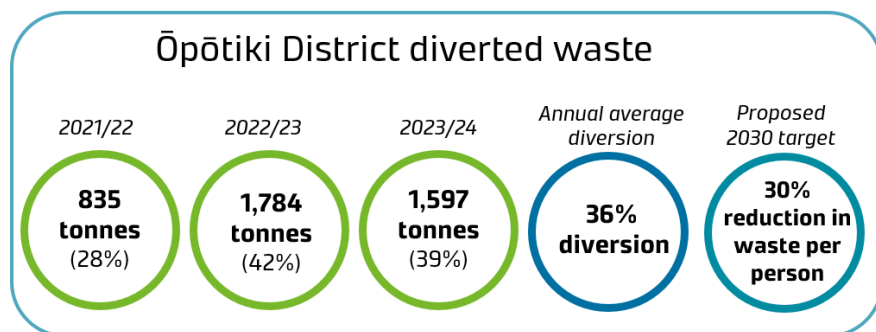


Figure 2.7: Ōpōtiki district waste diverted from landfill

2.2.6 What have we achieved?

In 2022/23 the Ōpōtiki RRC received funding to support construction of a weighbridge at the site. Construction of the weighbridge was completed at the end of the 2023 calendar year. Although data from the weighbridge was not available until August 2024. The installation of a weighbridge at this facility has enabled accurate waste tracking from the district which will significantly improve waste reporting in future.

During 2023/24 Ōpōtiki utilised the services of Para Kora, a kaupapa Māori, a not-for-profit organisation to deliver education sessions to its coastal communities. These sessions focused on exploring waste

generation in these communities and promoted sustainable waste management methods available within the district. These sessions were an integral part of bringing communities on the journey towards a circular economy.

As there are no large-scale commercial options to process greenwaste in the Bay of Plenty, the greenwaste collected at Ōpōtiki RRC is shredded / chipped by a local contractor and free for the local community to take and use in their gardens. This allows the greenwaste to stay within the region, reducing transport associated with the movement of waste. There is an opportunity to improve the processing of the material which will in turn improve the quality of the product. This could provide the opportunity to monetise the final product generating a revenue stream for the council.

2.2.7 Future waste projections

Forecasting the potential waste generated in the district allows council to consider how expected population and household growth, changes to services, or regional and district activities may influence council's role in managing waste. These forecasts are typically developed using population projections, historic waste quantities, and the specific factors relevant to the district.

Population projections for Ōpōtiki suggest minimal growth with a minor drop through to around 2050. Similarly, no major economic growth or contraction is anticipated over a similar period. This suggests relatively static waste generation with shifts such as changing consumption patterns, increased reuse and enhanced recovery/recycling reducing materials disposal to landfill.

There are several factors which create uncertainty in waste projection forecasts and these need to be considered in any decisions made based on the forecast demands. These factors include:

- The management of waste on individual properties e.g. burning household waste, farm dumps and burning farm waste.
- The impact of the current (regional and national) focus on rural waste. It is possible there will be a resultant significant increase in commercial quantities of rural waste such as plastic wrap, chemical containers and treated timber (fencing/construction) making their way to the RRC with a greater focus of rural wastes.
- The impact of alignment with kerbside standardisation requirements and proposals.
- The impact of varying economic activity.

2.2.8 Challenges and opportunities

The analysis conducted in the Waste Assessment (Appendix A), identified issues and opportunities. In collating and considering information about the change in demand, delivery of waste services in the district, several issues were identified. These issues represent challenges in delivering effective services, as well as in achieving the aims to reduce environmental harm and maximise resource efficiency. In many cases the issues also present opportunities for council, the community, and/or the private sector to improve waste minimisation and management in the district. These challenges and opportunities are detailed below.

Challenges:

- Lack of comprehensive data.
- Council kerbside refuse and recycling services do not cater to large families / multi-family households.
- Lack of rural waste reporting, management and control.
- Lack of education and awareness.

Opportunities:

- Better waste forecasting due to new weighbridge at Ōpōtiki RRC.
- Assess impact of population growth on current kerbside services.
- Organic waste collections depending on outcome of options/feasibility
- External funding sources to allow progression of actions in WMMP.
- Improved diversion e.g. hazardous, special.
- Analysis of C&D waste.
- Public litter bins for tourists.
- Planning for a resilient district and weather-related waste.

Opportunities are also likely to emerge from funding available through Central Government which is targeting waste collection services and resource recovery infrastructure (including transfer station upgrades). In addition to investment in local solution there are likely to be opportunities to collaborate with Councils and national organisations to address common opportunities and issues. Examples may include supporting regional organic material processing solutions where economies of scale bring benefits to the Ōpōtiki community, advocating for national policy and investment and contributing to research and innovation activity.

3 Where do we want to be?

This section introduces the vision, goals, objectives, and targets (strategic framework) for waste management and minimisation in Ōpōtiki.

3.1 Strategic framework

The strategic framework provides the future direction for the WMMP, considering the strategic context, the Government's waste and resource efficiency strategy, and the current situation with waste management and minimisation in the district. The strategic framework includes an overarching vision statement, key goals, objectives and measurable targets which determine the action plan for the next six years.

The strategic framework for this WMMP is described on the next page.

3.1.1 Targets

For this WMMP, Council has opted to adopt the targets that reflect commitments in the Emissions Reduction Plan and aligned with previous targets set by Government. The targets adopted for this WMMP, are:

- Waste generation: reduce the amount of material entering the waste management system, by 10 per cent per person.
- Waste disposal: reduce the amount of material that needs final disposal, by 30 per cent per person.
- Waste emissions: reduce the biogenic methane emissions from waste, by at least 30 per cent.

The baseline (2022/23) performance of Ōpōtiki waste management system relative to the targets is set out in Table 3.1.

Table 3.1: WMMP targets for Ōpōtiki

Target	Unit	2022/23 Baseline (t)	2030 Target (t)
Waste generation	t per capita per annum	0.430	0.387
Waste to landfill	t per capita per annum	0.230	0.161
Waste emissions	% reduction of biogenic methane	No baseline data	Establish baseline data by 2025/26 >10% reduction from 2025/26 baseline

Our vision for waste management and minimisation:

“Taking action towards a circular economy”

Goal 1: Collective responsibility for our resources and where they end up



Goal 2: Enabling systems to support the reuse, reduction and recycling of materials



Goal 3: Collaborate and innovate for a circular economy



Objectives

Objective 1:

Promote, encourage and support reduction, reuse and recycling.

Objective 2

Council, Iwi, hapu, local community and businesses work together where possible to implement projects that maximise waste diversion and effective resource recovery..

Objective 3:

Strengthen regulatory instruments and tools to support improved environmental, public health, waste and resource recovery outcomes across the district.

Objective 4:

Strengthen cost-effective and equitable collection systems and services across the district.

Objective 5:

Prioritise developing a stable foundation of waste and resource recovery facilities so that more material, and a wider range of items, can be diverted from landfill.

2030 Targets



Reduce the amount of material entering the waste management system, by 10 per cent per person.



Reduce the amount of material that needs final disposal, by 30 per cent per person.



Reduce the biogenic methane emissions from waste, by at least 30 per cent.

3.2 Consultation insights

This section of Council's WMMP will be finalised following the SCP process

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4 How are we going to get there?

4.1 Council's role



Figure 4.1: Roles of council in waste management and minimisation services.

Council's intended role over the course of this WMMP (2024-2030) in waste management and minimisation services is to ensure the system is well set up to meet forecast demand, the needs of the district and alignment with the national direction set out in the Government's waste and resource efficiency strategy and the Emissions Reduction Plan. This is delivered through a number of different roles, depending on council's

level of influence and availability of council resourcing. The roles of council in delivering and implementing the WMMP over the next six years are depicted in Figure 4.1.

4.2 Action Plan

The action plan⁴ is a continuation of the action plan set out in the 2018 WMMP and has been developed to support council in achieving the vision, goals and targets as set out in this WMMP. It has considered the current situation alongside the district's future aspirations and councils associated role/s to reflect areas of focus and specific actions that the council will need to deliver on over the next six years.

The actions which are being taken forward from the 2018 WMMP include:

- Develop a data strategy that is aligned with the national waste data framework.
- Management of farm waste.
- Peak season waste management.
- Working proactively with commercial and community stakeholders.

⁴ This Action Plan has been designed to meet the requirements of the Waste Minimisation Act 2008 and the Local Government Act 2002, by including all practicable options to achieve the Council's waste minimisation objectives.

The Action Plan outlines the following points for each focus area:



Specific actions to address the issue



Strategic alignment

Goals (Gx) and Objectives (Ox)



Council's intended role



Targets addressed



Stakeholders who will support/be impacted by the delivery of the action



Funding source⁵

The Action Plan will inform councils waste and resource recovery programme of work for the next six years, working to support council in setting out their annual priorities, budgets and activities for waste management and minimisation. Any significant changes to levels of service will be incorporated into councils existing Annual Plan or Long-Term Plan processes and subsequent public consultation.

⁵ Refer to section 1 for further detail.

4.3 Understanding iwi aspirations

The previous national waste strategy, Te rautaki para | Waste strategy, highlighted how the concept of circular economy is well aligned with the underlying values of te ao Māori. In particular with principles of kaitiakitanga and mauri which take an integrated view of the environment. Kaitiakitanga and mauri are indigenous concepts which are highly complementary to Western notions of the waste hierarchy; collectively forming a set of potential foundational principles which support a vision of minimising landfill waste.

Although this alignment is understood and acknowledged at a national level there has been very limited discussion and testing of this at a local level during the implementation of the last WMMP or the development of this WMMP. Recognising this, and councils desire to deliver good waste outcomes for all of Ōpōtiki communities and residents, Council is committed to continuing to build an understanding of what this does or doesn't look like for Ōpōtiki's Māori communities, local hapū and Iwi.

4.4 Infrastructure and services

Table 4.1: Focus area 1 – Infrastructure and services

	Action		Strategic alignment ⁶		Councils intended role		Targets addressed		Other stakeholders		Funding source ⁹
1.1	Identify and establish partnerships and collaborative relationships that will enable the district to process and manage waste and resources locally wherever feasible and cost-effective		G1, G3, O1, O2		Collaborator / connector		Waste generation		Commercial sector, community groups, Iwi, other Councils		Targeted rates, waste levy, general rate, other funding
1.2	Undertake a review of Council delivered services to ensure services are being offered across all stages of the waste hierarchy including: - Identification of options to ensure compliance with central government requirements (e.g. standardised kerbside collections). - Investigating alternative options for waste disposal and recovery which keep the waste within the district or region (e.g. waste to energy and reuse stores at RRCs). - consider the needs of large families, rural areas, and areas not currently serviced by council kerbside collections. - look for ways to limit double handling of materials and transporting materials long distances for processing or disposal.		G2, O4, O5		Advocate / promote		Waste generation, waste to landfill		Elected members, ratepayers, waste operators		Targeted rates, waste levy, general rate, other funding
1.3	Investigate options to accept materials which are reusable or can be recycled at the RRCs with a focus on those with existing funding mechanisms (e.g. materials that are part of existing product stewardship schemes).		G2, O4, O5		Service provider, enabler, advocate / promote		Waste generation, waste to landfill		Elected members, ratepayers, waste operators		Targeted rates, waste levy, general rate, other funding
1.4	Investigate the impact of seasonal waste to the district (e.g. tourism and seasonal work).		G1, G2, O1, O2, O4		Service provider, enabler, advocate / promote		Waste generation, waste to landfill		Tourists, commercial sector		Targeted rates, waste levy, external revenue streams, general rate, other funding

4.5 Education and communication

Table 4.2: Focus area 2 – Education and communication

	Action		Strategic alignment		Councils intended role		Targets addressed		Other stakeholders		Funding source ⁹
2.1	Continue to update and maintain information on the Council website regarding Council's services, particularly commercial collections and private sector (for example farm plastics).		G1, O1		Enabler Collaborator / connector		Waste generation, waste to landfill, waste emissions.		Rate payers, community groups, commercial sector, Iwi		Targeted rates, waste levy, general rate, other funding
2.2	Develop an engagement plan and education programme to: - Outline and deliver waste minimisation activities. - Outline actions to support the actions of the WMMP. - Develop an understanding of collective responsibility for waste and resource recovery outcomes.		G1, G2, O1, O2		Advocate / promote		Waste generation, waste to landfill, waste emissions.		Community groups, schools, commercial sector, Iwi.		Targeted rates, waste levy, general rate, other funding

⁶ Strategic alignment links back to the goals and objectives detailed in Section 3.1.

 Action		 Strategic alignment	 Councils intended role	 Targets addressed	 Other stakeholders	 Funding source ⁹
- Identify groups in the community which require specific targeted education e.g. schools, businesses and households.						
2.3	Establish robust data reporting and information collecting processes to better understand and track our work on waste and resource recovery.	G1, O3	Enabler	Waste generation, waste to landfill, waste emissions.	Elected members	Targeted rates, waste levy, other funding

4.6 Policy

Table 4.3: Focus area 3 – Policy

 Action		 Strategic alignment	 Councils intended role	 Targets addressed	 Other stakeholders	 Funding source ⁹
3.1	Develop a data strategy that is aligned with the national waste data framework to ensure that Council is collecting accurate and appropriate data to use in future waste assessments. This will assist council in understanding the waste and material flows from different groups in the district e.g. residents and commercial businesses. This may also involve carrying out 'SWAP' composition studies, and/or negotiating the use of a weighbridge to collect data on the quantity of wastes from kerbside rubbish and recycling collections.	G2, O3, O4	Enabler	Waste generation	Commercial sector, community groups, Iwi	Targeted rates, general rate, other funding
3.2	Investigate and support the development of an infrastructure plan which includes waste and resource recovery. The plan should consider District specific challenges and opportunities and the local based solutions that may address these including resilience to natural weather events.	G2, O3, O4	Enabler	Waste generation, waste to landfill	Commercial sector, community groups, Iwi	Targeted rates, general rate, other funding
3.3	Develop a grant funding strategy targeting publicly available funding to help co-fund investigations and infrastructure enabling the delivery of actions e.g. the Waste Minimisation Fund (WMF).	G1, G2, O1, O3, O4	Enabler, regulator and advisor	Waste generation, waste to landfill	Elected members, Commercial sector, community groups	Targeted rates, general rate, other funding
3.4	Review and update waste bylaw to strengthen relevant provisions.	G1, G2, O1, O3	Enabler	Waste generation, waste to landfill	Elected members	Targeted rates, general rate, other funding
3.5	Reduce illegal dumping through active enforcement under the Litter Act, education on the services available and consider options to reduce illegal dumping of animal carcasses.	G2, O1, O3, O4	Regulator	Waste generation, waste to landfill	Commercial sector, community groups, Iwi.	Targeted rates, general rate, other funding
3.6	Work with other Councils in the region, neighbouring regions and other stakeholders to progress national debate on waste issues and policy e.g. contributing to the Waikato and Bay of Plenty Waste Strategy and Infrastructure Plan	G3, O2, O4	Collaborator / connector	Waste generation, waste to landfill, waste emissions.	Other Councils	Targeted rates, waste levy, general rate, other funding

5 Monitoring, evaluating and reporting progress

5.1 Evaluation and review of this plan

In line with the WMA, a full review of council's WMMP will be conducted by Council at intervals of not more than six years after adopting the WMMP or the last review. Any review of the WMMP will be preceded by a Waste Assessment under section 51 of the WMA.

5.2 Monitoring and reporting

The council will monitor and report against the targets set out in the WMMP to determine the implementation of the Action Plan. This will, at a minimum, include:

- Type, quantity and composition of waste and captured materials.
- Origin of the waste / source of materials received.
- Contamination tonnages for waste services managed by council.
- Monitoring of specific waste streams, such as illegal dumping
- Progress in capturing more data.
- Effectiveness of actions in the plan and progress towards the targets set.
- Compliance with legislative requirements.
- Better capture and reporting of circular economy activities and emissions generated from waste.

Table 5.1 sets out the targets for this WMMP, alongside direction for how council may track progress towards the 2030 targets. Noting that information for the wider waste management sector has not been collected as part of the WA/WMMP process, the targets focus on waste being received via council's transfer station network.

Table 5.1: WMMP targets for Ōpōtiki

Measure	Unit	Baseline	Year 1	Year 2
Waste generation	t per capita per annum	0.430		
Waste to landfill	t per capita per annum	0.230		
Waste emissions	% reduction of biogenic methane	No baseline data		

6 Funding the plan

6.1 Proposed funding sources

Waste management and minimisation services are funded by a range of sources including targeted rates, general rates, waste levy, external revenue streams and other funding. For reference, an overview of the funding sources that could be used to support the delivery of the WMMP are outlined in Table 6.1.

As part of this WMMP, the proposed funding sources to enable the delivery of actions have been included in our action plan. It is important to note that these are proposed funding sources indicative of the suitability of the action to the proposed funding. However, for the most cases these are yet to be formally approved by Council or other relevant funding providers. Each aspect of the plan that is to be funded by Council will need to be approved through standard processes e.g. through the Annual or Long Term Plan consultation, or approved by relevant committees.

Table 6.1: Funding sources for waste action plan

Funding source	Description	Applied to waste activities, such as...
Targeted rates	Eligible properties pay rates to be provided specific services that benefit the people in these eligible properties, but which also contribute to wider public benefits.	Processing of recycling, kerbside collection services.

Funding source	Description	Applied to waste activities, such as...
Waste levy allocation	Councils receive an allocation of national waste levy funds, allocated on a population basis.	Promoting or achieving the waste minimisation activities set out in the WMMP.
External revenue streams	Revenue generated from waste management and minimisation activities, such as: - Gate fees at RRCs. - Income from investment.	- Operating transfer station network - Upgrades to our transfer station network.
General rates	All properties pay a charge which contributes to the council's wider activities and provides public good benefits. Where it is difficult to identify who / what may benefit from an activity, or who / what may cause a problem for which a council activity is required, the costs are funded from the general rate.	- Removal of illegal dumping / litter collection. - Enforcement of Waste Bylaw and Litter Act - Managing closed landfills.
Other funding	External funding such as: - Central government funding (e.g., Climate Emergency Response Fund). - Contestable funds (Waste Minimisation Fund).	- Capital intensive projects, such as upgrades to waste management infrastructure and assets. - Organics processing and resource recovery (in line with WMF priorities).

Appendix A Waste Assessment

DRAFT



Waste Assessment

Prepared for
Opotiki District Council

Prepared by
Tonkin & Taylor Ltd

Date
February 2024

Job Number
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Document control

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Date	Version	Description	Prepared by:	Reviewed by:	Authorised by:
Dec 2023	1.0	Update following new waste strategy	ZOYA, SBRO	ANAI, KIHO	CHP
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1 electronic copy

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1 Introduction

This Waste Assessment has been prepared for Ōpōtiki District Council (Council) in accordance with the requirements of the Waste Minimisation Act 2008 (WMA). The Waste Assessment describes the current waste situation, sets the vision, goals, objectives and targets for the districts, and develops options for meeting future demand. The outputs from this Waste Assessment will be summarised in the final WMMP for Ōpōtiki.

While a WMMP must be reviewed every six years, this assessment takes a much longer-term view. This recognises local government long term planning approaches and that decisions on contracts for services (typically 10 years or more) and infrastructure investment (with a service life of 20-50 years) span many years.

This Waste Assessment and the subsequent WMMP meet Councils obligation to evaluate and plan for waste minimisation and management in the District under the Waste Minimisation Act 2008 (WMA). It also positions council to adequately protect public health by providing facilities for the safe recovery and disposal of waste. A statement from the Medical Officer of Health is provided at the conclusion of this document.

1.1 Structure of this Document

This document is arranged into a number of sections described in Figure 1.1. The sections describe the current state of waste management in Ōpōtiki, and use this information to establish the districts goals, objectives and targets for waste management and minimisation. How these can be achieved is considered in the final section of this document.

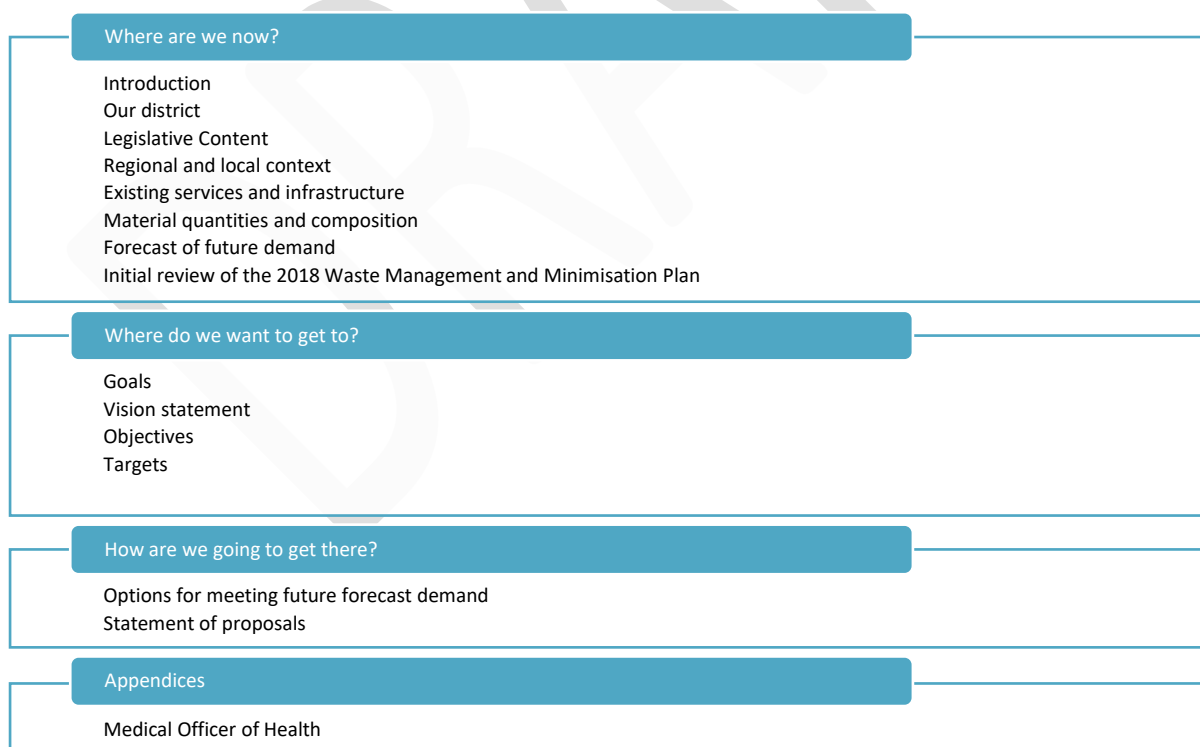


Figure 1.1: Structure of this document.

2 Our District

The Ōpōtiki district is located on the eastern side of the Bay of Plenty. The Bay of Plenty is one of New Zealand's primary fruit growing regions and also benefits from forestry and the tourism industry. The region is divided into seven territorial authorities (Figure 2.1).

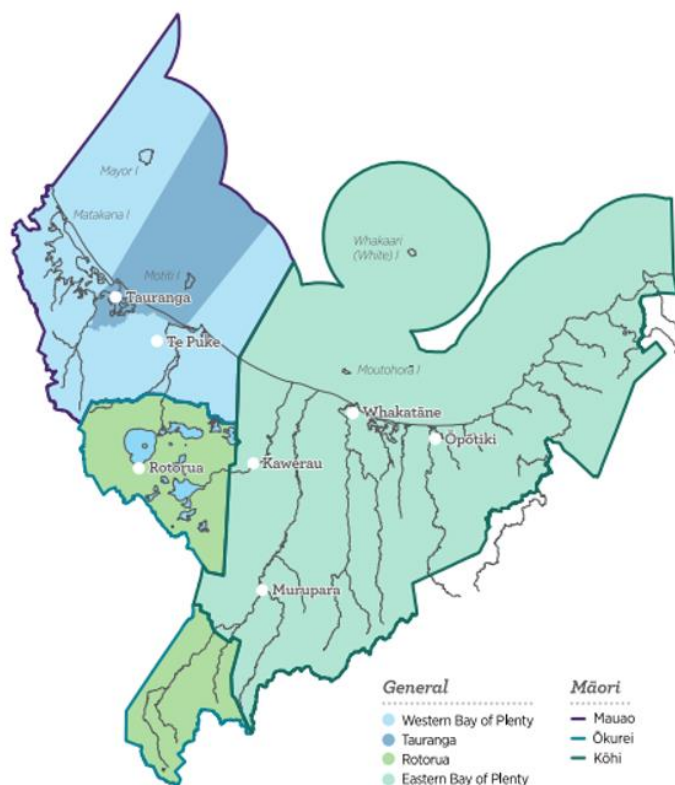


Figure 2.1: Map of Region and Territorial Authority Areas¹.

The main centre in the district is Ōpōtiki township which has a population of approximately 5,380², this accounts for roughly half of the population of the area (estimated at 10,550³). Ōhiwa and Te Kaha are the next most populated areas, however each are recognised as rural settlements with populations below 999 (Statistics NZ).

Over recent years the district has experienced a number of major weather-related events impacting the district and wider East Coast Region.

Ōpōtiki could see a period of significant economic growth on the horizon with the strategic development of the Ōpōtiki Harbour. The harbour development is intended to enhance Ōpōtiki's connectivity and provide a hub for aquaculture such as the Mussel Farm in Ōpōtiki.

¹ Regional Waste and Resource Efficiency Strategy

² Stats New Zealand – Subnational population estimates (TA, ward), by age and sex, at 30 June 2018-2023 (2023 boundaries)

³ Stats NZ - Subnational population estimates (TA, community board), by age and sex, at 30 June 2018-2023 (2023 boundaries)

3 Legislative Context

The legislative context surrounding waste management and minimisation in New Zealand is evolving. This section describes the current context and the drivers that influence waste related legislation.

3.1 Te Rautaki Para Waste Strategy

Te Rautaki Para Waste Strategy (2023) is the Government's core policy document concerning the future direction of waste management and minimisation in New Zealand. The vision of the Waste Strategy commits New Zealand to a low-emissions, low-waste circular economy, by 2050.

The strategy includes three national targets to achieve by 2030. The targets focus on the three most important changes we need to make:

- 1 **Waste generation:** reduce the amount of material entering the waste management system, by 10 per cent per person.
- 2 **Waste disposal:** reduce the amount of material that needs final disposal, by 30 per cent per person.
- 3 **Waste emissions:** reduce the biogenic methane emissions from waste, by at least 30 per cent.

Section 44 of the WMA requires councils to have regard to the waste strategy when preparing their WMMP. Government announcements relating to the review of the WMA and Litter Act 1979 indicate that the statutory relevance of the waste strategy may be strengthened in a replacement act. In planning for Ōpōtiki, a key focus will be to ensure Ōpōtiki is well set up to deliver on the future direction provided in the Waste Strategy.

Te Rautaki Para Waste Strategy is underpinned by the legislative framework in Figure 3.1. The legislative framework is currently under review with a focus on supporting the vision and direction of the Te Rautaki Para Waste Strategy. There is some uncertainty about what the future legislative framework will look like. This includes proposals relating to nationally coordinated investment in infrastructure, clearer obligations for producers of waste (households and businesses) and specified services such as food waste collection from households.

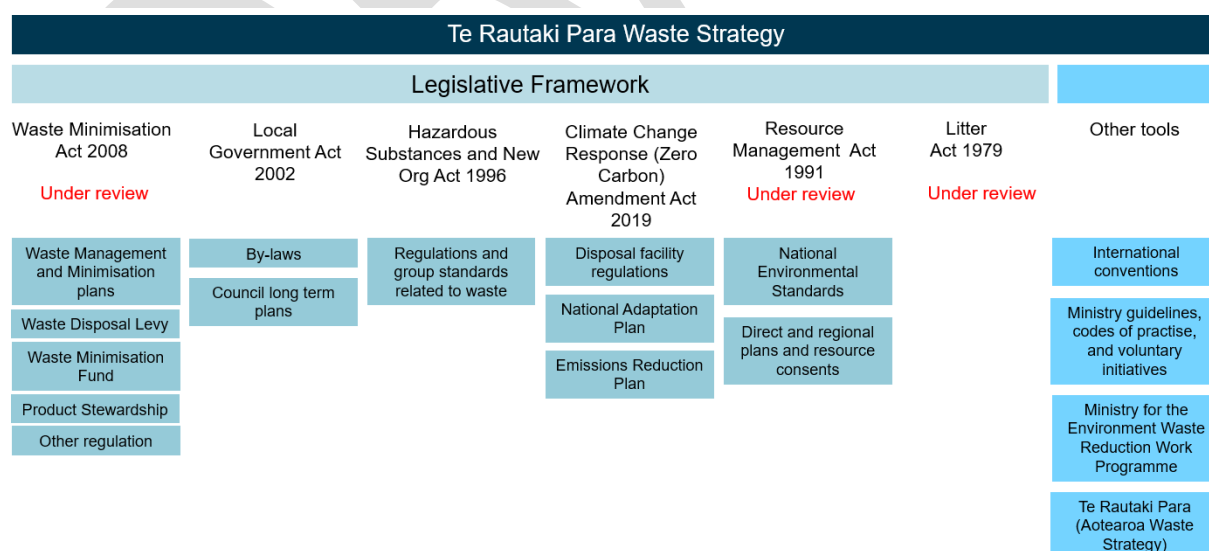


Figure 3.1: Policy context for waste management and minimisation in New Zealand.

3.1.1 Kerbside standardisation

Early in 2023, MfE announced a move to standardise kerbside recycling across the country as part of the workplan /priorities laid out in Te Rautaki Para. This announcement signalled:

- A **standardised set of recyclable materials** would be collected from households in urban areas.
- **Kerbside organics collections** be available to households in all urban areas.
- **Minimum standards for diverting waste from landfill** would apply to councils, with reporting requirements for private waste companies.
- **Businesses would be required to separate food scraps** from general waste by 2030.

The announcement was followed by a Gazette Notice released on 13 September 2023. The September Gazette Notice sets out the first tranche of performance standards⁴ related to standardisation of materials collected for recycling at the kerbside.

The September Gazette Notice signalled that further regulations under the WMA will be developed and that these regulations would:

- Ensure **kerbside recycling services are provided to households in urban areas** (i.e., towns of 1000 people or more) by 2027.
- Make **kerbside organics collection services available to households in all urban areas** by 2030.

The need for businesses to also separate food scraps from general waste by 2030, as signalled in the original announcement, is likely to be considered as part of the broader waste legislation review process.

It is expected that there will be direct implications for Council to navigate as the kerbside standardisation requirements and proposals develop further. Where the policy has already been regulated, these implications are confirmed. Other aspects are expected to have implications if they are regulated. The lack of clarity regarding the timing of some of these proposals creates a degree of uncertainty for Council. However, Te Rautaki Para clearly sets out a pathway towards a more circular economy.

3.2 Waste Levy Expansion

For every tonne of waste disposed to landfill, a levy is applied and collected by the Ministry for the Environment (MfE). Since 1 July 2021, the landfill waste disposal levy has been progressively increased and expanded (

⁴ Standard materials for kerbside collections Notice 2023 (Notice No. 1) [2023-go4222]

Table 3.1).

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Table 3.1: Waste disposal levy expansion

Landfill class	Waste types	1 July 2021	1 July 2022	1 July 2023	1 July 2024
Municipal landfill (class 1)	Mixed municipal wastes from residential, commercial and industrial sources	\$20	\$30	\$50	\$60
Construction and demolition fill (class 2)	Accepts solid waste from construction and demolition activities, including rubble, plasterboard, timber, and other materials	\$0	\$20	\$20	\$30
Managed or controlled fill facility (class 3 and 4)	One or more of: - contaminated but non-hazardous soils and other inert materials (e.g, rubble) - soils and other inert materials.	\$0	\$0	\$10	\$10

Note: Information sourced from MfE, December 2023. Cost shown is per tonne for each respective waste stream.

Under the current WMA (2008) the revenue created from the levy is invested in initiatives to support waste reduction, with funding allocated as follows:

- 50% to local authorities based on population, to spend on waste minimisation initiatives in accordance with their WMMPs; and
- 50% (less administration costs) for waste minimisation projects through the Waste Minimisation Fund.

Based on this, council received \$74,848 in 2023. Under current legislative settings, the proportion of levy received by territorial authorities is expected to grow as the waste levy expansion and increase is implemented. However, councils' disposal costs can also be expected to increase.

3.3 Container Return Scheme

Alongside kerbside standardisation announcements in early 2023, the Government deferred the introduction of a **national beverage container return scheme (CRS)**. Container return schemes encourage consumers and businesses to return beverage containers (e.g., bottles, cans etc) for recycling and/or re-use. They do this by including a refundable deposit (e.g., 20-cents or more) in the price of purchase.

While the scheme has been deferred it has not been abandoned. As such, depending on design, any future CRS may have an impact on the quantity of containers collected through kerbside recycling services and may significantly increase the value of some collected materials. The current design of the deferred CRS is illustrated in Figure 3.2.

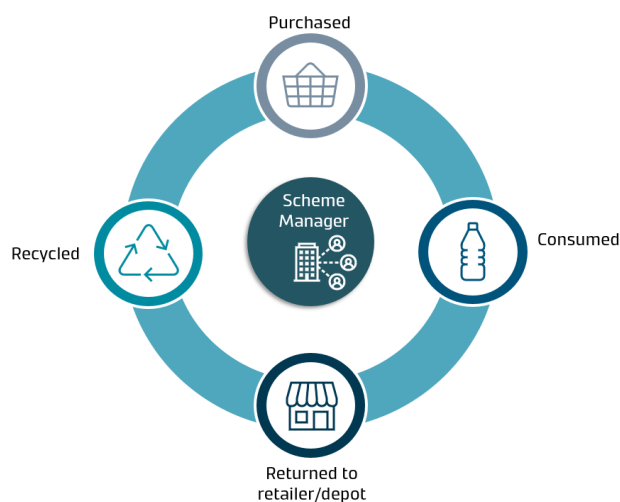


Figure 3.2: New Zealand Container Return Scheme model (figure adapted from Ministry for the Environment).

3.4 Emissions Reduction Plan

In May 2022 New Zealand released a national **Emissions Reduction Plan (ERP)** which set out the planned targets and actions for climate action over the next 15 years. The plan aims to enable a transition to a low-emissions, climate resilient future for Aotearoa New Zealand. As the first of its kind, the Government is placing new requirements on councils to reduce their waste emissions. One of the main actions for local government to reduce emissions is to offer a food scraps collection service by 2030.

3.4.1 International Commitments

New Zealand is party to the following key international agreements that are of relevance to waste minimisation and management:

- **Montreal Protocol** – to protect the ozone layer by phasing out the production of numerous substances.
- **Basel Convention** – to reduce the movement of hazardous wastes between nations.
- **Stockholm Convention** – to eliminate or restrict the production and use of persistent organic pollutants.
- **Waigani Convention** – bans export of hazardous or radioactive waste to Pacific Islands Forum countries.

New Zealand has also joined other countries in supporting the launch of negotiations towards a new treaty to combat plastic pollution. This legally binding treaty is expected to be negotiated by the end of 2024. After negotiation, countries will go through their own treaty-making processes to determine whether they will sign up to the treaty.

4 Regional and Local Context

This Waste Assessment and the resulting WMMP have been prepared within the unique local and regional context of Ōpōtiki. Given this, the actions and objectives identified in the Waste Assessment and WMMP reflect, intersect with, and are expressed through other planning documents. Key planning documents and other factors influencing waste management and minimisation are discussed in this section.

4.1 Regional context

4.1.1 Regional Waste Strategy

The Regional Waste and Resource Efficiency Strategy (2013 – 2023) presents a regional position on managing waste, hazardous substances, hazardous waste and contaminated sites in the Bay of Plenty. The strategy was reviewed following the completion of the last waste and infrastructure stocktake in 2013.

The Regional Waste Strategy has a vision of “working together towards a resource-efficient region”.

The Strategy also contains six key focus areas through which the vision and associated goals will be achieved:

- 1 Foster collaboration, partnerships and promote forward planning.
- 2 Improve data quality and information management.
- 3 Review regulatory environment governing waste.
- 4 Increase resource efficiency and beneficial reuse.
- 5 Reduce harmful impacts of waste.
- 6 Stimulate research and innovation.

4.1.2 Cross-regional collaboration

The Bay of Plenty and Waikato regional councils are working together on a number of collaborative projects. The areas of collaborative work include:

- Waste assessment and waste management and minimisation planning.
- Solids waste bylaws, licencing and data.
- Education and communication.
- Procurement.
- Organic waste.
- Rural waste.

4.1.2.1 Eastern Bay of Plenty collaboration

Whakatāne District Council is currently leading an **organics processing options investigation and feasibility assessment**, in collaboration with Ōpōtiki District Council and Kawerau District Council. The three councils have partnered on this work and have access to supporting feasibility funding from MfE as part of the kerbside organics pre-implementation funding package.

The feasibility study is considering a number of collections and processing scenarios for organic materials and is expected to produce:

- 1 An overall analysis of organic waste options for the Eastern Bay.

- 2 A collections and processing options assessment, with Whakatāne and Kawerau reported together and a separate report provided for Ōpōtiki.

This work is ongoing and is expected to be finalised in 2024.

4.2 Local context

4.2.1 Long Term Plan (2021 – 2031)

Ōpōtiki District Council is required to produce a **Long Term Plan (LTP)** every three years. A key part of the Long Term Plan (LTP) is the vision that has been set for the Council. The Council's vision, set out in the 2021 – 2031 Long Term Plan, is:

'Strong Community – Strong Future'

The key focus areas for the Council remain the four well-beings, namely:

- Economic well-being
- Social well-being
- Environmental well-being
- Cultural well-being

The current LTP includes the following sustainable solutions for solid waste management:

- Provision of effective and efficient waste collection and disposal facilities.
- A focus on waste minimisation through waste reduction, reuse and recycling.
- Ensuring a balance between economic incentives for waste reduction and the cost associated with waste disposal through fees and charges.

4.2.2 Long Term Plan (2024 – 2034)

The LTP 2024 - 2034 is being developed alongside this Waste Assessment. Where possible work on the draft LTP 2024 - 2034 has been informed by the information, findings and outcomes highlighted in this Waste Assessment document.

4.2.3 Solid waste bylaw⁵

Council has responsibilities and powers as regulators through the statutory obligations placed upon them under the WMA. Council has a role of regulator with respect to the management of litter and illegal dumping, trade waste requirements and nuisance related bylaws. Council has a solid waste bylaw which forms part of the **Consolidated bylaws 2021**. If there is significant change to the current waste management system then the bylaw may require review.

The current bylaw (Part 10 of the consolidated bylaw) provides for:

- Collection of waste and recyclables.
- Obstruction of footpath.
- Deposit of certain materials in approved containers prohibited.
- Responsibility to ensure road corridor is free of litter post-collection.
- Rubbish disposal areas and transfer stations.
- Interference with and removal of waste or recyclable materials.
- Matters to be considered for issue of licences to collectors.

⁵ [Opotiki District Council Consolidated Bylaws 2021.pdf \(odc.govt.nz\)](#)

4.2.4 Population

In 2023 the population in Ōpōtiki is 10,550⁶. Research was undertaken by MRCagney in 2023⁷ on behalf of Whakatāne District Council into population projections for the Eastern Bay of Plenty. The draft 2024 - 2034 Long Term Plan is expected to be based on the high scenario setting of the MRCagney report, which shows a projected increase to 12,140 residents in 2034. This would result in an additional 692 households over the ten years to 2034.

Table 4.1: Ōpōtiki District Population Projections 2024-2034⁸

Population	2024	2026	2028	2030	2032	2034
Population projections	10,800	11,200	11,400	11,640	11,880	12,140
Additional household predictions	155	310	390	490	590	692

Ōpōtiki has a relatively high proportion of unoccupied dwellings compared to the regional and national averages^{9 10}. Household size (2.38, 2018)¹¹ is smaller than regional (2.6) and national (2.7) figures. Ōpōtiki has a high population of Māori with 64%¹² identifying as Māori or part- Māori, with those identifying as European or part-European making up the second largest ethnic group at 51%.

4.2.5 Economy

The District economy is dominated by agriculture, forestry and fishing (32.9%), other industry (15.5%) and owner occupied properties (9.1%)¹³. Forestry and horticulture units (mainly kiwifruit), dominate across the district. Kiwifruit processors in Ōpōtiki include Seeka and Riverlock Group, meat and dairy processing happens outside of the District with the processing sites including AFFCO Rangiora (near Te Puke) and Fonterra Edgecumbe. The development of a large-scale mussel farm 8.5km off the coast has added significant economic activity to the district.

To realise the potential of the mussel farm development work on the Ōpōtiki Harbour is underway. The project will provide access for larger boats by creating an entrance that is navigable in all but the worst conditions, enabling Ōpōtiki to become a service and processing base for aquaculture and other marine related industries¹⁴. Ōpōtiki also hosts a number of tourists with nearly 40,000 visitors to the district each year (pre Covid-19), expected to increase following the completion of the harbour project.

⁶ Stats NZ - Subnational population estimates (TA, community board), by age and sex, at 30 June 2018-2023 (2023 boundaries)

⁷ MRCagney (NZ) Ltd, 2023, Eastern Bay of Plenty Housing and Business Needs Research (prepared for Whakatāne District Council)

⁸ All data taken from the draft LTP 2024-2034 working

⁹ <https://www.stats.govt.nz/tools/2018-census-place-summaries/bay-of-plenty-region> &

¹⁰ <https://www.stats.govt.nz/tools/2018-census-place-summaries/new-zealand>

¹¹ Martin Jenkins (2017) Ōpōtiki District Population and Rateable Assessment Projections 2018-2028.

¹² <https://www.stats.govt.nz/tools/2018-census-place-summaries/new-zealand#ethnicity-culture-and-identity>

¹³ <https://ecoprofile.infometrics.co.nz/Opotiki-District/Gdp/Structure>

5 Existing services and infrastructure

Ōpōtiki District utilises waste management infrastructure in and outside of the district. Services and infrastructure are provided and delivered by a combination of Council, commercial entities and Iwi.

5.1 Infrastructure in the Ōpōtiki district

Waste minimisation and management infrastructure and services in Ōpōtiki are provided and delivered by a combination of Council, commercial entities and Iwi (Figure 5.1). This section describes these in terms of those that are managed by council, and those that are not.

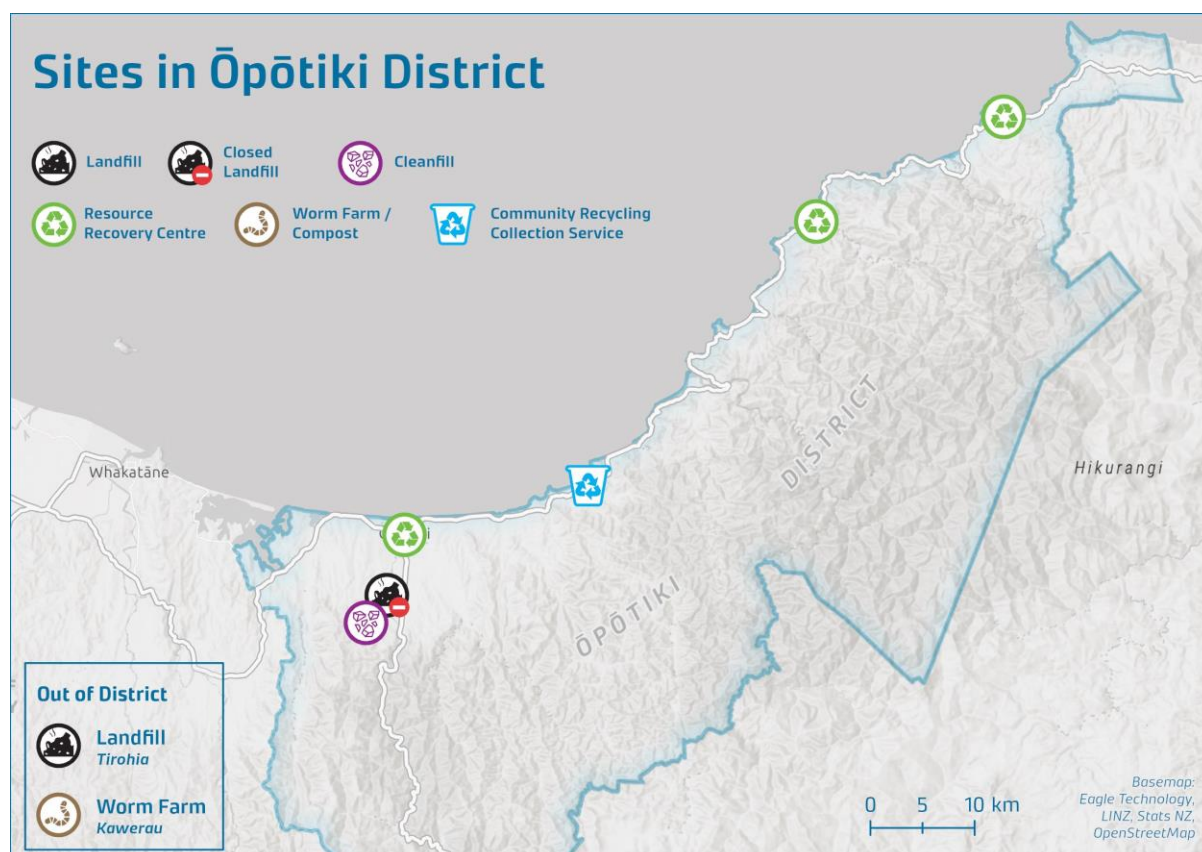


Figure 5.1: Key Waste Facilities in Ōpōtiki district.

5.1.1 Council controlled infrastructure

5.1.1.1 Council rubbish and recycling collections

A kerbside collection service for rubbish and recycling is provided to those households and businesses located with the urban area of the district (Figure 5.2).

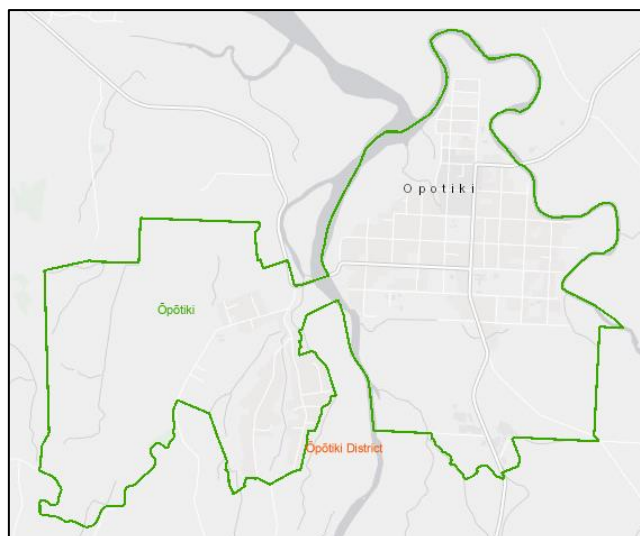


Figure 5.2: Outline of Ōpōtiki District Council urban kerbside collection service area.

Rubbish is collected weekly, with the materials collected for recycling alternating each week (Figure 5.3). There is no separate food waste collection for households or businesses. Councils service is delivered to 65% of households¹⁵ and 1-2% of businesses across the district.

The service is delivered by a contractor (Handee Can Services – Whakatāne), with contracts due to be reviewed in June 2024. The kerbside collection is funded by a targeted rate. For 2023/24, the targeted rate is \$263.06 (GST inclusive).



Figure 5.3: Council provided urban kerbside collection system.

¹⁵ Proportion calculated using 2,129 households receiving the kerbside collections and 3,261 occupied properties (2018 Stats NZ data).

5.1.1.2 Resource Recovery Centres

The Resource recovery centres (RRCs) in Ōpōtiki provide facilities for the public and commercial operators to dispose of waste and recoverable materials. Council has an agreement with Ngāitai Iwi Authority for operation of a Community Recycling Collection Service (CRCS) in Torere. The CRCS accepts general household rubbish and recycling only, and operates as an equivalent to the urban collection service for the residents of Torere and surrounding area. The opening hours, locations and materials accepted at each RRC are described in Table 5.1.

Material deposited at the RRCs attract a gate fee. Charges for greenwaste, recyclable materials and non-recyclable materials (waste) are outlined in

Table 5.2. Items including whiteware, gas bottles, and tyres¹⁶ attract per item charges. These are available on council's website.

Household quantities of hazardous materials are accepted at the RRC's. Hazardous wastes are logged as they are received, and stored in the hazardous waste store until a full load is accumulated. The disposal or recovery of the hazardous wastes is contracted out as required.

Table 5.1: Resource recovery infrastructure and collection in the district

Facility Description	Operation	Hours	Materials accepted
38 Wellington Street, Ōpōtiki	Operated by Council	Thursday – Monday 8:00am – 4:00pm Tuesday & Wednesday – Closed	A very wide range of recyclable and recoverable materials, residual waste, household waste
Copenhagen Road, Te Kaha		Saturday, Sunday, Monday & Wednesday 9:00am – 2:00pm Tuesday, Thursday & Friday – Closed	Recyclable and recoverable materials, residual waste, household hazardous waste
Orete Forest Road, Waihou Bay		Monday, Wednesday & Saturday 09:00am – 2:00pm Sunday, Tuesday, Thursday & Friday – Closed	Recoverable materials, residual waste, household hazardous waste
Ngāitai Iwi Authority shed and collection Marae Grounds, Torere	Operated by Ngāitai Iwi Authority	Thursdays for two to three hours	General household rubbish and recycling only ¹⁷ .

Note: Asbestos can be managed at the Ōpōtiki RRC with prior notice.

¹⁶ The cost of tyre disposal will be removed at the site as of September 24 2024, assuming the successful introduction of the TyreWise product stewardship scheme.

¹⁷ Current arrangements limits total volume collected to 6cu.m per week however a new agreement is currently under negotiation.

Table 5.2: Ōpōtiki household/domestic waste - fees & charges

Household/Domestic Waste	Green Waste	Recyclable	Non-Recyclable
Small bag (less than 25 litres)	Minimum \$4.00	\$2.00	\$3.50
Large bag (up to 75 litres)		\$3.00	\$7.00
Extra-large bag (over 75 Litres and wheelie bins)		\$5.00	\$10.00
Wool fadge (1m ³)	\$27.00	\$25.00	\$55.00
Cars (0.5m ³)	\$9.00	\$7.00	\$20.00
Ute, station wagon, van, small trailers (up to 1m ³)	\$18.00	\$10.00	\$30.00
Large trailers (1m ³ to 2m ³)	\$36.00	\$20.00	\$60.00

Commercial/Industrial/Business Waste: Depending on ease of handling, price by negotiation, but generally \$90.00 per m³. For loads greater than 2m³, waste depositors may have to arrange for their own transport to landfill. Council reserves the right to reject any commercial, business or industrial loads.

Since the Woodland Landfill closed in 2004, Ōpōtiki has had to dispose of all non-cleanfill solid waste out of the district. Rubbish and recycling from kerbside collections, other RRC's, and material are brought directly to the Wellington Street RRC which acts as a consolidation point for waste. From here, waste is transported out of the district to Tirohia Landfill (near Paeroa).

5.1.1.3 Closed Landfills

There is one closed landfill in the Ōpōtiki district, Woodlands Landfill which closed in 2005. Council has responsibility under the resource consent to provide ongoing maintenance and monitoring of the landfill after the site is closed¹⁸.

It is understood that there may also be a historic fill site next to Tarawa Creek within the town centre, however little formal information is available on this site.

5.1.1.4 Class 2 – 4 Landfills

There is one Class 4 site (controlled fill) in the district that is consented by the Bay of Plenty Regional Council to receive cleanfill type material and up to 10% untreated timber or greenwaste. Materials accepted are summarised in Table 5.3. The site does not have a weighbridge.

The site is estimated to receive between 5,000 – 10,000 tonnes per annum of material depending on the level of construction activity in the District¹⁹. It is understood that much of this material would previously have been disposed of at the now closed Woodlands Landfill. This site is included on the map shown earlier in Figure 5.1.

Table 5.3: Consented Class 4 landfills in Ōpōtiki district

Facility	Location	Capacity	Materials and Charges
Waiotahi Contractors (Private facility)	Woodlands Road	Consented to 2032	Soil, rock, concrete (minus reinforcing), brick, up to 10% untreated timber or greenwaste.

¹⁸ Ōpōtiki District Council 2022/23 Annual Report (ISSN 1173-1842)

¹⁹ Personal communication with Spike Petersen, director, Waiotahi Contractors

One consented site exists near to the cleanfill for burning of untreated wood – principally trees from orchards, which equates to around 680 tonnes per annum.

5.1.1.5 Waste Education and Minimisation Programmes

Council encourages all schools to adopt a Zero Waste Schools Policy. Marae are also being encouraged to adopt a recycling strategy.

Council also contracts the delivery of waste reduction programme in all schools from time to time.

5.1.1.6 Public place litter bins

There are 19 street litter bins provided in the Ōpōtiki CBD which are serviced under contract by OCS. No bins are currently provided at sports or recreational fields or beaches. Council is seeking to install recycling and rubbish bins located next to toilets located at/within Council reserves.

5.1.1.7 Litter and illegal dumping

During 2023, 46 incidents were recorded to the end of November with enforcement undertaken by Council officers who aim to identify those responsible and recover costs. Litter included recyclable waste, organic material and burnt out or abandoned vehicles.

5.1.1.8 Other Council Services/contracts

In addition to the services described above, council has a number of contracts in place for the delivery of services in the district. This includes rates-funded clean ups of illegal dumping, and provision of litter bins in public places. These contracts are summarised in Table 5.4

Table 5.4: Other solid waste services

Service	Contractor	Contract expiry date
Transport of waste to landfill and some recovered materials	Delta Contracting Ltd	30 June 2024
Collection from coastal RRCs	Handee Can Services	30 June 2024
	Delta	Adhoc ²⁰
Transport of glass bins	Ōpōtiki drainlayers	30 June 2024
Tyres (currently chipped and used as tyre derived fuel)	South Pacific Waste and Recycling, Te Puke; Refined Tyre Company, Napier; Waste Tyre Solutions, Auckland; Waste Management NZ Auckland	As required
Street litter bins installed at sports or recreational fields or beaches	OCS	30 June 2024
Clean up of Illegal Dumping, beach and park cleaning	OCS	30 June 2024

²⁰ This arrangement does not have an assigned contract and as a result there is no contract expiry date.

5.1.2 Non-Council Services in Ōpōtiki

There are a number of non-Council waste and recycling service providers operating in the district. The focus of these services is rubbish collections. These are described in Table 5.5.

Table 5.5: Non-council waste and recycling Services

Operator	Services	Location
Handee Can Services	Waste Collection – skip bins and private wheeled bins	Whakatāne
Blue Rock Contractors	Waste Collection – skip bins and private wheeled bins	
Waste Management	Waste Collection – skip bins	
AgRecovery	Drop off location – agrichemical containers, silage wrap and pit covers, unwanted/expired chemicals	Apex Orchard Services, 140 St John Street
Te Whatu Ora	Drop off location – medical waste (medicines, needles, syringes etc.)	Ōpōtiki Medical Centre, King Street

5.2 Infrastructure outside of the Ōpōtiki district

Infrastructure from outside of the district complements and works alongside infrastructure in Ōpōtiki, given the districts small size. This section describes the waste management utilised by Ōpōtiki that exists outside of the district. This infrastructure is not owned or operated by council.

5.2.1 Recycling and reprocessing

All recyclables are reprocessed and recovered outside the district at a range of commercial processing facilities. These are detailed in **Error! Reference source not found..**

Table 5.6: Other recycling and reprocessing facilities

Facility	Description
O-I NZ Ltd, Auckland	Process colour-sorted glass at their Penrose (Auckland) facility.
Metal Co, Te Puke	Ferrous metals recycling. E-waste components.
EcoCast, Whakatane	Vermicomposting of industrial, council (including biosolids) and some post-consumer organic wastes– currently accept screenings from the Ōpōtiki wastewater treatment plant.
Agrecovery, NZ wide	Accept unwanted agrichemicals and empty containers. Collection from properties (some charges apply) or free drop-off containers at site at Apex Orchard Services (prior appointment required), Ōpōtiki.
Various commercial (EastPack, supermarkets etc)	Recycle own cardboard and other recyclable materials.
Waste Management, Tauranga	Plastics, paper, cans and cardboard
Oji Fibre Solutions, Auckland, Tokoroa, Kawerau	Collect and process various paper and cardboard grades in New Zealand and for export.
Plateau Composting, Kawerau	Mulch and screen greenwaste to produce commercial grade compost.

5.2.2 Landfill

All rubbish that is consolidated at the Wellington Street RRC is currently transported to Tirohia Landfill in the Hauraki district. Tirohia Landfill has been operated by Waste Management New Zealand (WMNZ) since the end of 2016 and is consented until 2035. WMNZ applied for a consent to expand and extend the site in mid-2021; this was declined by Waikato Regional Councils Joint Hearing Committee in October 2021. The decision was appealed by Waste Management Ltd in November 2021 and this process remains ongoing. **Error! Reference source not found.** lists the landfills that could feasibly receive municipal waste from Ōpōtiki.

Table 5.7: Class 1 landfills accessible from Ōpōtiki District

Name & Owner/Operator	Description	Location	Capacity and Consent	Waste Levy ²¹
Tirohia Landfill, Waste Management	Non-hazardous residential, commercial and industrial solid waste, including special wastes. Sludges with less than 20% solid by weight are prohibited. Compostable material is also processed on site.	Tirohia, Hauraki District 224 km from Ōpōtiki.	Consented to accept 4 million m ³ approximately 2035.	Class 1 landfill - \$50/ tonne
North Waikato Regional Landfill, EnviroWaste Services Ltd	Non-hazardous residential, commercial and industrial solid waste including special wastes. Sludges with less than 20% by solid weight are prohibited	Hampton Downs, Waikato District 277km from Ōpōtiki	Consented to 2030	Class 1 landfill - \$50/ tonne
Taupo District Council, Taupo District	No gas capture system in place. Taupo Council and non-Council wastes	Broadlands Road landfill, Taupo 217km from Ōpōtiki	Consented to 2027, capacity up to 16-17 years ²² .	Class 1 landfill - \$50/ tonne
Waitomo District Landfill, Waitomo District Council	No gas capture system in place	Waitomo District 275km from Ōpōtiki	Consented. Consented capacity of 232,000 tonnes. 13 years of capacity at current rates.	Class 1 landfill - \$50/ tonne

²¹ Rate as of November 2023

²² Solid Waste Asset Management Plan [1 \(taupodc.govt.nz\)](https://www.taupodc.govt.nz/)

6 Material quantities and composition

This section describes the material quantities and composition resulting from the waste management system described in Section 5. A summary of these quantities and composition are provided in Table 6.1 with further information provided in Sections 6.2, 6.3 and 6.4.

This waste assessment is based on available data sets which present some limitations in accuracy and understanding of trends or anomalies. Where appropriate the data has been compared with nationally available data to track appropriateness and check assumptions.

6.1 Data availability

It is not known where privately collected material is deposited, but it is assumed that this would mostly go to one of the two transfer stations at Whakatane (which also send their waste to Tirohia for disposal).

Tonnage data is not available from the individual RRCs or the kerbside collections. Tonnage data is currently based on the consolidated waste quantities that leave the Wellington Street RRC for reprocessing or disposal. Additionally, tonnage data is recorded against the month that payment is invoiced for the material and therefore may not accurately reflect monthly volumes transitioning through the facility.

In 2022/23 the Wellington Street RRC received funding to support construction of a weighbridge at the site. As of the end of the 2023 calendar year, construction of the weighbridge is complete. It can be expected that future waste assessment calculations and general waste tracking from the district will be significantly improved in future.

6.2 Recovered materials

6.2.1 Council's kerbside recycling RRCs

Table 6.1: Material recovered from the Wellington Street RRC (Jul 2021 – Jun 2023)

Material	2021-2022 Quantity (tonnes per annum)	2022-2023 Quantity (tonnes per annum)
Glass	446	573
Plastics	63	57
Paper	70	76
Cardboard	151	192
Metal	227	258
Organic/green waste	0	552
Concrete/rubble	12	6
Wood	0	22
Tyre/rubber	0	22
Total	968	1,757

Glass represents the largest stream of material recovered overall (by weight), followed by green waste and metals. However, the Ōpōtiki data includes non-domestic waste disposed of at the RRC which may impact the data set compared to similar facilities that receive large domestic and light commercial material streams.

The data shows a significant increase in the quantity of materials between 2021-22 and 2022-23. However, as mentioned above, quantities are recorded against the date of invoice and therefore the information is unlikely to accurately represent the quantity of materials moving through the RRC at a given point in time. For example, no organic/green waste is recorded in 2021-22 whereas a large quantity is recorded in 2022-23. It is more likely that materials collected during 2021-22 were not invoiced during that time period, rather than no material being received during this time. This is unlikely to be an issue going forward as the introduction of the weighbridge will provide more accurate, time specific data.

6.2.2 Diverted materials

There is no information available on the quantity or composition of material diverted outside of the Council resource recovery system or where it is taken to for recovery. Examples include:

- Composting of organic waste on farms or private properties.
- Arborists chipping vegetation and commercial operations selling this as a mulch.
- Stock feed not ending up in landfill, but being diverted to piggeries.
- Commercial recycling from businesses e.g. New World where national contracts are likely to be in place, with the transportation of recyclables outside of the district for processing.

6.3 Waste to class 1 landfill

It is estimated that around 2,352 tonnes of waste were disposed to landfill from the Wellington Street RRC between 1 July 2021 and 30 June 2022.

From 1 July 2022 to 30 June 2023, it is estimated that around 2,424 tonnes of waste were disposed to landfill from the Wellington Street RRC.

6.3.1 Waste composition

There is currently no composition data available for residual waste from the Ōpōtiki district. Estimates of kerbside waste composition have been made based on existing national Solid Waste Analysis Protocol (SWAP) data and data provided by Council. The composition is presented in this section using the 12 primary classifications in the SWAP. The available data does not distinguish between kerbside collected waste and that disposed of at the RRC, it also does not separate domestic waste from business and commercial. Therefore Table 6.2 assumes an average of 446kg of rubbish per household per annum. This is based on findings from a 2020 audit of domestic kerbside rubbish and recycling undertaken at five locations around New Zealand²³.

Table 6.2: Estimated composition of waste to landfill

Category	Composition (%) ²⁴	Weight (kg) ²⁵
Paper	14.3%	64
Plastics	12.1%	54
Putrescibles (kitchen)	40.0%	178
Putrescibles (green)	9.6%	43
Ferrous metals	2.1%	9

²³ Waste Not Consulting (2020) Rethinking Rubbish and recycling – prepared for WasteMINZ TAO Forum

²⁴ Waste Not Consulting (2009) Household sector waste to landfill in New Zealand. Prepared for MfE

²⁵ Waste Not Consulting (2020) Rethinking Rubbish and recycling – prepared for WasteMINZ TAO Forum

Category	Composition (%) ²⁴	Weight (kg) ²⁵
Non-ferrous metals	0.9%	4
Glass	3.0%	13
Textiles	3.8%	17
Nappies and sanitary	10.7%	48
Rubble	1.6%	7
Timber	0.7%	3
Rubber	0.2%	1
Potentially hazardous	1.0%	4
Total	100.0%	446

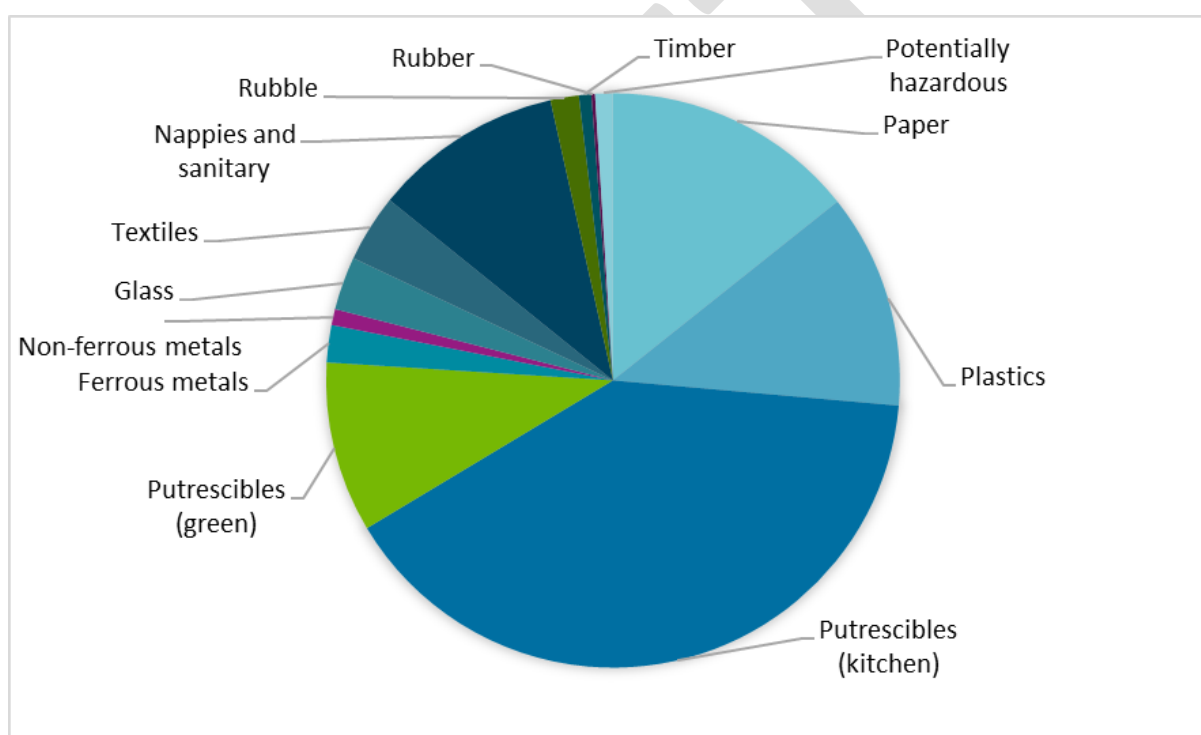


Figure 6.1: Estimated composition of domestic kerbside waste.

Overall composition of waste to landfill is influenced by the types of activities undertaken in the district and without this information an estimate of the overall waste to landfill composition is not available.

In 2015, a study on urban organic waste at the kerbside²⁶ identified that food waste was approximately 33% of the total waste at the kerbside in Ōpōtiki. Note that the sample size for this investigation was small and there will likely be variability in this composition across the district.

6.4 Summary of waste disposed to all landfills

Based on the data provided in this section, a summary of the amount of waste disposed to land between 1 July 2022 and 30 June 2023 has been provided below. Total waste to disposal is an

²⁶ Maple, P (2015) "Scoping study to look at the feasibility of introducing an urban organic waste kerbside collection and disposal system in Ōpōtiki", completed as part requirement for an Advanced Zero Waste course

estimated 17,948 tonnes of solid waste from the Ōpōtiki district. Of this material, 14% or 2,424 tonnes is waste disposed to landfill via the RRC. Waste to class 2-4 landfills contributed 42% to the total, with farm waste contributing 41%.

Table 6.3: Estimated total waste disposal to all landfills 2022-23

	Estimated quantity (tonnes)	Percentage (%)
Waste disposal from RCC (includes kerbside)	2,424	14%
Commercial collectors (outside of the district)	422	2%
Demolition waste direct to Tirohia Landfill	170	1%
Other residual waste	60	>1%
Material sent to cleanfill and other waste to class 2-4 landfills	Est 7,500	42%
Farm waste estimate including non-natural rural waste (Refer Section 6.5.1)	7,372	41%
Total waste to land	17,948	100%

6.5 Other wastes

6.5.1 Rural waste

Little research has been conducted on the quantities of waste generated on farms and disposed of on-site across New Zealand. There are two pieces of research, one conducted in the Waikato and Bay of Plenty in 2014²⁷ and one in Canterbury in 2013²⁸ on farm waste. The Canterbury study found that 92% of the farms surveyed practised one of the following methods (burn, bury, or bulk store indefinitely) for on-site disposal of waste. The studies calculated average annual tonnages of waste for four different types of farm in the regions and this is seen as reflective of other parts of New Zealand.

²⁷ GHD (2014) *Rural Waste Surveys Data Analysis Waikato & Bay of Plenty*, Waikato Regional Council Technical Report 2014/55, July 2014

²⁸ GHD (2013), *Non-natural rural wastes - Site survey data analysis*, Environment Canterbury Report No.R13/52

Table 6.4: Estimated on farm disposal²⁷

On-farm disposal of farm waste in district/city – tonnes/annum	Dairy	Livestock	Arable	Viticulture / Orchards	TOTAL
Number of farm holdings (2012)	69	96	66	156	387
Non-natural rural waste (T/farm/annum)	6.1	8.9	7.4	5.5	6.8
Domestic waste (T/farm/annum)	0.6	0.08	1.1	0	0.3
Organic materials (T/farm/annum)	21.2	21.2	3.2	10	13.6
Total waste generated (T/farm/annum)	27.9	30.18	11.7	15.5	20.7
Disposed of on-farm (T/farm/annum)	25.7	27.8	10.8	14.3	19.0
Total waste disposed of on-farm (T/annum)	1,771	2,665	710	2,225	7,372

This data has been applied to the approximately 400 farms in the Ōpōtiki district (Table 6.4). This suggests that 20.7 tonnes of waste per farm per annum. With 19 tonnes per farm estimated to be disposed of on the farm itself through burial, burning, or indefinite bulk storage. The reports estimated that 7,372 tonnes of waste per annum are disposed in this way across the Ōpōtiki district.

6.5.2 Biosolids

Biosolids from council's wastewater treatment processing are transported to Whakatane for processing. The treated biosolids are sent to Waste Management Tauranga. In 2023, Opotiki produced approximately 54 tonnes of biosolids.

6.5.3 Medical Waste

Medical waste is predominantly disposed of through local medical centres; Council receives small quantities (2-3kg/year) of medical waste that has been incorrectly disposed of at its facilities.

6.5.4 Hazardous waste

Hazardous waste collected at the Opotiki Resource Recovery Centre (RRC) site is appropriately stored and collected as needed. In 2023, a 55 kgs of general household hazardous wastes were collected, along with an additional 388 kgs of other hazardous materials.

6.6 Waste disposal per capita

Total waste per capita has been calculated with the information available for council operations only and has been provided below.

Table 6.5: Waste disposal per capita

Waste per capita	
Population ²⁹	10,550
Total waste to Class 1 landfill (tonnes 2022/23 year), note: Council operations only	2,424
Tonnes / capita / annum of waste to Class 1 landfills	0.230

²⁹ MRCagney (NZ) Ltd. 2023. Eastern Bay of Plenty Housing and Business Needs Research – prepared for Whakatāne District Council

7 Forecast of future demand

7.1 The changing landscape for resource recovery and waste management

There are a range of drivers that mean methods and priorities for waste management are likely to continue to evolve, with an increasing emphasis on diversion of waste from landfill and recovery of material value. These drivers include:

- **Landfill costs have risen** in the past due to higher environmental standards under the RMA and increasing construction and operation costs. Costs will continue to rise with increases in the Waste Disposal Levy (currently \$20 per tonne, moving to \$60 per tonne in 2024) and costs for landfills associated with the New Zealand Emissions Trading Scheme.
- **The Te Rautaki Para Waste Strategy (2023)** has provided an increased focus on the circular economy and emission reduction, with an ambitious 2050 roadmap. For the district, this may require funding infrastructure to manage specific material streams, implementing national standardisation of collections, a focus on organic waste, increased data collection and reporting requirements and continuing efforts on developing product stewardship schemes.
- **Statutory requirements in the Waste Minimisation Act 2008** to encourage waste minimisation and decrease waste disposal – with a specific duty for TAs to promote effective and efficient waste management and minimisation and to consider the waste hierarchy in formulating their WMMPs. Updates planned to the WMA to support the implementation of the Te Rautaki Para Waste Strategy may affect the approaches driven within Ōpōtiki.
- **New regulations surrounding forestry** (National Environmental Standards for Commercial Forestry) include new requirements to remove slash from erosion-prone land. This may increase the amount of forestry slash requiring disposal in Ōpōtiki, where previously this was left on forests to break down.
- **Waste industry capabilities.** As the nature of the waste sector continues to evolve, the waste industry is changing to reflect a greater emphasis on recovery and is developing models and ways of working that will help enable effective waste minimisation in cost effective ways. This will likely open up new markets for recoverable materials. Recent examples include the development of a food waste anaerobic digestion plant in Reporoa, construction waste diversion activity in Auckland and a tyre derived fuel scheme supplying Golden Bay Cement in Whangarei.
- **Recycling and recovered materials markets** – many materials collected for recycling rely on downstream processing in New Zealand or off shore. Increasingly there is a focus on collecting materials that can be processed in New Zealand (paper, cardboard, PET, HDPE, glass) or that are traded internationally at good prices (steel, aluminium).
- **Local policy**, including actions and targets in the WMMP, bylaws and licensing.
- **Collection systems.** In brief, more convenient systems encourage the presentation of material for recycling or disposal. An increase in the numbers of large wheeled bins used for rubbish collection, for example, drives an increase in the quantities of material disposed of through them. Conversely, more convenient recycling systems with more capacity help drive an increase in the amount of recycling recovered.
 - Council has the benefit of a range of small infrastructure at the Ōpōtiki RRCs that is **capable of sorting, compacting and baling various materials**. This, combined with the relatively low throughput at the site, enables a wide range of material types to be separated at the RRCs. This in turn allows Council to secure good prices for these commodities due to relatively low levels of contamination.
 - The cost of residual waste disposal at the Wellington Street RRC is currently \$90/m³.

- Ōpōtiki's **generation of waste per capita to Class 1 landfill** is approximated to be 0.23 tonnes per capita per annum which is recycled, composted or disposed to landfill.
- Ōpōtiki's **generation of waste per capita (including to Class 1-5 landfills and disposed on-farm)** is approximated to be 1.70 tonnes per capita per annum which is recycled, composted or disposed to landfill.
- Ōpōtiki's **growing tourism industry** is likely to increase the volume of waste generated in public place bins. This waste generation may fluctuate, for example, increasing in large centres around the summertime when holiday makers in the district visit beaches and reserves.

7.2 Projections

Forecasts of waste 'generated' have been developed using population projections, historic waste quantities and the specific factors relevant to the district.

The data presented in **Error! Reference source not found.** (c omparison of waste to Class 1 landfill and recycling over time) suggests that the proportion of waste recovered is reducing over time or that the recovery of waste is in line with population growth. The figure also shows an increase in the amount of waste and recyclables being produced in the district since 2020. This could be attributed to post-COVID related behaviour change, population changes, harbour development or more materials coming from the rural sector however this is unclear from the data available.

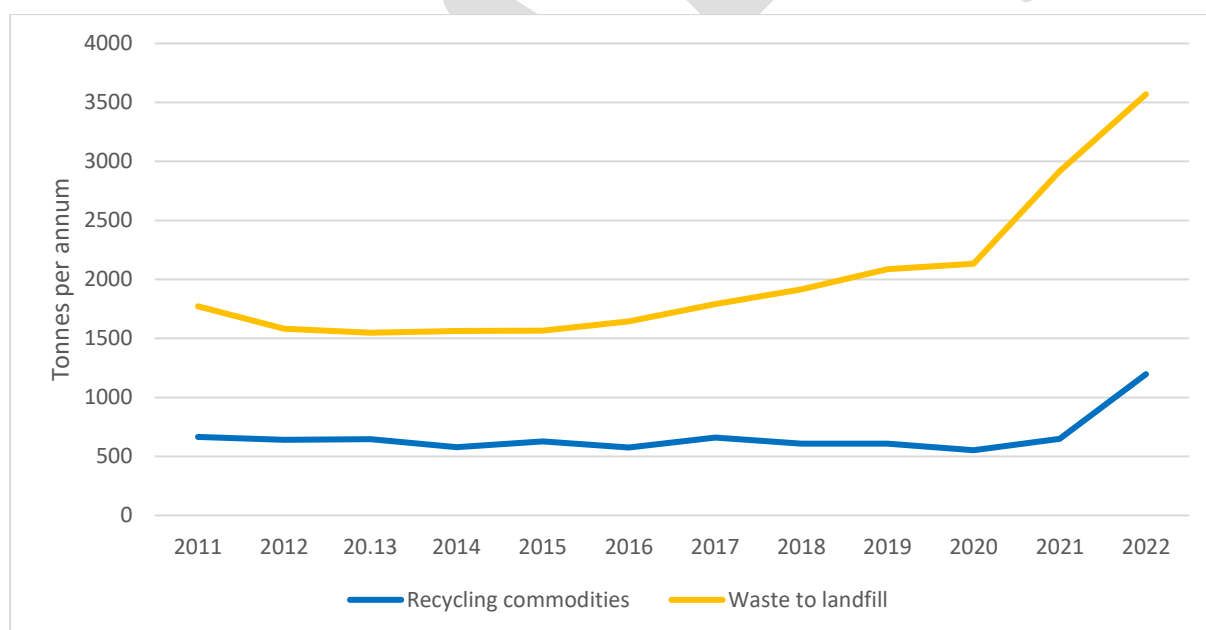


Figure 7.1: Waste quantities over time³⁰.

There are several factors which create significant uncertainty in the forecasts and these need to be considered in any decisions made based on the forecast demands. These factors include:

- The management of waste on individual properties e.g. burning household waste, farm dumps and burning farm waste.
- The impact of the current (regional and national) focus on rural waste. It is possible there will be a resultant significant increase in commercial quantities of rural waste such as plastic wrap,

³⁰ Data provided by ODC from past recorded quantities

chemical containers and treated timber (fencing/construction) making their way to the RRC with a greater focus of rural wastes.

- The impact of alignment with kerbside standardisation requirements and proposals.
- The impact of varying economic activity.

7.3 Gap analysis

The aim of waste planning at a territorial authority level is to achieve effective and efficient waste management and minimisation. The priority waste and sources have been identified through the review of the current situation and summarised below and further commentary is provided.

Table 7.1: Priority wastes and waste sources

Recyclable materials	Other materials requiring active management	Waste sources
Plastics (1, 2 and 5s)	Hazardous waste	Domestic waste
Glass (green, white and brown bottles and glass containers)	Difficult or special waste	Rural waste
Cardboard	General waste	Construction waste
Aluminium cans	E-waste	Farm waste
Non-iron containing metals		
Paper		
Green waste		

7.3.1 Data

The most significant challenge for Ōpōtiki is a lack of comprehensive data. This makes it difficult to understand where material is generated and how it is managed from that point. Some data is available for the streams controlled by Council only. The materials where Council does not currently have data comprises around 10% of the total waste generated in the district. Key information gaps include quantities and characteristics of material going to cleanfill disposal, on-farm disposal and transported out of district through private operators.

7.3.2 Kerbside services

Continued delivery of the kerbside services requires the following to be considered:

- Population growth – increased demand on Council services.
- Organic waste, particularly food waste both from domestic and commercial properties.
- Increased capacity for kerbside recycling.
- Options available for larger families with capacity constraints within the existing kerbside collection.

Demand for waste management services is not restricted to the Ōpōtiki town itself. This is due to the spread out nature of the existing population.

The generation of waste per capita (Class 1 landfills only), which is approximated to be 0.23 tonnes per capita per annum, is lower than the New Zealand average³¹. Relative to similar councils,

³¹ Ministry for the Environment. 2021. Te kawē i te haepapapara | Taking responsibility for our waste: Proposals for a new waste strategy; Issues and options for new waste legislation. Wellington: Ministry for the Environment.

Ōpōtiki's waste generation per capita is low (refer Table 7.2). However, it should be noted that there is unquantified waste which council does not have sight over, which needs to be captured going forwards.

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Table 7.2: Waste disposal per capita across rural New Zealand councils

	Central Hawkes Bay District Council	Matamata-Piako District Council	Kaikoura District Council	Hurunui District Council
Population	13,720	34,404	4,110	11,529
Total waste to Class 1 landfill (Council operations only)	6,714	12,557	1,722	3,323
Tonnes / capita / annum of waste to Class 1 landfills	0.489	0.369	0.440	0.256
Data source	CHBDC Waste Assessment, 2019 P.50	MPDC Waste Assessment, 2020 P.11	KDC Waste Assessment, 2020 P.25	HDC Waste Assessment, 2020 P.5

7.3.3 The RRC network

Around 2,352 tonnes of waste were disposed to landfill from the RRCs in 2021/22. It is likely that this material includes a high proportion of reusable or recyclable materials and improved diversion at the RRCs for general waste is worth considering. However, there are other materials present in the waste stream that may have negative impacts and this will also need to be carefully managed. These include:

- Hazardous waste (e-waste, used oil, agrichemicals).
- Difficult or special waste (tyres, bulky waste, dead animals).
- General waste (household and commercial waste).

7.3.4 Waste from businesses

Forthcoming developments relating to aquaculture and the Ōpōtiki harbour will result in a significant increase in waste streams associated with shellfish processing, and some waste streams associated with water-based tourism activities. These developments will take place during the term of the new WMMP.

Construction and demolition waste is a significant part of the waste stream which may be able to be recovered to a greater extent. Economic activity and population growth could lead to a significant increase in this waste stream in the future which will require planning.

7.3.5 Public litter bins

There will need to be attention paid to the facilities provided for tourists. Issues such as bins on beaches, freedom camping and litter and illegal dumping will all be important to address.

7.3.6 Rural waste and isolated locations

Farm and rural waste is likely to make up a substantial proportion of the total waste that is currently being generated in the district. Further work to increase awareness of the problems associated with improper disposal may drive demand for better services.

Ōpōtiki, by nature of its relative geographic isolation, faces challenges in accessing appropriate facilities for disposal and processing of material. While there are facilities that can be accessed with the region for most waste streams, transport distances, and hence costs mean that recovery and disposal options all have substantial costs attached.

7.3.7 Resilience and weather related waste

Consideration will need to be given to the district's ability to effectively respond to future events in regard to waste aspects, including movement of material through the district. The resilience of the district, in particular the smaller more rural communities, should also be further considered. The expanded role that the current waste infrastructure in these communities could play in any future response (i.e. wellbeing and welfare responses in a civil emergency) should be considered as part of any future investment or upgrade process to these existing waste facilities.

7.3.8 Economic growth

The Harbour project requires ongoing consideration in terms of waste generation.

8 Initial Review of the 2018 Waste Management and Minimisation Plan

The last WMMP for Ōpōtiki district was prepared in 2018. The Waste Minimisation Act requires that each Waste Assessment include a review of the last WMMP, including an assessment of data, key issues from the last WMMP, any other issues not addressed, and an update on the action plan from the last WMMP including progress.

8.1 Data

The information presented in this waste assessment is an improvement and informs the strategic approach and specific actions presented later in this Waste Assessment. The improved data availability reflects action taken at a local, regional and national level to improve data availability. However, remaining gaps highlight that there is still work to do.

8.2 Key Issues

The key issues identified in the last WMMP are summarised in Table 8.1.

Table 8.1: Progress on key issued from the 2018 WMMP

Issued raised in 2018 WMMP	Comment on progress
Kerbside	Capacity added
Food waste – opportunity for improved diversion	No progress
Rural waste – managing waste produced by rural households	No progress
Farm waste – management of waste produced from farms	No progress
Aquaculture/harbour development – new and increased volume of existing waste streams	Seafood processing established, port being developed.
Disposal and other infrastructure – limited availability of disposal facilities and increasing costs.	Tirohia Landfill is being extended Hampton Downs also available
Kerbside rubbish – residents reporting dog strike resulting in litter and difficulty in collecting rubbish.	Shift to bins has addressed some of the issues but now there has been concern expressed about capacity
Data and monitoring	Data still very limited but improved.

8.3 Targets

Council did not set targets in the 2018 WMMP due to uncertainty in data available for waste quantities and types in the district. The 2018 WMMP does state that Council intend to implement the national waste data framework and improve the quality of data for more waste streams. It stated that once better data was available, benchmarking and targets would be set for the remainder of the WMMP. No targets were set for the remainder of the WMMP.

8.4 Implementation Plan

The implementation plan identified key actions, methods to address the issues, funding sources, and monitoring and reporting metrics and frequencies. Table 8.2 below shows progress made on individual actions.

Table 8.2: Review of 2018 WMMP Action Plan

Action plan	Action detail (timeframe, funding)	Progress
Solid waste bylaw	Review existing bylaw to ensure alignment with any changed services, and incorporate standard clauses as appropriate	Solid waste bylaw was combined into a consolidated bylaw alongside Councils other bylaws. Bylaw will require a review and updating with any change in future service.
Regional licensing and data collection project	Work with other councils and agencies such as BOPLASS to support the implementation of any regional approach to licensing and data collection	Ongoing – however Central Government proposals for a National Waste Licensing regime has slowed down local progression of this initiative.
Illegal dumping	Continue to take enforcement action against those that dump rubbish where possible.	Ongoing
Develop a data strategy that is aligned with the national waste data framework	Develop a data strategy that is aligned with the national waste data framework to ensure that Council is collecting accurate and appropriate data to use in future waste assessments. This may involve carrying out 'SWAP' composition studies, and/or negotiating the use of a weighbridge to collect data on the quantity of wastes from kerbside rubbish and recycling collections	Weighbridge has been installed .with plans to start fully utilising the weighbridge for data collection from 1 July 2024.
General education and engagement	Continue to provide information on services and waste minimisation generally to householders, appropriate to their situation	Ongoing
Expand education and engagement activities	Build on existing information provision, particularly through social media and community engagement channels	Ongoing
Specific education and engagement relating to any service changes	If kerbside collection services or other services are changed/new services are offered, more intensive and specific information material will be required	Completed and will be required for any future change in service.

Action plan	Action detail (timeframe, funding)	Progress
Review kerbside collection systems generally	Review the kerbside collection system and identify improvements that will address issues such as restricted capacity for recycling and rubbish, food waste diversion, reducing dog strike, and a subsidy policy for specific parts of the community. Options for providing subsidies/discounts to target groups will be investigated. Investigate offering wheeled bins for rubbish collection, which could still be on a user-pays basis. A wheeled bin service costs more to provide than the existing system.	Ongoing – noting the proposals and requirements released by Central Government in 2023.
Food waste diversion	Support the regional food waste investigation project and implement agreed actions following appropriate consultation through annual plans or LTP processes.	Ongoing – Eastern Bay of Plenty organics feasibility study underway and expected to be completed in early 2024.
Extend kerbside collection systems	Extend kerbside collections to additional areas, as operational efficiency makes this cost-effective, on a case by case basis	In progress
Farm waste	Consider introducing a specific service targeting farm waste, depending on the outcomes of the current trials	To be completed
Peak season collections	Investigate the potential to introduce a ‘summer camping’ system where visitors to the district and users of popular free camping areas are able to pay a charge and receive collections during peak seasons. Implement if feasible.	To be completed
Extend RRCs	Operate RRCs as currently, with improved signage, additional reuse options, reviewed charges, and incorporation of additional waste streams, micro-businesses and community partnerships.	Ongoing
Capital works	Continue to undertake scheduled capital works on facilities	Ongoing
Work proactively with commercial and community sectors	Identify key groups and work proactively with them to target waste stream and issues, and develop collaborative solutions.	To be completed
Participate in collaborative projects	Work within the Waste Liaison Group to identify and support collaborative projects, particularly those relating to infrastructure, food waste collections, and licensing/data collection.	Ongoing
Advocate for extended product stewardship	Work with local and regional councils and other organisations to promote enhanced product stewardship schemes including accredited and priority product schemes under the WMA Encourage and work with the Bay of Plenty District.	Ongoing

Action plan	Action detail (timeframe, funding)	Progress
Medical Waste Collection	Encourage and work with the Bay of Plenty District Health Board in providing appropriate schemes for the management of medical waste from home health care and medical facilities.	Ongoing

Most of the identified actions related to ongoing operations. These were all carried out and will continue to progress over the term of the next plan.

The key actions not addressed have been highlighted in the table below. These actions should be carried through to the new WMMP given that they address gaps and issues that will continue to be relevant throughout the term of the next WMMP.

Table 8.3: Actions to be taken forwards from last WMMP

Action Plan	Action Detail (timeframe, funding)
Develop a data strategy that is aligned with the national waste data framework	Develop a data strategy that is aligned with the national waste data framework to ensure that Council is collecting accurate and appropriate data to use in future waste assessments. This may involve carrying out 'SWAP' composition studies, and/or negotiating the use of a weighbridge to collect data on the quantity of wastes from kerbside rubbish and recycling collections.
Farm waste	Consider introducing a specific service targeting farm waste, depending on the outcomes of the current trials
Peak season collections	Investigate the potential to introduce a 'summer camping' system where visitors to the district and users of popular free camping areas are able to pay a charge and receive collections during peak seasons. Implement if feasible.
Work proactively with commercial and community sectors	Identify key groups and work proactively with them to target waste stream and issues, and develop collaborative solutions.

9 Where do we want to be?

9.1 Background

The preparation of this Waste Assessment has included a review of the Vision - Goals Objectives framework set out in the previous WMMP. The relationship between Vision, Goals and Objectives is illustrated in Figure 9.1³².

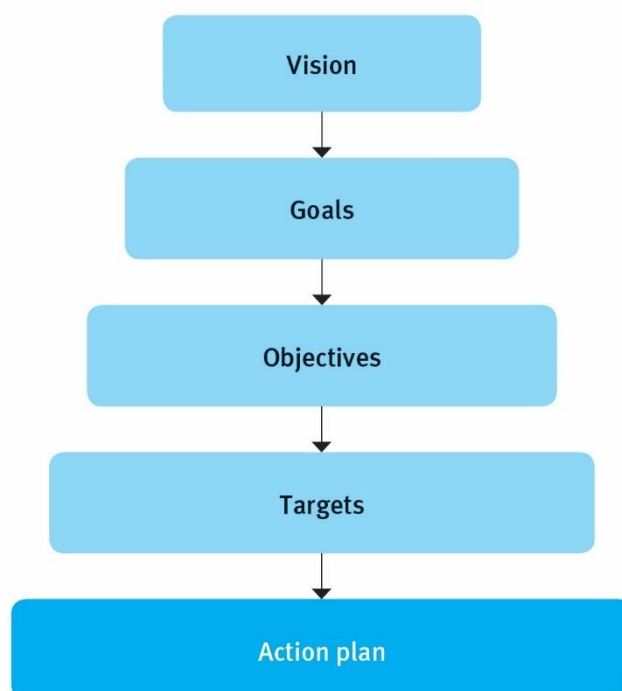


Figure 9.1 Vision, goals, objectives and targets.

9.2 Draft vision, goals, objectives and targets

The draft vision for waste management and minimisation in the Ōpōtiki Region is³³:

“Taking action towards a circular economy”

9.2.1 Tangata whenua view of waste management

This draft vision aligns to the vision and content of the Waste Strategy (see section 3.1). The Waste Strategy highlights how the concept of circular economy is well aligned with the underlying values of te ao Māori. In particular with tangata whenua principles of kaitiakitanga and mauri which take an integrated view of the environment. Kaitiakitanga and mauri, are highly complimentary to the waste hierarchy; collectively forming a set of potential foundational principles that support a vision of minimizing landfill waste.

Recognising the significance of these principles, there will be a need for Council to undertake ongoing engagement with mana whenua. This is likely to mean rigorous testing of waste proposals

³² Sourced from Waste Assessments and Waste Management and Minimisation Planning – A Guide for Territorial Authorities, MfE 2015.

³³ This vision is adopted from the previous WMMP and reflects the aspirations of the Ōpōtiki district community.

and the WMMP to align future waste management practices in the district with local cultural values and environmental sustainability priorities.

9.2.2 Draft Goals

The draft goals for waste management and minimisation in the Ōpōtiki district are :

- 1 Collective responsibility for our resources and where they end up
- 2 Enabling systems to support the reuse, reduction and recycling of materials
- 3 Collaborate and innovate for a circular economy

9.2.3 Draft Objectives

The draft objectives for waste management and minimisation in the Ōpōtiki District are:

- Objective 1: Promote, encourage and support reduction, reuse and recycling.
- Objective 2: Council, Iwi, hapu, local community and businesses work together where possible to implement projects that maximise waste diversion and effective resource recovery.
- Objective 3: Strengthen regulative instruments and tools to support improved environmental, public health, waste and resource recovery outcomes across the district.
- Objective 4: Strengthen cost-effective and equitable collection systems and services across the district.
- Objective 5: Prioritise developing a stable foundation of waste and resource recovery facilities so that more material, and a wider range of items, can be diverted from landfill.

9.2.4 Draft Targets

Te Rautaki Para Waste Strategy sets three national targets to be achieved by 2030. This includes:

- 1 Waste generation: reduce the amount of material entering the waste management system, by 10 per cent per person.
- 2 Waste disposal: reduce the amount of material that needs final disposal, by 30 per cent per person.
- 3 Waste emissions: reduce the biogenic methane emissions from waste, by at least 30 per cent.

The generation of waste per capita in the Ōpōtiki district is lower than the New Zealand average, so while these targets have been set at a national level they may not accurately reflect the situation in Ōpōtiki.

The absence of robust data specific to the district and the Council provided services makes it difficult to establish a reliable baseline of waste management in the District. The introductions of a weigh bridge to the Wellington Street RRC is likely to improve the quality of data available over the next few years. Similarly, the opportunity to include reporting requirements in any contracts associated with the new kerbside contract required at the end of 2024 will also improve the quality of data that Council has access to.

It would be sensible for Council to review the suitability of the above National targets to the local situation once one years' worth of data has been collected. Any changes to the targets, and therefore an associated WMMP, could then be re-confirmed through an Annual Plan process.

Table 9.1 provides a summary of the draft Vision, Goals and Objectives presented above and associated actions for waste management and minimisation in the Ōpōtiki District.

Table 9.1: Draft Vision – Goals – Objectives – Actions

Vision		Taking action towards a circular economy	
Objective	Relevant goal(s)	Actions	
1 Promote, encourage and support reduction, reuse and recycling	Goal 1: Collective responsibility for our resources and where they end up Goal 3: Collaborate and innovate for a circular economy	Continue to update and maintain information on the Council website regarding Council's services, particularly commercial collections and private sector (for example farm plastics).	
		Develop an engagement plan to outline ongoing waste minimisation education and behaviour change campaigns and programmes to support the actions of the WMMP.	
		Develop a district specific plan for Council to deliver waste minimisation programmes, support environmental education activities for schools and early learning centres, including site visits.	
2 Council, Iwi, hapu, local community and businesses work together where possible to implement projects that maximise waste diversion and effective resource recovery.	Goal 1: Collective responsibility for our resources and where they end up Goal 2: Enabling systems to support the reuse, reduction and recycling of materials Goal 3: Collaborate and innovate for a circular economy	Identify and establish partnerships and collaborative relationships that will enable us to process and manage wastes and resources locally wherever feasible and cost-effective.	
		Develop a grant funding strategy targeting publicly available funding to help co-fund investigations and infrastructure enabling the delivery of actions. For example the Waste Minimisation Fund.	
3 Strengthen regulative instruments and tools to support improved environmental, public health, waste and resource recovery outcomes across the district.	Goal 1: Collective responsibility for our resources and where they end up Goal 2: Enabling systems to support the reuse, reduction and recycling of materials	Review and update waste bylaw.	
		Establish robust data reporting and information collecting processes to better understand and track our work on waste and resource recovery	
		Reduce illegal dumping through active enforcement under the Litter Act, education on the services available and consider options to reduce illegal dumping of animal carcasses.	

Vision		Taking action towards a circular economy	
Objective	Relevant goal(s)	Actions	
4 Strengthen cost-effective and equitable collection systems and services across the district	Goal 2: Enabling systems to support the reuse, reduction and recycling of materials.	Undertake a review of Council delivered services. - identification of options to account for compliance with central government requirements. - consider the needs of larger families, rural areas, - look for ways to limit double handling of materials - followed by a S17A review.	
5 Prioritise developing a stable foundation of waste and resource recovery facilities so that more material, and a wider range of items, can be diverted from landfill	Goal 2: Enabling systems to support the reuse, reduction and recycling of materials.	Develop a district focused waste and resource recovery future infrastructure plan. The plan should consider District specific challenges and opportunities and the local based solutions that may address these.	
		Investigate options to accept additional reusable or recyclable waste streams at the RRCs with a focus on those with existing funding mechanisms (e.g. materials that are part of existing product stewardship schemes).	

10 How are we going to get there?

10.1 Introduction

Section 51 of the WMA requires that a Waste Assessment contain a statement of options available to meet the forecast demands of the district with an assessment of the suitability of each option.

This section summarises the identification and evaluation of options to meet the forecast demands of the district, address issues identified in this waste assessment and to meet the goals set out in Section 9. The preferred options from this assessment will be incorporated into WMMP as methods and feature in the Action Plan.

For the Ōpōtiki District the total quantity of waste generated is forecast to increase over the life of this plan in line with population and economic activity. Infrastructure planning needs to take account of this growth.

The available data suggests that there is potential to increase the diversion of material from the waste management system. There are also ongoing issues with the current size of rubbish containment, obtaining robust data on waste and recycling activity and the potential for increasing quantities of materials entering the waste stream from rural properties.

A significant challenge for Council is the small population, and therefore rates base, compared to the large land area. The limited rates funding that Council does receive for waste and resource recovery goes towards funding kerbside and drop off services. There is insufficient funding, even with their waste levy allocation, to allow investment in any new resource recovery and waste minimisation initiatives. Maintaining the status quo is already a financial challenge.

Options are evaluated with reference to the Vision, Goals and Objectives set out in Section 9. Specifically:

- Sustainable, cost effective services.
- Increase the quantity and range of material diverted from landfill.
- Deliver broader outcomes (business development, employment, social benefits).
- Partnering with the community to deliver local waste outcomes.
- Strengthen the foundation from which future waste and resource recovery services and infrastructure can develop.
- Process and manage wastes locally wherever feasible and cost-effective.
- Work closely with commercial entities to identify opportunities to better manage non-household waste streams.
- Access to additional sources of funding to support waste and resource recovery capital investment.

10.2 Identifying options

There are a wide range of approaches to providing waste management and minimisation services and programmes that could be adopted in Ōpōtiki. A useful way to consider options is the model set out in Figure 10.1. Simply put, effective waste management and minimisation relies on a combination of infrastructure (including collection), education/information and regulation or policy. These are supported by having the right data to inform strategic and operational decision making.

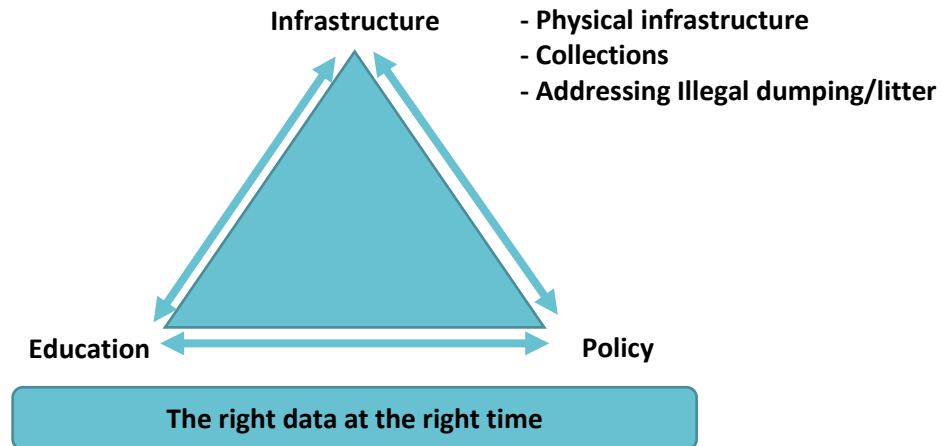


Figure 10.1 Effective Waste Management and Minimisation.

For this waste assessment, options have been identified by considering key challenges for waste management and minimisation in the Ōpōtiki District, referencing approaches adopted elsewhere and looking for new solutions where appropriate. Options have also been considered with reference to the current recovery rates of key materials.

Based on the model set out in Figure 10.1, options considered can be grouped as follows.

Infrastructure

- Providing **collection** services - collection of waste, recyclable materials (at kerbside or resource recovery facility) and public litter bins.
- Providing **physical infrastructure** - fixed location drop off facilities, waste sorting, waste processing.
- **Managing the negative impacts of waste** - litter/illegal dumping clean-up, closed landfills.

Education

- Changing behaviour - **education** programmes targeting schools, businesses and/or households
- Support infrastructure - **information** on how to use collection and drop-off services to maximise recovery and maintain the quality of recovered materials (to maximise their value).
- developing an understanding of collective responsibility for waste and resource recovery outcomes.

Policy

- Strengthening relevant provisions in the existing by-law.
- Effective data collection from Council services, working alongside other Councils in the region, considering regional approaches.
- Targeted data collection, for example waste composition surveys and contractor collected data under collection and transportation services.

Other

- Making information on waste issues and opportunities available.
- Developed provisional criteria will be based on contribution to the Vision, Goals and Objectives for waste management and minimisation with consideration of co-funding. Applications for funding should also be assessed for their ability to deliver the promised benefits i.e. due diligence on organisation capability, governance and accountability. Consideration also needs to be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.

- Working with other Councils in the region and other stakeholders to progress national debate on waste issues and policy.

10.3 Options Analysis

The following sections outline the potential options available to Council to meet the future waste and resource recovery needs and demands of the district. The options presented range from continuing with the status quo, doing more through to undertaking maximum actions. For some of the services a reduction to the status quo service option has also been included. Some high level benefits and risks for each option have been presented.

As noted elsewhere in this report, Council is in the process of developing their LTP 2024-2034 for the district. The events of the last few years (i.e. 2023 weather events, COVID etc) have highlighted a number of pressing challenges for Council. In particular, it has highlighted the need for more urgent investment in a range of aging infrastructure. Council has access to a limited pool of funding and resourcing, creating significant pressure on budgets and rates.

Some analysis has been included below as to the suitability of these options however this has primarily focused on waste minimisation. Further analysis and consideration will be needed within the wider context of Councils commitments, resources and budgets to determine the preferred approach for each system component.

10.3.1 Waste Collection

Considering approaches adopted elsewhere, Council could consider the options listed in **Table 10.1**.

Table 10.1: Options for residual waste management and minimisation service

Summary	Explanation	Objective
Urban and semi-rural rubbish collection		
Kerbside rubbish collection continued (<i>Status quo</i>)	Continue with the current approach of providing kerbside rubbish collection to those living in the urban and semi-rural areas, with the option of residents transporting their waste to the RRCs themselves also. Benefits – if progress is made on waste reduction, capacity of bin would remain suitable. Risks – does not cater for large families and an increase in targeted rates for the current service is expected.	Continue current service delivery.
Kerbside rubbish collection removed (<i>Reduced service option</i>)	Council to stop providing a rubbish collection service, requiring residents to transport their rubbish materials to one of the RRCs. This option requires consideration alongside any proposed recycling collection change and Council's vision of a more circular approach to waste management and reduction in waste to landfill. Benefits – residents have flexibility to use the RRCs or the private sector, potential for increased competition in the market. Risks - this option may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. It may also have consequences under the Local Govern Act. This option may result in unintended consequences from poor management and disposal of rubbish by individuals. Council will have reduced influence over waste minimisation.	Reduce cost to Council of proving refuse collection service.
Kerbside rubbish collection includes additional bin (<i>Do minimum option</i>)	Council to provide an additional bin of the equivalent size (45 L) currently delivered. This could be an additional charge on the rates bill of those who opt in for the extra bin. Benefits – caters for a base level of service and provides flexibility through user pays for additional capacity and can be serviced with existing collection trucks. Risks – greater administration requirements to manage an opt in service and the uncertainty around the actual diversion from this.	Increased containment capacity.
Kerbside rubbish collection stickered bag system (<i>Intermediate option</i>)	Council to include a stickered bag system part of the existing rubbish collection service. Some Council's provide opt-in rubbish bag and/or wheelie bin collection services funded by a variable targeted rate³⁴ or selling bin tags^{35 36}. Benefits - provide additional capacity as this would enable those properties with larger families to be able to dispose of all rubbish they produce at the kerbside. Risks – combination of bags and bins for collection could require manual handling collection and different collection trucks adding cost.	Provide a Council service which meets household requests for additional capacity.
Kerbside rubbish collection increased capacity (<i>Do maximum option</i>)	Increase capacity of existing containment e.g. increasing the current bin size from 45L. Benefits - this could be supported by a reduction in the collection frequency to reduce costs, and alongside food waste collection to improve diversion of waste to landfill. An investigation should be considered prior to implementing a roll out of increased capacity for rubbish. Consideration of measures to reduce the rubbish volume should be reviewed. Risks – could encourage more waste to landfill and increased targeted rates if collection frequency is not reduced.	Increased containment capacity

Rural rubbish collection		
Rubbish drop off (<i>Status quo</i>)	Continue to offer user-pays drop off rubbish services at the RRCs across the district for rural residents. Consideration could be given to the operating days/hours to make sure that the facilities are accessible to the community. Benefits – residents are familiar with the service. Risks – there is an unequal level of service provided to urban and rural households, if disposal costs at RRC increase significantly people may look to improper waste disposal methods.	Continue current service delivery
Kerbside rubbish collection extended (<i>Intermediate option</i>)	Council to extend the urban collection service across the district to those rural households not currently receiving a rubbish collection service. A targeted rate would be applied to those households who receive the service. Households may be required to take their waste to a collection point, for example on main roads. Benefits – provides a more equitable level of service to more households in the district. Risks - the service may have low uptake given the collection is designed for urban properties, however a targeted rate could be applied to eligible properties regardless of whether they have indicated support for the service. The contractor may have difficulties accessing private and unsealed roads requiring people to bring their rubbish to a central location.	Consistent level of service, equality, avoid fragmented collection services
Kerbside rubbish collection established for rural houses (<i>Do maximum option</i>)	Council to provide a separate rural waste collection service to those households not currently receiving a collection service. A targeted rate would be applied to those households who receive the service. The structure of this service would vary from the extension option, as it would be a standalone collection service. Benefits – provides a more equitable level of service to more households in the district. The service can be designed for the needs of rural properties. Risks – the contractor may have difficulties accessing private and unsealed roads which may require people to bring their rubbish to a central location.	Provide a Council service to residents in rural areas
Business rubbish collection		
Kerbside rubbish collection used by those businesses in urban area (<i>Status quo</i>)	Those businesses who qualify for a rates based rubbish collection service within the urban area continue to use the service. Continue to offer user-pays drop off recycling services at the RRCs across the district for commercial and business users. Consideration could be given to the operating days/hours to make sure that the facilities are accessible to the community. Benefits – council incurs minimal costs given there is no new capital outlay.	Continue current service delivery.

³⁴ For example Selwyn District Council currently charge \$136.40/year for an 80 L wheelie bin or \$407/year for a 240 L bin. An optional service both on and off the collection route, 60 L rubbish bag - \$12.50 per pack of 5 bags. \$2.50 per bag.

³⁵ Auckland Council sell tags for rubbish bins, \$2.70 for an 80 L bin, \$3.95 for a 120-140 L bin and \$5.70 for a 240 L bin.

³⁶ Gisborne District Council adopted a stickered bag system to manage rural waste. One sticker costs \$2.80 per 5kg. There is a \$10 charge for rural collections.

	Risks – businesses may prefer to continue with a rubbish and recycling collection carried out by one provider. Existing volume may not be suitable to business specific needs.	
Kerbside rubbish collection for businesses removed <i>(Reduced service option)</i>	Council to stop providing a rubbish collection service to businesses who currently qualify for a rates based rubbish collection service, requiring businesses to transport their rubbish materials to one of the RRCs or arrange a private collection. This option requires consideration alongside any proposed recycling collection change and Council's vision of a more circular approach to waste management and reduction in waste to landfill. Benefits – businesses have flexibility to use the RRCs or the private sector, potential for increased competition in the market. Risks - this option may reduce councils influence over waste minimisation for businesses. The likely reduction of targeted rates revenue by removing businesses may impact ability to deliver overall service due to reduced economies of scale.	Reduce cost to Council of providing refuse collection service.
Kerbside rubbish collection extended to businesses <i>(Intermediate option)</i>	Council to extend the urban collection service to more businesses across the district. The collection service would be user pays for those businesses. Benefits – council incurs minimal costs given there is no new capital outlay. Risks – given the small size of the current bin this is unlikely to be attractive to businesses and is likely to be a reason for the current low uptake of the existing service by businesses.	Provide a domestic type Council service to businesses.
Kerbside rubbish collection established for businesses <i>(Do maximum)</i>	Council to provide a separate business waste collection service to those properties rated commercial. A targeted rate would be applied to those properties who receive the service. The structure and methodology of this service would vary from the domestic option/s, as it would be a standalone collection service. The extent of the service outside of the existing urban area would also need consideration. Benefits – uptake may be higher given that the service is designed for businesses. Risks – council will need to undertake a procurement process for the supplier of any new collection service. Increased rates for businesses.	Provide a business specific Council service to businesses.

10.3.2 Recycling collection

The current recycling collection system is funded by a targeted rate. Considering approaches adopted elsewhere Council could consider the options listed in Table 10.2.

Table 10.2: Options for recycling services

Summary	Explanation	Objective
Urban and semi-rural recycling collection		
Kerbside recycling collection continued <i>(Status quo)</i>	Continue the existing Council run, targeted rates funded recycle crates service. The projected 2023/24 cost to each household is a targeted rate of \$263.06 excluding GST for the rubbish and recycling collection. The targeted rate for the collection service is likely to increase over the coming years, reflecting the impact of the following factors: • Increase in the Government levy on landfills (given the current combined rubbish and recycling contract). • ETS charging. • Landfill costs (including transportation out of District). • Uncertainty in the values of collected recyclable materials (this can go up or down). • Increasing costs of managing safety risks. • General operating cost increases. Benefits – existing level of service remains. Risks - the targeted rate for the collection service is likely to increase over the coming years due to factors outside of councils control.	Continue current service delivery
Kerbside recycling collection removed <i>(Reduced service option)</i>	Council to stop providing a recycling collection service, requiring residents to transport their recyclable materials to one of the RRCs. This option requires consideration alongside any proposed rubbish collection change and Council's vision of a more circular approach to waste management and reduction in waste to landfill. Benefits – residents have flexibility to use the RRCs or the private sector, potential for increased competition in the market. Risks - this option may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa New Zealand. This option may result in unintended consequences from poor management and disposal of recycling by individuals. Council will have reduced influence over waste minimisation.	Reduce cost to Council of providing recycling collection service
Kerbside recycling collection at increased frequency <i>(Do minimum option)</i>	Council to increase the frequency of the recycling collection. Four crates are collected, two each week, thus providing a fortnightly collection for paper, tins, glass and plastics. Increasing the number of collections should be considered alongside rubbish collection decisions and any changes made to the size of recycling containers. Benefits – increased opportunities to divert material from landfill. Provides greater flexibility to households. Risks – the targeted rate will likely increase more than if the status quo continued, owing to increased truck movements.	Increase recycling capacity by providing additional collections
Kerbside recycling collection at increased capacity <i>(Do more option)</i>	Council to provide more crates to contain recycling. Households currently receive an alternate fortnightly collection and are provided four crates. Increasing the targeted rate for those already receiving the recycling collection service or user charges if offering optional additional crates are both considerations. Residents already have four crates, and although additional capacity is required by some service users, the appropriate containment type would require consideration.	Increase recycling rates by providing additional capacity

	Benefits – increase of existing level of service, addresses community concerns related to collection capacity, increased capacity to divert material from landfill. Risks – households may utilise additional capacity to dispose of rubbish, health and safety risks for collectors e.g. RSI from heavier crates.	
Kerbside recycling collection targeted rate (wheelie bin and crate) <i>(Intermediate option)</i>	Council to provide a targeted rate funded wheelie bin and recycle crate based service. This is a common approach in New Zealand with paper, cardboard, plastics and tins collected in wheelie bins (sizes ranging from 140-240L) and glass collected in crates. Providing this service requires a change in the current collection methodology. In some cases glass is collected in wheelie bins. Charges per household are in the range \$50 - \$125 per household each year, typically levied as a targeted rate. Benefits – aligns with common approach in New Zealand – positioning council to use national recycling campaigns, reduced risks from manual handling. Risks - requires a change in the current collection methodology, resourcing to procure new contracts	Increase recycling containment for paper, card and plastics
Kerbside recycling collection targeted rate (wheelie bin service) <i>(Do maximum option)</i>	A Council run, targeted rates funded recycling wheelie bin service. This is the approach adopted in Auckland, Christchurch, Southland and the Bay of Plenty with all materials collected in a single 240L wheelie bin. Providing this service relies on having access to a sorting facility that can handle a fully mixed recyclables stream. Charges for this service depend on the specific service configuration, but are likely to be in the range \$75-\$125 per household. This type of service is a change in methodology from the current contract. Benefits – aligns with common approach in New Zealand – positioning council to use national recycling campaigns, most reduced risks from manual handling. Risks - requires a change in the current collection methodology, resourcing to procure new contracts and relies on having access to a sorting facility that can handle a fully mixed recyclables stream.	Increase recycling rate by providing additional capacity and simple service
Rural recycling collection		
Recycling drop off <i>(Status quo)</i>	Continue to offer user-pays drop off recycling services at the RRCs across the district for rural residents. Consideration could be given to the operating days/hours to make sure that the facilities are accessible to the community. Benefits – the extent of material accepted at the RRCs could also be expanded (provided the site is consented to accept the material) to extend the service offering and thereby increase waste diversion in line with Council targets. Risks – rural ratepayers have access to a reduced level of service when compared to urban.	Continue current service delivery
Kerbside recycling collection for rural households <i>(Intermediate option)</i>	Council to extend the urban collection service across the district to those rural households not current receiving the service. A targeted rate would be applied to those households. The projected 2023/24 cost to each household is a targeted rate of \$263.06 including GST for rubbish and recycling collections, however this would require review with the contractor with potential for variable charging based on household location.	Provide a Council service to rural residents.

	Benefits – the extent of material accepted at the RRCs could also be expanded (provided the site is consented to accept the material) to extend the service offering and thereby increase waste diversion in line with Council targets Risks – council to provide a separate rural waste collection service to those households not currently receiving the collection service via a targeted rate. The structure of this service would vary from the extension option above. For example: households may take their recycling to a specified collection point, for example at road ends.	
Kerbside recycling collection established for rural houses <i>(Do maximum option)</i>	Council to provide a separate rural recycling collection service to those households not currently receiving a collection service. A targeted rate would be applied to those households who receive the service. The structure of this service would vary from the extension option, as it would be a standalone collection service. Benefits – provides a more equitable level of service to more households in the district. The service can be designed for the needs of rural properties. Risks – the contractor may have difficulties accessing private and unsealed roads which may require people to bring their rubbish to a central location.	Provide a Council service to residents in rural areas.
Business recycling collection		
Kerbside recycling collection used by those businesses in urban area <i>(Status quo)</i>	Those businesses who qualify for a rates based recycling collection service within the urban area continue to use the service. Continue to offer user-pays drop off recycling services at the RRCs across the district for commercial and business users. Consideration could be given to the operating days/hours to make sure that the facilities are accessible to the community Benefits – minimal costs given that there is no new capital outlay. Risks - businesses may prefer to continue with a rubbish and recycling collection carried out by one provider. Existing volume and materials accepted may not be suitable to business specific needs.	Continue current service delivery.
Kerbside recycling collection for businesses removed <i>(Reduced service option)</i>	Council to stop providing a recycling collection service to businesses who currently qualify for a rates based recycling collection service. This would likely require businesses to transport their recycling materials to one of the RRCs or arrange a private collection. This option requires consideration alongside any proposed rubbish collection change and Council's vision of a more circular approach to waste management and reduction in waste to landfill. Benefits – businesses have flexibility to use the RRCs or the private sector, potential for increased competition in the market. Risks - this option may reduce councils influence over waste minimisation for businesses. The likely reduction of targeted rates revenue by removing businesses may impact ability to deliver overall service due to reduced economies of scale.	Reduce cost to Council of providing refuse collection service.

Kerbside recycling extended to businesses (Intermediate option)	Council to extend the urban recycling collection service to more businesses. Around 1-2% of businesses in Ōpōtiki currently utilise the Council recycling collection service. This option requires Council to communicate more widely to businesses on the services currently offered. Given the small size of the current crates this is unlikely to be attractive to businesses and is likely to be a reason for the current low uptake of the existing service by businesses. Benefits – council incurs minimal costs given there is no new capital outlay. Risks – this option requires Council to communicate more widely to businesses on the services currently offered. Given the small size of the current crates this is unlikely to be attractive to businesses and is likely to be a reason for the current low uptake of the existing service by businesses.	Increase recycling rate by providing service to more businesses.
Kerbside rubbish collection established for businesses (Do maximum option)	Council to provide a separate business recycling collection service to those properties rated commercial. A targeted rate would be applied to those properties who receive the service. The structure and methodology of this service would vary from the domestic option/s, as it would be a standalone collection service. The extent of the service outside of the existing urban area would also need consideration. Benefits – uptake may be higher given that the service is designed for businesses. Risks – council will need to undertake a procurement process for the supplier of any new collection service. Increased rates for businesses.	Provide a business specific Council service to businesses.

10.3.3 Organic waste collection

Council do not currently offer a separate food or garden waste collection. Food waste is collected as part of the rubbish collection. The requirements and proposals from central Government in regard to the standardisation of kerbside services includes proposals to require council kerbside organic collections. Councils around New Zealand are increasingly looking at offering organic waste collection services to address the high proportion of organic waste in rubbish bags and bins. In 2015, an investigation of 25 randomly sampled residual waste bags were analysed. The results (albeit a low sample) showed that 33.3% by weight of the waste collected was food waste³⁷.

Existing services in New Zealand target garden waste (Whakatane, South Taranaki, Tauranga) garden and food waste (Christchurch, Selwyn and Timaru) or food waste only (New Plymouth, Auckland, Hamilton, Tauranga). These services take the collected materials to be composted or put through anaerobic digestion.

Combined food and garden waste collections are common in Australia and implemented in Timaru and Christchurch via rates funded collections. A typical food and garden waste collection will deliver an appropriate mix of food and green waste for composting. Food waste is suitable as feedstock for anaerobic digestion or for composting when combined with other materials such as garden waste or wood chip.

³⁷ Scoping study to look at the feasibility of introducing an urban organic collection and disposal system in Ōpōtiki (2015) Peter Maple.

Considering approaches adopted elsewhere Council could consider the options listed in Table 10.3.

Table 10.3: Options for organics collection

Summary	Explanation	Objective
Organics³⁸ service offering		
No kerbside organic waste collection <i>(Status quo)</i>	Continue offering a rubbish collection service where food and garden waste can be deposited at targeted rate of \$263.06 excluding GST costs as (projected for 2023/24). A separate food waste collection would not be offered. This option may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. Benefits – No additional costs to households currently receiving the kerbside collections service. Risks – This option may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa.	Maintain current level of service.
Council to support community composting <i>(Do minimum option)</i>	Council to support community composting. There is potential for public education and support from Council to be investigated. Uptake and diversion rates are likely to be low. Consideration of the wider social impacts would form part of the decision making process. There are a number of community composting networks across New Zealand and growing. Community Compost based in Nelson, Kaicycle in Wellington and Compost Collective in Auckland. Charges for bucket collection varies between location and both homes and businesses can both utilise these networks. This option on its own (i.e. without a kerbside organic collection) may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa.	Council to support community composting.
Council to support the use of home composting <i>(Intermediate option)</i>	Council to support the use of home composting. This would require investigation and be supported by public education and financial support (if available). Uptake and diversion rates are likely to be low. The Western Bay of Plenty District Council supported locals interested in worm farms, through the provision of workshops. Attendees received a free worm farm, tiger worms and compost at the end of the course, worth around \$180. Nelson and Tasman residents have access to a \$20 per year subsidy voucher towards a compost bin, worm farm, worms or bokashi set. Benefits – No additional costs to households currently receiving the kerbside collections service. Supports a decentralised solution for organics processing and collection. Risks – This option on its own (i.e. without a kerbside organic collection) may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. Uptake and diversion rates are likely to be low.	Council to support home composting.
Council provided kerbside organic waste collection <i>(Do maximum option)</i>	Council to introduce a new kerbside collection for organic waste. Depending on the type of collection methodology (see below options) the targeted rate charge can range from \$70 to \$190. Weekly collection of food waste organic material may enable a reduction in the frequency of rubbish kerbside collections; however, this would need further analysis considering the small rubbish bins that council currently provides. Benefits – Better positions council to comply with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. Risks – The targeted rate for collections will increase.	Council provide a new service.
Council kerbside organics collection methodology		

Noting this group of actions will only be considered if the option for Council provided kerbside organic waste collection is progressed		
Council run Greenwaste only collection service (Do minimum option)	A Council run green waste collection. This could be funded through targeted rates or user pays. Examples include South Taranaki District Council who offer a voluntary fortnightly green waste collection service for \$110 per annum. Tauranga City and Hutt City Councils have recently rolled out optional green waste bin collection services. Benefits – an opportunity to increase recovery, provide an increase in level of service to a number of households Risks – consideration of rural area access to the service uptake and existing options for drop off of green waste at Wellington Street RRC require consideration. This option on its own (i.e. without a kerbside food waste collection) may risk council becoming non-compliant with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa.	Increase recovery by providing an additional service.
Council run food-only waste collection service (i.e. no greenwaste) (Intermediate option)	A council run food waste collection service. This could be funded by either a targeted rate for serviced properties or direct charges for users. This would be most appropriate for urban parts of the District. Anticipated uptake and processing of the collected food waste are particularly important considerations as processing is likely to take place out of the District. Benefits – better position for council to comply with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. Risks – anticipated uptake and processing of the collected food waste are particularly important considerations as processing is likely to take place out of the district. A lower volume of material will be collected when compared to a food and garden collection.	Increase recovery by providing an additional service.
Council run food and garden waste collection (Do maximum option)	A Council run food and garden waste collection. This could be funded by a targeted rate for serviced properties or user pays. This would be most appropriate for urban parts of the District. Uptake, processing of collected organic waste and current acceptance of green waste drop off at the Wellington Street RRC are particularly important considerations. Costs for this type of collection service vary and are often included within a combined targeted rate for rubbish and dry recyclables as well. Selwyn charge \$210 per annum for the organics collection only. Timaru offer the organics bin to all rated properties, total costs for recycling, waste and an organics bin are between \$335-\$436 per year. Benefits – better position for council to comply with the requirements and proposals that are a part of standardising kerbside collections in Aotearoa. Risks – uptake, processing of collected organic waste and current acceptance of green waste drop off at the Wellington Street RRC are particularly important considerations.	Increase recovery by providing an additional service.

³⁸ Organic material includes food waste and garden/green waste. Organic material collections may be introduced for these material streams individually (eg food waste only or garden/green waste only collections) or alternatively combined (eg food waste and garden/green waste together).

10.3.4 Physical infrastructure options

Council currently operate three RRCs:

- Wellington Street being the main RRC (located in Ōpōtiki).
- Waihou Bay (coastal RRC).
- Te Kaha (coastal RRC).

A further Community Recycling Collection Service (CRCS) is run out of Torere by Ngāitai Iwi Authority under contract with Council.

Wellington Street RRC has adequate capacity to handle the quantity of waste generated in the District at present. The percentage of waste materials diverted from Class 1 landfill via the RRC in 2022-2023 is estimated at around 74% based on the data collected for this Waste Assessment. We note however, that the data for this year is likely to also include material that was collected in the 2021-2022 year due to the nature of data recording at the RRC. The average percentage of waste materials diverted from Class 1 landfill via the RRC across 2021-2022 and 2022-2023 is 57% based on the data collected for this waste assessment. National initiatives to improve the management of rural waste streams (for example plastic wrap, chemical containers and treated timber) means there may be an increase in the quantity of material entering the Council waste management system in rural areas. This needs to be reflected in options for changing current arrangements.

Current arrangements:

- Disposal of rubbish at the coastal RRCs is transported to Wellington Street.
- Week transport of rubbish to Tirohia Landfill.
- Clean fill and inert construction and demolition waste is transported to Tirohia Landfill³⁹.
- Recyclable materials are consolidated at the Wellington Street RRC before transport to end users or for further processing.
- Green waste is processed onsite and stored with the option to send to plateau compost for further processing.

Issues:

- Wellington Street RRC configuration:
 - Safety of site users, particularly the risk of conflict between pedestrians, cars and site equipment.
 - Safety of processing operations.
 - Contamination of recyclable streams due to storage on unmade surfaces, leading to lower prices being received.
 - Lack of covered space
 - o For storage of materials suitable for resale protected from the impacts of weather e.g., furniture, electrical items.
 - o For a resale area.
 - o For recyclable or recoverable items that need to be protected from the weather e.g. plasterboard, carpet, wood.
 - o Storing materials, for example, gib, carpet, wood, furniture.
 - Infrastructure and equipment which is not fit for purpose (limited capacity, ageing equipment and equipment which is not fit for purpose).
 - Difficulty with recovery/sorting of materials dropped off as residual waste (limited labour to remove recoverable materials as well as suitable equipment to enable this).

³⁹ There is currently no record of the volume of these materials which are being taken for reuse.

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- Occasionally subject to flooding, which has implications for the site as a district consolidation point⁴⁰
- Coastal RRCs
 - Contamination of recyclable streams.
 - Space limitations at Te Kaha and Waihou Bay.
 - Acceptance criteria for materials varies at each RRC.
 - No data collection capability (i.e. no weighbridge facilities).
- The pricing structure across the RRCs is not clear.
- A lack of data on the movement of materials through the sites.
- Rural waste⁴¹ is increasingly entering the Council waste management system.

Processing

There is potential to improve the infrastructure and efficiency of operations at Wellington Street RRC to enable increased diversion of material from landfill and avoidance of double handling of recycling streams.

Materials that could be targeted include:

- Recyclable materials collected at kerbside or from businesses for example.
 - Expansion of the kerbside recycling collection to rural properties.
 - Increasing capture of plastics 1, 2 and 5 through the kerbside collection.
 - Increasing the number of businesses using the Council provided collection service.
- Increasing the capacity to accept more construction and demolition waste e.g. timber, concrete and demolition rubble.
- Acceptance of additional garden waste, topsoil, fibrous green waste (flax and bamboo).
- Items that could be reused locally identified and diverted at point of entry to the site.

Considering approaches adopted elsewhere Council could consider the options listed in Table 10.4.

⁴⁰ In September 2023, Wellington Street RRC was directly impacted by District wide flooding and was closed for a period of time as a result of the event. This had consequential implications for the RRCs along the coast and their ability to transfer material to the site.

⁴¹ Waste from farming activities including plastic wrap, chemical containers and fencing materials (timber, wire). This material has traditionally been stored or disposed of on individual farms.

Table 10.4: Options for physical waste infrastructure

Summary	Explanation	Objective
Maintain current level of service (status quo)	Continue the current operations at Wellington Street RRC and the coastal RRCs/CRCS. The RRCs/CRCS operate with user pays and charges depending on the proportion of recyclable materials being dropped off. Waste and recyclables dropped at the coastal RRCs/CRCS will continue to be transported to Wellington Street RRC. Materials currently accepted will remain unchanged. Benefits – no significant increase in CapEX/OpEX likely to limit rates impact. Risks – this option may risk council becoming non-compliant with the broader requirements and proposals that are a part of standardising kerbside collections in Aotearoa.	Maintain current level of service.
Reduce number of RRCs (<i>reduced service option</i>)	Council to reduce the number of RRCs in the district. Residents will be able to drop waste off at any of the remaining RRCs/CRCS across the district. Materials currently accepted will remain unchanged. Will need to be considered alongside wider collections options being considered. Benefits – funding for operational and maintenance costs can be redirected to other RRCs/CRCS improvements. Potential for increased competition from private sector. Risks – this option may risk council becoming non-compliant with the broader requirements and proposals that are a part of standardising kerbside collections in Aotearoa. It may also impact obligations under the Local Government Act. This option is likely to disproportionately impact more rural communities and raise equity of service issues. The likely reduction of operational costs may be negated by costs associated with poor waste management and minimisation practices. Reduced influence over waste minimisation and diversion.	Reduced cost to Council of operating and maintain assets.
Expand processing capacity (<i>Do minimum option</i>)	Expand processing capacity for existing recyclable materials already accepted at the RRCs/CRCS. Materials to be diverted require identification and assessment (increased capacity for C&D type wastes already accepted, timber framing and other building materials). Considerations include the availability of site capacity, staffing and consent conditions at the RRCs/CRCS to receive additional recyclable materials. Transportation of additional materials under the existing contract from the coastal RRCs/CRCS to Wellington Street RRC. Benefits – transportation of additional materials under the existing contract from the coastal RRCs/CRCS to Wellington Street RRC. Risks – likely increase in CapEX/OpEX likely to limit rates impact. Local markets for recovered materials may not exist and require out of district transport. Consent conditions will need to be met.	Increase recovery by providing additional capacity.
Increase materials accepted at RRCs	Increase acceptance of targeted materials not already accepted at the RRCs/CRCS. Topsoil, fibrous green waste e.g. flax and bamboo.	Increase the diversion of material from landfill.

<i>(Do more option 1)</i>	Benefits – Increase diversion of materials from landfill. Risks – May present challenges for current processing equipment.	
Manual sorting of recyclables at Wellington Street <i>(Do more option 2)</i>	Manual sorting of recyclables at Wellington Street – improve existing infrastructure – e.g. conveyor to sort from. Benefits – Improved quality of recyclable materials available to the market. Council may receive higher revenue for recyclables. Risks – This option would likely require investment in plant and equipment and staffing.	Increase the diversion of material from landfill.
Reconfigure transportation logistics of materials from RRCs/CRCS <i>(Do more option 3)</i>	Current operations require transportation of waste and recycling to be collected and transported to Wellington Street RRC, where it awaits onward transportation to markets or landfill. Expand processing activities at individual RRCs/CRCS with the option of consolidation at the Wellington Street RRC or transport direct to processor. Benefits – Reduce double handling of waste and recycling particularly relevant to the coastal RRCs/CRCS. Risks – This option would likely require investment in staffing to increase operational hours and potentially more staff at the RRCs/CRCS. For example, removing the requirement to re-sort recycling arriving at Wellington Street RRC from the other RRCs/CRCS. It will also be reliant on space availability at individual RRCs/CRCS and may risk inefficiencies in transportation should the quantities not be sufficient.	Increase efficiency through reducing double handling.
Upgrade to Wellington Street RRC <i>(Intermediate option)</i>	Upgrades to existing facility – Wellington Street RRC. Upgrades to the existing facility will consider the operations of successful recycling and reuse centres where community partnerships have been made. Examples across New Zealand include: Nelson Environment Centre and Habitat for Humanity, both located in the Nelson region and The Junction located in New Plymouth. Benefits – This option will improve the health and safety for both users of the facility but also the operational staff. Increased efficiency of operations and an improved configuration will provide additional space within the current site boundaries. Council could look to partner with a community organisation to operate the facility. Risks – This option would likely require investment in staffing and require capital spend.	Increase efficiency of operations and health and safety.
Upgrade to existing RRCs/CRCS <i>(Do maximum option 1)</i>	Increase efficiency of operations and an improved configuration will provide additional space within the current site boundaries. Upgrades to the existing facility will consider the role of onsite resource recovery including reuse or repurpose areas. Consideration could also be given to the potential for weigh bridges. Benefits – This option will improve the health and safety for both users of the facility but also the operational staff. Risks – This option would likely require investment in staffing and require capital spend.	Increase efficiency of operations and health and safety.
New facility for C&D waste <i>(Do maximum option 2)</i>	New facility for C&D waste – the scale of development in the region over the next ten years is expected to increase the creation of C&D. Current acceptance of materials at the RRCs/CRCS excludes commercial volumes. Currently C&D waste from the region is being sent to landfill. This option requires the consideration of available space within the existing boundary at Wellington Street RRC, but also other Council owned land. Benefits – This option will improve the health and safety for both users of the facility but also the operational staff. Increase efficiency of operations and an improved configuration will provide additional space within the current site boundaries. Council could look to partner with a community organisation to operate the facility.	Increase recovery by providing additional capacity.

	Risks – This option would likely require investment in staffing and require capital spend.	
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11 Statement of Proposals

Based on the options identified in this Waste Assessment and the Council's intended role in meeting forecast demand a range of proposals for how this may be achieved have been included. Actions and timeframes for delivery of these proposals will need to be identified in the draft Waste Management and Minimisation Plan.

It is expected that the implementation of these proposals will meet forecast demand for services as well as support the Council's goals and objectives for waste management and minimisation. These goals and objectives will be confirmed as part of the development and adoption of the Waste Management and Minimisation Plan.

11.1 Statement of Extent

In accordance with section 51 (f), a Waste Assessment must include a statement about the extent to which the proposals will (i) ensure that public health is adequately protected, (ii) promote effective and efficient waste management and minimisation.

11.1.1 Protection of Public Health

The Health Act 1956 requires the Council to ensure the provision of waste services adequately protects public health.

The Waste Assessment has identified potential public health issues associated with each of the options, and appropriate initiatives to manage these risks would be a part of any implementation programme.

In respect of Council provided waste and recycling services, public health issues will be able to be addressed through setting appropriate performance standards for waste service contracts and ensuring performance is monitored and reported on, and that there are appropriate structures within the contracts for addressing issues that arise.

Privately-provided services will be regulated through local consents and bylaws. Uncontrolled disposal of waste, for example in rural areas and in cleanfills, will be regulated through local and regional consents.

It is considered that, subject to any further issues identified by the Medical Officer of Health, the proposals would adequately protect public health.

11.1.2 Effective and Efficient Waste Management and Minimisation

The Waste Assessment has investigated current and future quantities of waste and diverted material, and outlines the Council's role in meeting the forecast demand for services.

It is considered that the process of forecasting has been robust, and that the Council's intended role in meeting these demands is appropriate in the context of the overall statutory planning framework for the Council.

Therefore, it is considered that the proposals would promote effective and efficient waste management and minimisation.

11.2 Key issues and opportunities to be addressed by WMMP

11.2.1 Data

The data available on waste and resource recovery is limited. There is data on the waste sent by Council out of the district to landfill disposal, and also on the quantities of materials recovered (only and those coming through the RRCs); based on weighbridge data and figures provided by operators. Information on materials transport directly from businesses or households to out of district disposal or processing is limited.

The figures provided for waste to Class 2-4 landfills are based on estimates provided by site operators. The estimate for farm waste is based on data from a relatively small study of farms in Canterbury, Waikato, and the Bay of Plenty. There is some composition data available, but this only applies to kerbside-collected waste and is focused on 'kitchen waste' (usually known as food waste or putrescible organic waste).

There is limited or no data on commercial and private rubbish and recycling collections and composition of waste streams.

11.2.2 Council Services – Kerbside Collections

The kerbside collection services are well-embedded, with the 45L bin for residual waste and four crate recyclable collection. The structure of the collections enables glass to be colour separated, which ensures the maximum return, but does raise some concerns with respect to manual handling health and safety issues. The service could be extended to some suburban/rural properties.

A food waste collection would ease the pressure for these households, enabling them to divert more waste from the rubbish collection and therefore from landfill⁴². Increasing diversion from landfill for the district would help to minimise future exposure to increasing costs of landfilling, and associated charges such as the landfill levy, ETS and transport cost implications.

11.2.3 Council Services – Facilities

The council- run RRC in Ōpōtiki accepts a very wide range of materials. The Council also receives a good return on recyclable materials, due to the accuracy and extent of sorting that takes place. This helps to offset the high costs of transport as Ōpōtiki is at such a distance from most processors and end markets.

There may be an opportunity to expand the reuse and refurbishing elements at the Ōpōtiki RRC, perhaps in conjunction with providing training and business incubation opportunities to the local community. There is signage at the RRC, but this is somewhat inconsistent and could be improved to be more noticeable, and consistent within the centre and with national branding and guidelines.

The weighbridge at the RRC has only recently been installed, which has made it difficult to collect accurate data on waste and materials coming into the site to date. There is a charge for recycling, albeit small, which is appropriate given the site is used by commercial organisations as well as householders. However, the capacity of the kerbside recycling collection is quite restrictive and the charge for recycling at the RRC may discourage some householders separating out additional recycling and bring it to the RRC instead.

⁴² Noting however that the changes to plastics accepted at the kerbside as per kerbside standardisation requirements may put pressure on kerbside rubbish bin capacity as this material will be considered waste if collected from the kerbside.

11.2.4 Aquaculture and Harbour Development

The growth of the aquaculture industry, and the developments of Ōpōtiki Harbour, are at a stage where waste management and minimisation implications are not completely clear. With the current 3,800 Ha open water mussel farm having potential to significantly expand existing waste generation is likely to increase. Council has a role to work alongside the iwi and commercial organisations involved in these projects to ensure that waste types and quantities are assessed and planned for in a way that supports the vision, goals and objectives of the WMMP.

11.2.5 Landfill Disposal

Waste disposal options (in terms of landfill capacity) is not expected to be an issue for Council in the near to medium future with Waste Management NZ seeking an extension at Tirohia and Hampton Downs (distanced further away) has plenty of remaining capacity. Council does need to be aware that the pricing for landfill disposal is likely to continue to increase as the waste levy is increased and implications of the Emissions Trading Scheme are reflected in the landfill gate fee.

11.2.6 Farm Waste

It is likely that at present, much farm waste in the district is managed using the ‘three Bs’ – burning, burial, or bulk storage on private property. There is relatively little known about the current management of farm waste; nor what types of waste there might be and what quantities.

Export markets are increasingly interested in on-farm management practices including managing both degradable and non-degradable materials. There are also pressures on applying organic materials to land where they contribute to nitrogen loading on groundwater and waterways. These factors suggest there is potential for an increasing proportion of material generated on farms in the District to require management through Council's waste management services or other providers.

Examples include plastic wrap, agrichemical containers, treated timber (fencing, kiwifruit trellis) and off specification produce (e.g. kiwifruit).

Recent central government initiatives like Farm Management Plans may be a useful tool in identifying practices, waste types and quantities associated with on-farm waste management.

11.2.7 Seasonal Wastes

Ōpōtiki district experiences changes in waste patterns at certain times of the year, due to freedom campers, seasonal workers and seasonal processing. This means that services need to cope with varying levels of demand and changing waste characteristics through annual or shorter cycles.

A particular issue noted is general waste at coastal locations that are used by locals and visitors for ‘freedom camping’ during the summer months. There are also a number of accommodation options in the district that are used predominantly by seasonal workers at peak times.

With significant kiwifruit production and processing in the region both off specification produce and packaging materials (trays, boxes, crates and pallets) have the potential to be significant at certain times of the year. Mussels are harvested and processed year round with periodic refurbishment of the growing structure.

11.2.8 Weather events

The intensity and frequency of extreme weather events has had a direct impact on parts of the county, the eastern coast of the North Island has been particularly subjected to these issues. For Council, the RRC network continues to have challenges operating as normal during poor weather events. In September 2023, the Wellington Street RRC was directly impacted by flooding and was

closed for a period of time. And most recently, in late October, the Waihau Bay RRC was closed early due to surface water entering the building and high winds making it unsafe for staff and the general public. Road closures have also impacted the coastal networks ability to operate in a business as usual capacity.

These issues put pressure on a network of infrastructure that is already stretched. The 2023 weather events have highlighted a number of infrastructure challenges for Council and have compounded the need for more urgent investment in a range of aging infrastructure. This is creating pressure on Councils budgets and investment prioritisations.

Further, the type of wastes that often result from these events are not necessarily materials that the current network is set up to receive and effectively manage.

12 **Applicability**

This report has been prepared for the exclusive use of our client Opotiki District Council, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

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