



Central Otago District Council

Waste Management and Minimisation Plan

2024-2030

June 2024

Contents

| | |
|--|----|
| Foreword | 3 |
| Part A – Strategy | 4 |
| 1 Introduction | 4 |
| 2 What informs the plan? | 6 |
| 3 Vision, goals, objective, policies, and targets | 7 |
| 3.1 Vision for the future | 7 |
| 3.2 Goals, objectives, policies and targets | 7 |
| 3.2.1 Goals and objectives | 7 |
| 3.2.2 Our targets | 9 |
| 4 What happens with our waste? | 10 |
| 4.1 Overview of existing waste management and minimisation infrastructure and services | 10 |
| 4.1.1 Services provided by Council | 10 |
| 4.1.2 Non-council provided services and facilities | 12 |
| 4.2 Public health protection | 12 |
| 4.3 Volume and composition of our waste | 12 |
| 4.4 Funding of Council's waste services | 15 |
| 5 How much better could we do? | 16 |
| 5.1 Council's role | 16 |
| 5.2 Identified district waste opportunities | 16 |
| Part B – Action Plan: What would we like to achieve? | 19 |
| Action Plan Overview | 19 |
| 6 Forecast future demand | 25 |
| 7 Funding | 26 |
| 7.1 Funding the plan | 26 |
| 7.2 Waste minimisation levy funding expenditure | 26 |
| 7.3 Waste Levy grants | 26 |
| 8 Monitoring, evaluating and reporting progress | 26 |
| 8.1 Monitoring and evaluation | 26 |
| 8.2 Reporting | 27 |
| Glossary | 28 |
| Part C – Supporting Information | 29 |

| | | |
|-----------|---|----|
| Figure 1 | Circular management and waste management within the waste hierarchy | 5 |
| Figure 2 | Central Otago’s planning framework for statutory, Council and organisational documents which related to this solid waste strategy | 6 |
| Figure 3 | Central Otago’s current kerbside services | 10 |
| Figure 4 | Current kerbside collection information and branded collection vehicles..... | 11 |
| Figure 5 | Central Otago District controlled waste volumes over the previous five years..... | 13 |
| Figure 6 | Summary of kerbside waste volumes in Central Otago..... | 14 |
| Figure 7 | Kerbside refuse composition from a waste audit in November 2020..... | 14 |
| Figure 8 | Diversion potential in kerbside refuse | 15 |
| Figure 9 | Opportunities aligned to the national waste strategy | 17 |
| Figure 10 | Projected waste generation, disposal to landfill and diversion..... | 25 |
| | | |
| Table 1 | NZWS goals and Councils objectives | 7 |
| Table 2 | Central Otago District’s waste minimisation targets..... | 9 |
| Table 3 | Council services currently provided and their funding methods..... | 15 |
| Table 4 | 2024-2030 WMMP Action Plan | 20 |

Foreword

As Mayor of Central Otago, I'm proud to introduce the 2024 Waste Management and Minimisation Plan (WMMP). This document, our third WMMP, reflects an expanded vision for waste minimisation in line with national advancements and our community's values.

Significant changes since 2018 include embracing a circular economy, focusing on resource redesign, reuse, and repair. Nationally, we've seen a standardisation in materials for kerbside collections, a process in which Central Otago is already well-aligned.

Our district leads in waste management, demonstrated by the successful 2023 kerbside service rollout. The 2024 WMMP aims to align this service with business needs, especially in construction and accommodation, fostering collaboration towards our waste reduction goals.

We're also committed to providing equitable waste services for all residents, enhancing material diversion from landfills, and managing legacy landfill sites responsibly.

Our regional partnerships across Otago and Southland are key to maximising waste minimisation facilities and funding. These collaborative efforts are crucial for meeting the ambitious targets set by this WMMP and the National Waste Strategy.

Achieving our goals requires collective action. I urge everyone to engage with this plan, contributing to a sustainable, efficient, and environmentally responsible waste management system in Central Otago.

Tim Cadogan

Mayor of Central Otago

This plan is in three parts:

- Part A: The Strategy: contains core elements vision, goals, objectives, and targets. It sets out what we are aiming to achieve and the broad framework for working towards the vision.
- Part B: Action Plan: sets out the proposed actions to be taken to achieve the goals, objectives, and targets set out in Part A. Part B also shows how we will monitor and report on our actions and how they will be funded.
- Part C: Supporting Information: contains the background information that has informed the development of our Waste Management and Minimisation Plan (WMMP). Most of this information is contained in the Otago Region Waste Assessment (WA).

Part A – Strategy

1 Introduction

Central Otago District Council (Council) has a statutory responsibility to promote effective and efficient waste management and minimisation within the Central Otago District (Section 42, Waste Minimisation Act 2008 (WMA)). In order to do this, the Council is required to adopt a waste management and minimisation plan (WMMP) under Section 43 of the Act.

This WMMP is a guiding document which identifies Council's vision, goals, objectives, targets and methods for achieving effective and efficient waste management and minimisation. It also provides information on how Council intends to fund the activities of the WMMP over the next six years.

In addition to the legislative framework in which this WMMP has been developed, it has also been developed in the context of the New Zealand Waste Strategy 2023 (NZWS). The NZWS sets out the long-term policy priorities for waste management and minimisation and has a vision for 2050:

By 2050, New Zealand is a low-emissions, low-waste circular economy. We cherish our inseparable connection with the natural environment and look after the planet's finite resources with care and responsibility.

This updated version on the NZWS sets out how to reduce waste and prevent valuable resources being lost to landfills by moving towards a circular economic model (Figure 1). Currently a lot of waste is produced as a by-product of a linear economy. Things are taken from the natural environment, whether nutrients from soils in biological materials or metals or hydrocarbons in technical materials to make up products. Often these are mixed together in a way that makes them hard to separate – such as a polyester-cotton blend cloth or a liquid paper board container. This means that they are hard to recycle or reuse in any meaningful way, so are disposed of and require more of the raw materials to make a replacement item. An economy based on a circular model designs products with a plan in place for the end of their useful life. Components are designed to be easily repaired, replaced or reused. Biological and technical materials are kept separate so that valuable technical materials can be reused or recycled and biological materials can be composted to return nutrients to soils.

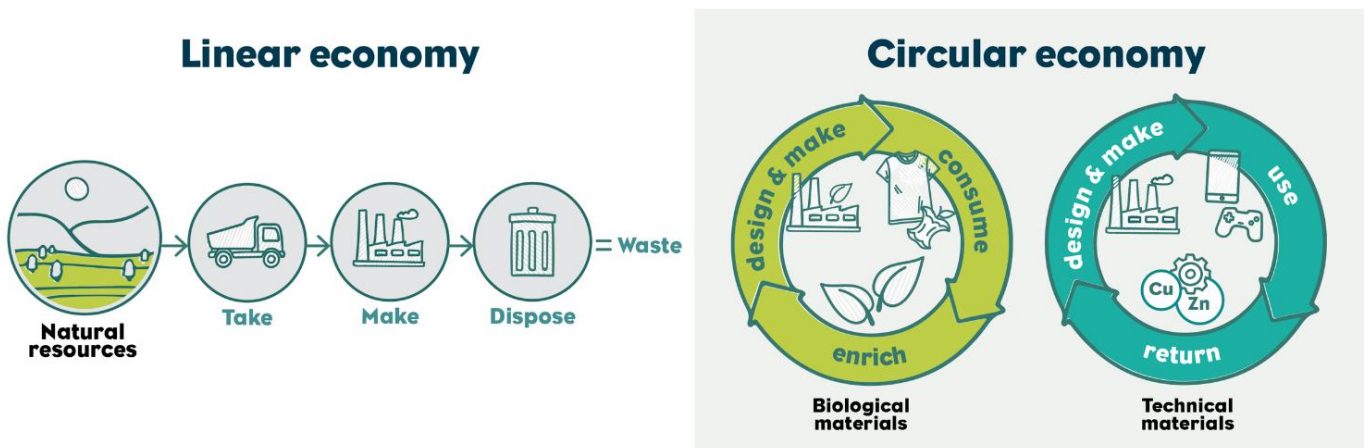


Figure 1 A comparison of linear and circular economic models

Source: Waitaki District Council

The NZWS has the following eight goals:

1. **Systems:** The strategic planning, regulatory, investment and engagement systems are in place and operating to drive and support change.
2. **Infrastructure:** We have a comprehensive national network of facilities supporting the collection and circular management of products and materials.
3. **Responsibility and accountability:** We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences.
4. **Using less:** We use fewer products and materials, and using them for longer, by making them more durable, and repairing, reusing, sharing and repurposing them.
5. **Resource recovery systems:** Resource recovery systems are operating effectively for core materials and across all regions.
6. **Recovering value:** We look for ways to recover any remaining value from residual waste, sustainably and without increasing emissions, before final disposal.
7. **Emissions:** Emissions from waste are reducing in line with our domestic and international commitments.
8. **Contaminated land:** Contaminated land is sustainably managed and remediated, to reduce waste and emissions and enhance the environment.

Council has also considered the waste minimisation hierarchy of reduce, reuse, recycle, recover, treatment and disposal in the development of this WMMP and each stages role in a circular economic model (Figure 2). This plan should be read in association with the Otago Region Waste Assessment attached as Part C to this WMMP.

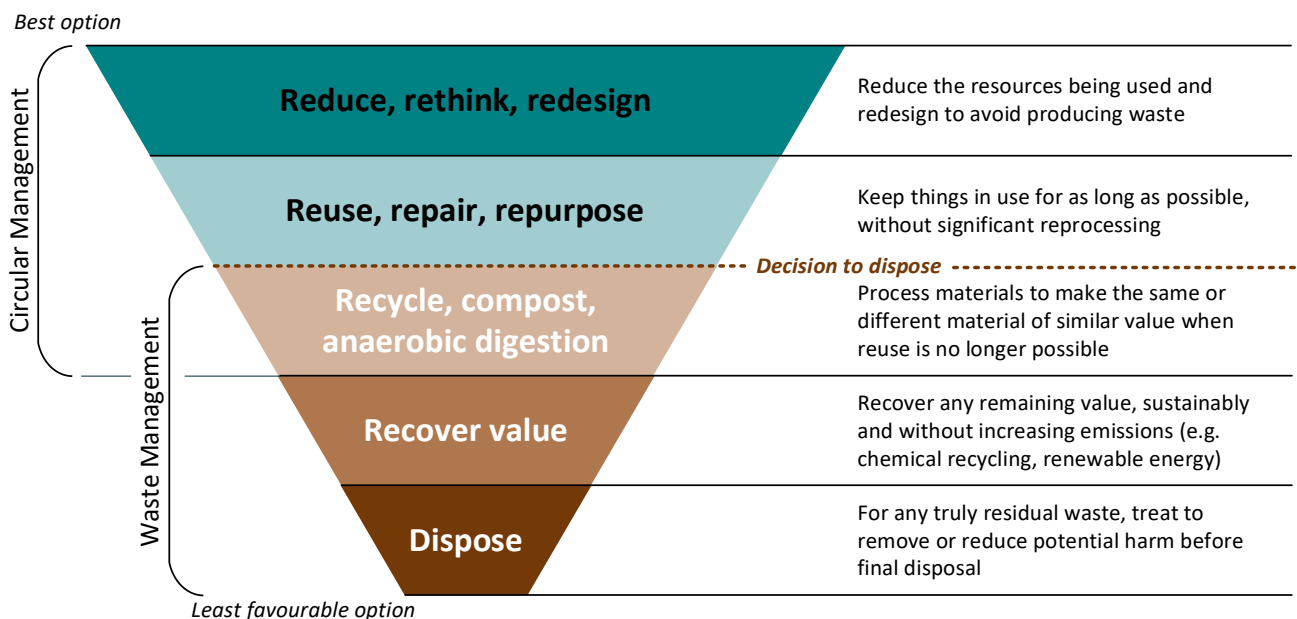


Figure 2 Circular management and waste management within the waste hierarchy

Source: Based on the New Zealand Waste Strategy, Ministry for the Environment

2 What informs the plan?

There is a clear legislative and policy framework within which the Council provides waste services and facilities within its District. A summary of the applicable legislation is detailed below.

Key legislation affecting waste is:

- Waste Minimisation Act 2008
- Local Government Act 2002
- Resource Management Act 1991
- Climate Change Response Act 2002 (Emissions Trading)
- Litter Act 1979
- Health Act 1956.

While the WMA sets out the legislative requirement for solid waste, the NZWS provides the government's strategic direction for waste management and minimisation in New Zealand. The goals of this WMMP replicate those from the NZWS. Local, regional, and national plans and policies affect the Council's provision of waste and diverted material services. Primarily, there are requirements under the WMA and the Local Government Act 2002.

Figure 3 shows Council's planning and policy framework with alignment from legislative requirements to operational policies. There needs to be alignment between Council's key planning documents, including this WMMP, bylaws and its operational policies.

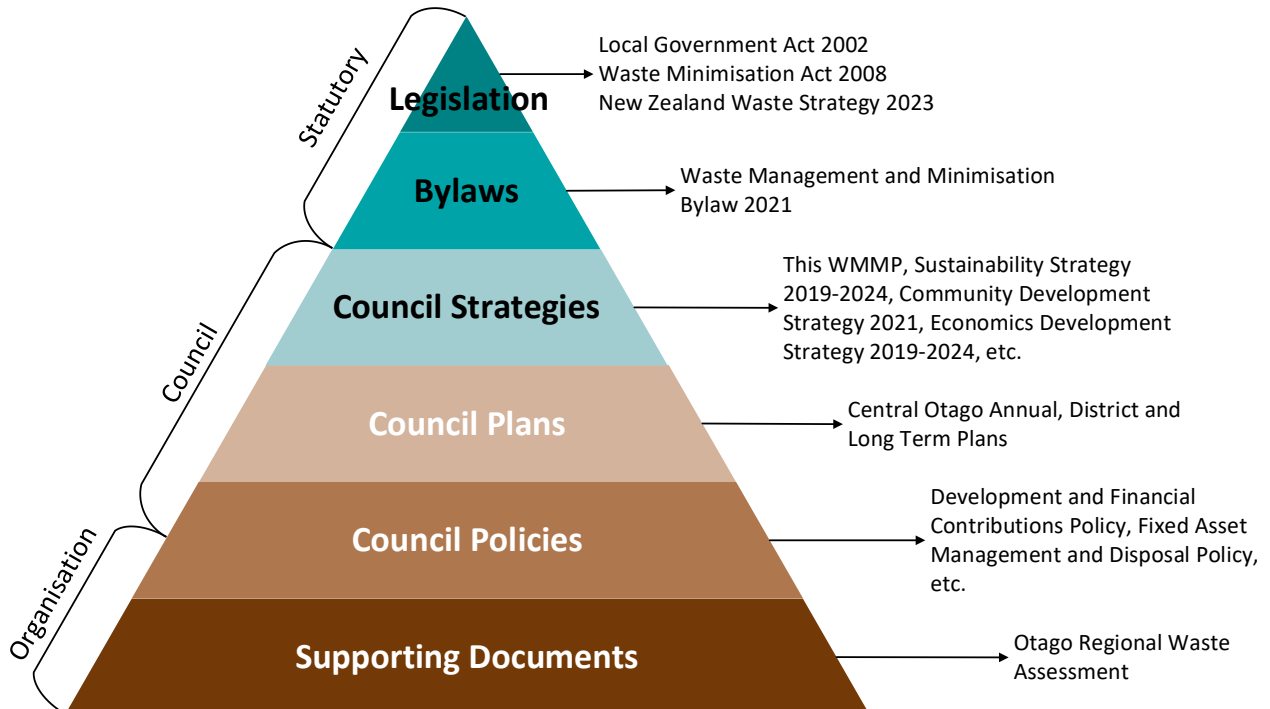


Figure 3 Central Otago's planning framework for statutory, Council and organisational documents which related to this solid waste strategy

3 Vision, goals, objective, policies, and targets

Working together, Council and the community can achieve more effective and efficient waste management and minimisation in the District. Council is proposing the following vision, goals, objectives, and targets. Taken together these form the strategy for Council’s WMMP.

3.1 Vision for the future

Our vision for the future is:

“Central Otago is working towards becoming a low-emissions, low-waste district built upon a circular economy”.

3.2 Goals, objectives, policies and targets

3.2.1 Goals and objectives

Council have adopted the NZWS 2030 goals and developed our own objectives that support the achievement of these goals. The NZWS states that “By 2030, our enabling systems are working well, and behaviour is changing”. The NZWS goals and Councils objectives are shown in Table 1.

Table 1 NZWS goals and Councils objectives

| # | NZWS Goals | Council Objectives |
|---|--|--|
| 1 | <p>Systems</p> <p>The strategic planning, regulatory, investment and engagement systems are in place and operating to drive and support change</p> | <ul style="list-style-type: none"> • Provide long-term strategic planning and guidance on Waste Minimisation and Management through Central Otago’s Long Term Plan (LTP) and WMMP. • Align services to enable staged goals for 2030, 2040 and 2050. • Support national and regional collaboration where required (e.g. Action Investment Plan). |
| 2 | <p>Infrastructure</p> <p>We have a comprehensive national network of facilities supporting the collection and circular management of products and materials</p> | <ul style="list-style-type: none"> • Council and private facilities support collection and circular management of products and materials. • Local planning provisions support the circular economy. |
| 3 | <p>Responsibility and accountability</p> <p>We all take responsibility for how we produce, manage and dispose of things, and are accountable for our actions and their consequences</p> | <ul style="list-style-type: none"> • Deliver behaviour change programmes to increase awareness and accountability to better support waste minimisation. |
| 4 | <p>Using less</p> <p>We use fewer products and materials, and use them for longer, by making them more durable, and repairing, reusing, sharing and repurposing them</p> | <ul style="list-style-type: none"> • Support local redesign, repair, reuse, sharing and repurposing initiatives. • Education programs to raise awareness in the community. |
| 5 | <p>Resource recovery systems</p> <p>Resource recovery systems are operating effectively for core materials and across all regions</p> | <ul style="list-style-type: none"> • Kerbside services are supported by resource recovery for use in region (e.g. glass and organics) or consolidation (e.g. plastics) for out of region circular processing. • Recent expansion and introduction of new |

| | | |
|----------|---|---|
| | | kerbside collections in July 2023, with further system improvements identified in this next solid waste strategy cycle. |
| 6 | Recovering value We look for ways to recover any remaining value from residual waste, sustainably and without increasing emissions, before final disposal | <ul style="list-style-type: none"> Look to recover any remaining value from residual waste prior to disposal to landfill. |
| 7 | Emissions Emissions from waste are reducing in line with our domestic and international commitments | <ul style="list-style-type: none"> Reduce organic waste production and disposal from both residential households and businesses. |
| 8 | Contaminated land Contaminated land is sustainably managed and remediated, to reduce waste and emissions and enhance the environment | <ul style="list-style-type: none"> Continued management of Council's closed landfills. |

3.2.2 Our targets

Council's waste minimisation targets are set out in Table 2. The current performance is assessed, and targets are set to align with the NZWS.

Table 2 Central Otago District's waste minimisation targets

| NZWS target | Description | Central Otago District Council | |
|--|---|---------------------------------|--------------------|
| | | 2022/23 | 2030 Target |
| 10% reduction in waste generation* per person by 2030 <i>*Waste generation means everything collected through all kerbside collections and refuse transfer stations.</i> | 10% reduction in waste per person from all sources. | 447 kg/person/year ¹ | 402 kg/person/year |
| 30% reduction in waste disposal** per person by 2030 <i>**Waste disposal means all refuse collected via kerbside collections and refuse transfer stations.</i> | 30% reduction in refuse from all sources | 355 kg/person/year ² | 248 kg/person/year |
| | 30% reduction in kerbside refuse | 186 kg/person/year ³ | 118 kg/person/year |
| 30% reduction in biogenic methane emissions by 2030 | Putrescible content in kerbside refuse measured in regular SWAP | 44% ⁴ | <20% |
| % diversion kerbside collection | Staged diversion: 30% by July 2026, 40% by July 2028 and 50% by July 2030 | 29% ⁵ | 50% |

The targets set in the table above have been calculated using solid waste data available to Council from its kerbside collection services, drop off sites and transfer stations, up to the end of the 2022/23 financial year. It also includes data from CODC's solid waste analysis (i.e. SWAP) for kerbside refuse in November 2000 and transfer station refuse in November 2021. Where Council data is not available, waste volumes assessed in the Otago Region Waste Assessment have been used.

Note, these targets have been set using the base year of 2022/23, which is prior to changes Council have made to their kerbside collection services. Refer to Section 4.1.1 for further details of service changes.

¹ Includes total refuse and diverted volumes from all sources available in Council records (XX,000 tonnes), and a population of 26,000 (Infometrics).

² 2022/23: refuse to landfill from all sources: 9,227 tonnes (Council data), district population: 26,000 (Infometrics).

³ 2022/23: refuse from kerbside collections: 4,391 tonnes (Council data), kerbside service entitled population (estimated): 9,885 households (Council data) multiplied by 2.39 people per household (StatsNZ, 2018 census).

⁴ SWAP (2020, pg. 11) and Otago Region Waste Assessment (2023, pg. 59-60).

⁵ Refer to Figure below for tonnage data used for this calculation.

4 What happens with our waste?

4.1 Overview of existing waste management and minimisation infrastructure and services

A summary of the current services provided by Council and non-council providers is outlined below. For a detailed description of Council and non-council solid waste services, refer to the Otago Region Waste Assessment in Part C.

4.1.1 Services provided by Council

Council provides a range of waste management and minimisation services and facilities across the district. The solid waste services include kerbside collections for refuse, mixed recycling, glass and organics, recycling drop-off stations, operation of four refuse transfer stations (RTS), and the processing and disposal of collected material. Council also provides waste minimisation education and behaviour change programmes to its community.

Changes were made to Council's solid waste services in July 2023. This change included the introduction of collections for combined food and garden organics (FOGO) bins and a reduction in the size of rubbish bins from 240L to 140L (with a continuation of fortnightly collections). The kerbside collection services are provided to the urban areas of Alexandra, Cromwell, Bannockburn, Pisa Moorings, Omakau, Ophir, Bridge Hill, Clyde, Fruitlands, Teviot Valley, Ranfurly and Naseby. Some properties outside of the defined urban areas, but along collection routes are also included in the service.

Figure 4 provides a summary of Council's kerbside collection services. Alongside the kerbside service changes introduced in July 2023, Council ran an extensive education and communication campaign with its community to help residents understand how to use the new services appropriately and the reasons for the changes. Figure 5 shows some of the communication material provided to households during the roll out.



Figure 4 Central Otago's current kerbside services



Figure 5 Current kerbside collection information and branded collection vehicles

Households outside of the kerbside collection areas, or those with needs beyond the scope of kerbside collections, are able to access a range of alternative services, including:

- One of four refuse transfer station (RTS) facilities, located at Alexandra, Cromwell, Ranfurly and Roxburgh.
- Material accepted at Council's transfer stations for a fee includes: refuse bags, bulk refuse, greenwaste, scrap metal, whiteware, vehicle batteries and tyres. Some facilities accept household quantities of cleanfill/hardfill, most classes of hazardous waste, LPG cylinders and agricultural containers.
- Material not accepted at Council's transfer stations include asbestos, and some hazardous waste. Currently, household batteries, electronic waste and used engine oil are not accepted, but from early 2024 certain facilities will start to accept these items. More detail will be provided via CODC's website.
- Refuse drop-off sites are also available in Tarras and Patearoa, for residents who purchase pay-per-use CODC rubbish sacks.
- Recycling drop-off sites, free of charge, are located at the Alexandra and Cromwell transfer stations, and in Omakau, Oturehua, Patearoa, Poolburn, Roxburgh, Ranfurly, and Tarras.

Note, Council also has plans to re-establish one in Alexandra, following its closure in July 2023 and investigate establishing a resource recovery centre in Cromwell. These are discussed further in the Action Plan in Part B.

Much of the refuse from Central Otago is disposed of at Victoria Flats Landfill in the neighbouring Queenstown Lakes District, with no Council or private class 1 landfills operating in the district. The exception is screenings from Central Otago wastewater treatment plants, which are disposed of at AB Lime in Southland. Council will have processing capabilities for glass within the district, with a glass crusher facility in Cromwell to be commissioned in early 2024. Mixed recycling and organics

are currently processed out of the district, at the Redruth Materials Recovery Facility (MRF) and compost facility in Timaru. In future, organics will be processed at Council's composting facility in the Central Otago district, which is currently under investigation.

4.1.2 Non-council provided services and facilities

There are private waste services available across the district, predominantly for businesses, with limited access for households not in a CODC mandatory kerbside collection zone. Most businesses in the district are part of the Council's kerbside collection services but may also use private waste services to increase refuse collection volume or recycle different material than can be accepted in kerbside bins. Private collection services exist for the recycling of: GIB board, soft plastics and polystyrene. These services can also provide larger bins than available through the Council's kerbside collection services for recycling of greater volumes of materials, for example cardboard.

4.2 Public health protection

The range of public and private waste services in the Central Otago District ensures public health will be adequately protected in the future. Council own and operate a network of transfer stations in the district, with access to processing and disposal facilities either within the district or outside the district. The community currently has adequate access to council or private collection services and Council's drop-off sites. Services are available for recycling, food scraps, greenwaste, glass, refuse, hazardous waste and litter, but further waste minimisation is achievable as outlined in this plan. This plan proposes initiatives for continued waste minimisation.

In its feedback on the Otago Region Waste Assessment, Te Whatu Ora – Southern Te Waipounamu stated their support of the collaborative approach while allowing for Territorial Authority's to develop specific requirements based on local circumstances. The response highlights the importance of sanitary refuse collection and disposal and associate this to appropriate management of human health and environmental risks. They also highlight wider sustainability and climate outcomes and equity considerations including access to services and cost to ratepayers. The Medical Officer of Health's review acknowledges the degree of change expected in the solid waste services and that the WMMP would need to show clear direction/change in practice that demonstrates a more efficient use of resources and waste diversion. This feedback has been considered in the development of this plan.

4.3 Volume and composition of our waste

As a district we will need to change what materials we discard to landfill and what we divert to recover the value of the embodied resources. In order to do this, we first need to understand what our waste looks like and where we have opportunities to reduce waste generation and increase diversion. The Otago Region Waste Assessment provides a good regional picture of our collective waste. Central Otago's waste profile over the previous five years is shown in Figure 5 below. Waste volumes disposed to landfill are represented below the line, with materials diverted from landfill shown above the line.

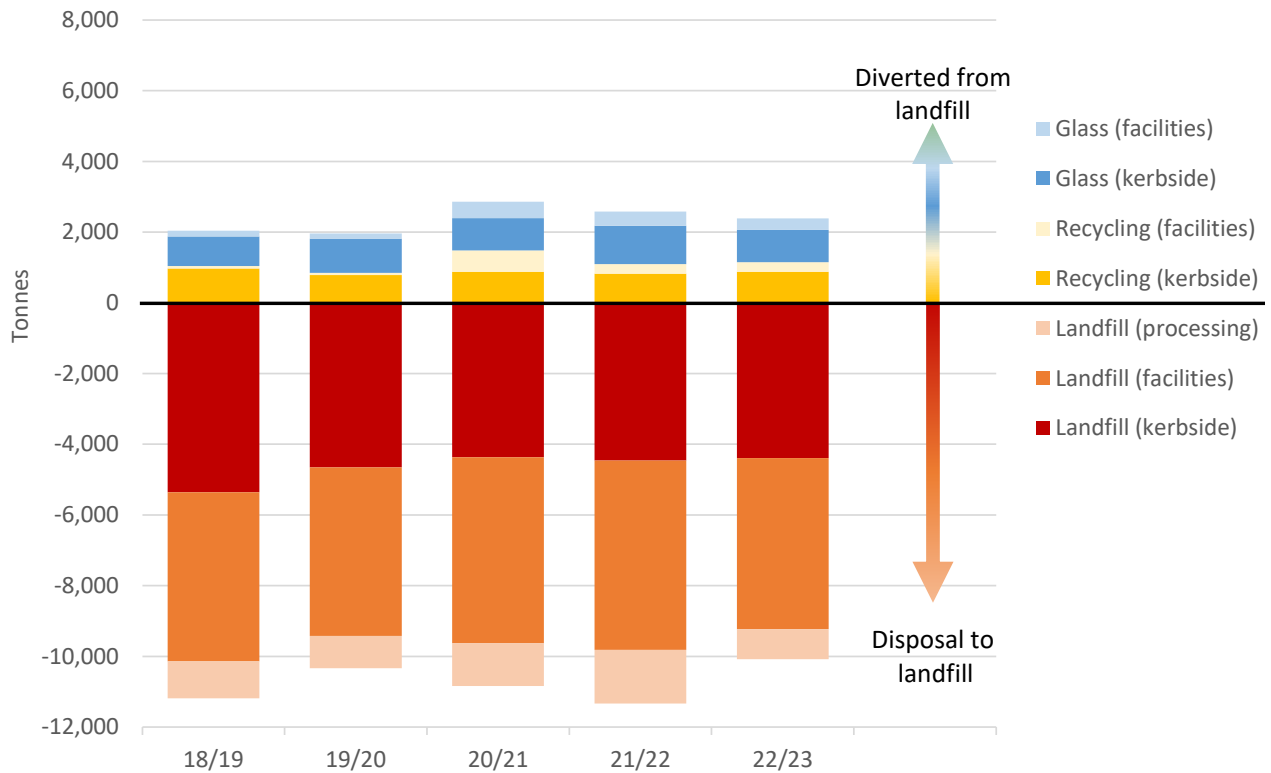


Figure 6 Central Otago District controlled waste volumes over the previous five years.

There are three primary sources of material disposed to landfill; refuse collected at the kerbside, refuse received at Council’s facilities, and diverted materials that have had to be disposed to landfills, due to contamination or a lack of appropriate processing options. The change in Council’s solid waste services from July 2023 includes new processing options which will help reduce the volume of diverted materials that are disposed to landfill.

Materials diverted from landfill have primarily been mixed recyclables and glass from kerbside collections, drop-off sites and Council’s transfer stations. With the introduction of the new FOGO bins and improved recording of green waste received at transfer stations, the volume of organics diverted from landfill is expected to increase. Most waste in the Central Otago district passes through one of Council’s transfer stations, prior to disposal. However, it there may be some privately collected material (refuse or diverted materials) that do not pass through Council’s facilities.

Kerbside collection volumes for 2022/23 are shown in Figure . Kerbside diversion was 29% in that year, with the new collection services expected to increase diversion, particularly for organics, and drive refuse volumes down. Council expects to achieve 30% for mid-2026 and the new services are expected to set up the district to achieve the longer-term targets of 40% by mid-2028 and 50% by mid-2030.

Kerbside Waste in Numbers

| Organics | Recycling | Glass | Refuse |
|-------------------------------------|---------------------------------------|-------------------|------------------------|
| - | 882 | 911 | 4,391 |
| - | tonnes diverted | tonnes diverted | tonnes to landfill |
| - | 37 kg per person | 39 kg per person | 186 kg per person |
| <i>Collections commenced Jul-23</i> | <i>Paper, cardboard, and plastics</i> | <i>Glass only</i> | <i>Household waste</i> |



Figure 7 Summary of kerbside waste volumes in Central Otago

Council regularly assesses the composition of kerbside refuse through waste audits. The most recent audit of kerbside refuse bins was conducted in late 2020, with the breakdown of materials illustrated in the figure below. The recent introduction of the organics collection service was based on the high proportion of organics in kerbside refuse, 47.1%.

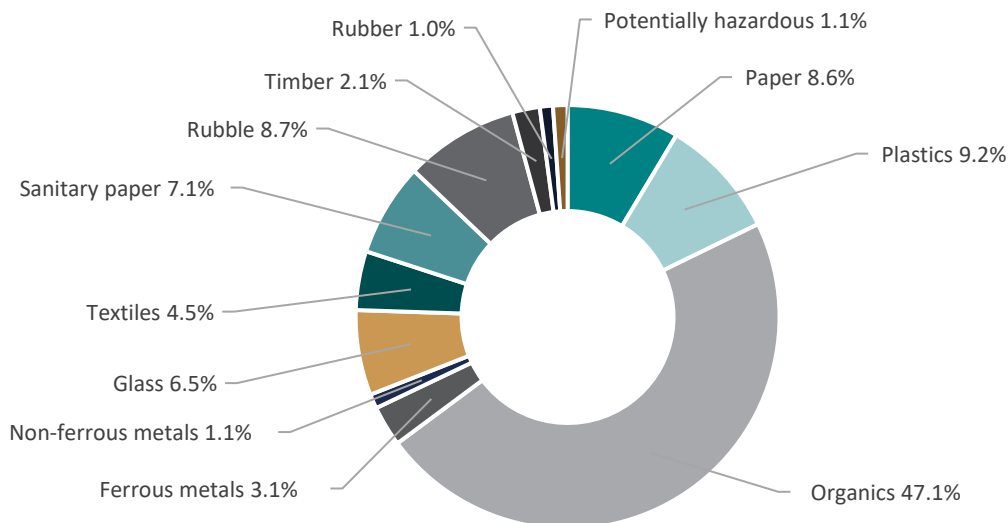


Figure 8 Kerbside refuse composition from a waste audit in November 2020

From the waste audit information, we can determine how much of the material we throw into our refuse bins could potentially be diverted to other, more sustainable uses. More than half of our rubbish could go into mixed recycling (8%), glass recycling (5%) and organics (44%) as illustrated in the figure below.

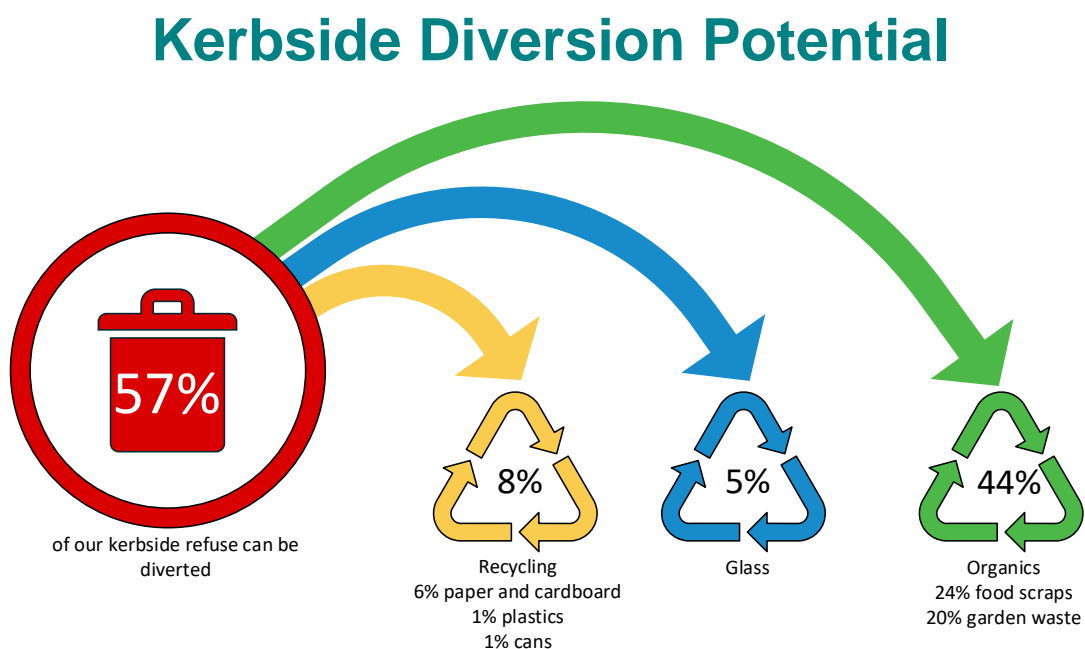


Figure 9 Diversion potential in kerbside refuse ⁶

4.4 Funding of Council's waste services

Current funding for these services comes from a combination of general rates, targeted rates, subsidies, grants and user fees and charges, with a breakdown shown in Table 4.

Table 3 Council services currently provided and their funding methods

| Council Service | Funding Methods |
|--|---------------------------------|
| Waste minimisation education, enforcement, communication, monitoring and policy development | General rates, waste levy funds |
| Kerbside collection and drop-off points, and associated processing and disposal (refuse, recyclables and organics) | Targeted rates, general rates |
| Transfer station operations | Fees and charges, general rates |
| Provision of public litter bins | General rates |

⁶ Based on a SWAP analysis of kerbside refuse in November 2020.

5 How much better could we do?

5.1 Council's role

In order for Council to achieve its future diversion targets, the District needs to make changes to how it manages and minimises waste. The Otago Region Waste Assessment identified six work areas where Council can play one of several roles in supporting the community make this change. These work areas are:

- Regulate (R): use regulatory tools available to Council, such as our Waste Management and Minimisation bylaw, to create an environment that encourages solutions, such as requiring construction site waste management plans, banning certain materials from landfill, etc.
- Measuring and Monitoring (MM): the collection and reporting of data provides Council the opportunity to assess progress against targets, this includes kerbside presentation rates, contamination levels, Council and commercial waste sources etc.
- Education and Engagement (EE): such as providing or supporting waste minimisation programmes, including mana whenua, community groups, social enterprise, and industry groups.
- Provider of Collection and Services (CS) or Infrastructure (IN): Take direct action by providing services or facilities that address the needs of the community.
- Leadership and Management (LM): take a facilitation and leadership role in addressing the need, such as by creating working groups focusing on a particular material e.g. construction waste. Identify the need at a strategic level, with other sectors able to respond to the need as they wish. Influence the way gaps are addressed by others by making funding available for specific initiatives that address the need in some way.

We will refer back to these roles when we consider the actions we can take to help reach the targets for waste minimisation that we have set.

5.2 Identified district waste opportunities

Based on the waste issues discussed in the Otago Region Waste Assessment, five areas of opportunity were identified for Central Otago to help the district meet its waste reduction and diversion targets by 2030:

- 1. Promote waste minimisation based on the waste hierarchy and local circular economy principles:**
 - Opportunities include raising awareness in the community, showcasing local initiatives and supporting national product stewardship schemes at the local level.
 - This also includes targeted and direct engagement with the community regarding Council's kerbside services, to maintain high participation and low contamination rates in the service.
- 2. Divert more from kerbside collection services:**
 - Changes to kerbside services, introduced in July 2023, will increase diversion. This will include monitoring service use and responding with targeted community engagement.
 - Council could seek to extend these new services to more households as development occurs or investigate expanding the service to provide for more targeted provision for commercial businesses.
 - Council also needs to ensure processing facilities remain available for glass, mixed recycling, and organics to ensure collected materials are diverted from landfill.

3. Improve access to appropriate waste services beyond the kerbside:

- Council services beyond the kerbside where improvements can be made include public place litter and recycling bins, rural drop-off sites and transfer station facilities. This could involve expanding the number of sites, (e.g. a recycling drop-off container in Queensberry), or expanding the range of materials that can be diverted at sites.
- It could also include supporting national product stewardship schemes by making Council sites available as part of national collection networks (e.g. for a national container return scheme).
- Council could work with commercial sectors within its district, to support sector-led diversion initiatives. For example, this could involve promoting and collaborating with the events and hospitality sectors across Central Otago.
- With the closure of the WasteBusters resource recovery centre in Alexandra, there is a need to review the provision of resource recovery centres in the district, particularly at Alexandra and Cromwell, including a decision on the role of social enterprise in delivering these services.
- There is also an opportunity to work with other Council departments for appropriate waste management solutions for waste from wastewater, roading and facility operation and construction projects.

4. Ensure regulations and collaboration enable Council to achieve its and maintain resilient wate services:

- This includes effective and efficient local bylaws and associated policies that support implementation.
- Participating in regional and national collaboration opportunities for waste infrastructure and future planning e.g. processing solutions, shared staff, disaster planning. When collaborating, ensure there are clear benefits for Central Otago in terms of diversion or resilience improvements.

5. Disposal and contaminated land management:

- Ensure compliance with resource consents, including monitoring of Council’s closed landfills and contaminated land.
- Maintain access to a well-maintained landfill with gas capture technologies.

Each of the opportunities can be aligned with the NZWS goals, as shown in Figure 9 below.

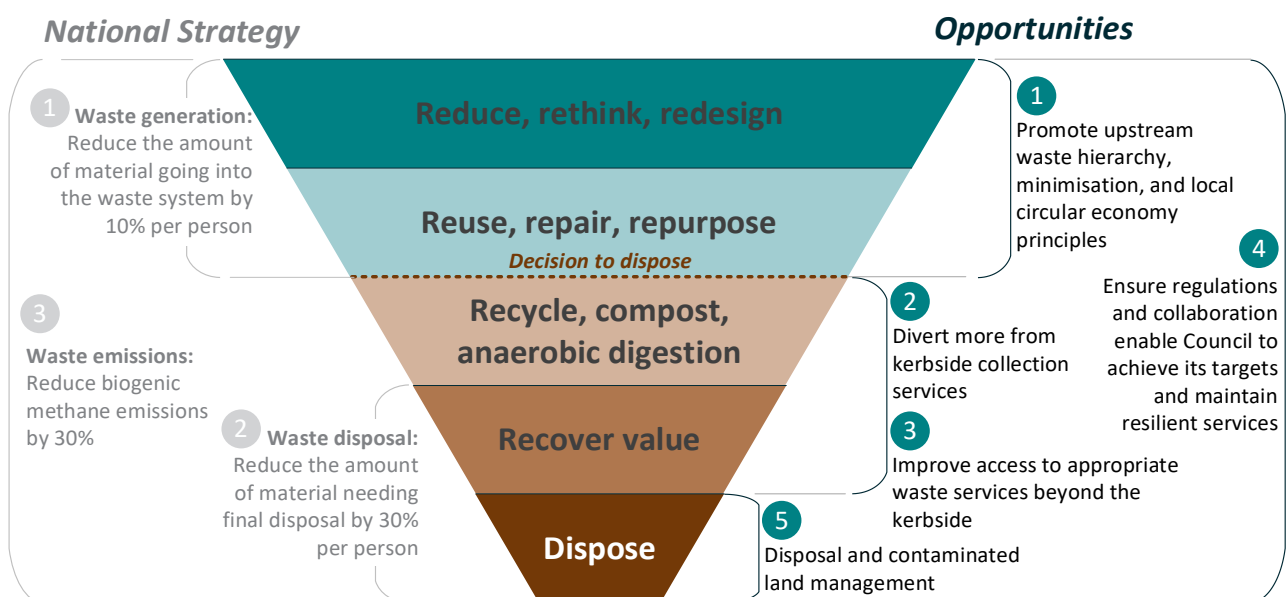


Figure 10 Opportunities aligned to the national waste strategy

Part B – Action Plan: What would we like to achieve?

Action Plan Overview

For each of the opportunities identified in Section 5.2, actions that Council will need to take to address waste management and minimisation over the next six years have been identified. These are outlined in Table 5 below. Where appropriate, these actions have been cross-referenced to the work areas identified in Section 8.2 of the Otago Region Waste Assessment.

Table 4 2024-2030 WMMP Action Plan

(Note EE=education & enforcement, LM=leadership & management, IN=infrastructure, CS=collections & services, MM=monitoring & measurement, R=regulator)

| Actions | | Otago Region Waste Assessment Work Areas | New or Existing | Funding | Implementation timeframe |
|--|--|---|-----------------|-------------------------------|--------------------------|
| 1. Promote upstream waste hierarchy, minimisation and local circular economy principles | | | | | |
| 1.1. | Encourage local circular initiatives by providing a contestable community grant scheme. | Facilitation / Leadership, Funder, Provider (EE1, EE2, EE3, LM3) | New | Levy funding | FY2024/25 onwards |
| 1.2. | Continue to work with neighbouring councils on initiatives to reduce waste and provide regionally consistent infrastructure and services. | Facilitation / Leadership, Funder, Provider (EE2, LM2, LM4, LM5, LM6) | Existing | General rates | Ongoing |
| 1.3 | Support a regional waste coordinator position. | Facilitation / Leadership (EE1, LM4) | New | Levy funding | FY2023/24 onwards |
| 1.4. | Advocate for national regulation and legislation that supports waste reduction and a move up the waste hierarchy, including product stewardship schemes. | Facilitation / Leadership, Provider (IN8, LM1, LM2, LM5, LM7, EE2, R1, MM2) | Existing | Levy funding | Ongoing |
| 1.5. | Continue to provide education and behaviour change programmes to the community that support waste reduction and a move up the waste hierarchy. | Provider (EE1) | Existing | Levy funding General rates | Ongoing |
| 1.6. | Engage with the local hospitality and tourism industry to encourage and support improved diversion in the sector. | Facilitation / Leadership (EE2) | New | Levy funding General rates | FY2023/24 onwards |
| 1.7. | Provide mandatory reporting data for national data collection programmes. | Regulator, Provider (MM2) | New | Levy funding General rates | FY2023/24 onwards |
| 1.8. | Provide data to the community on progress against the WMMP targets. | Regulator, Provider (M1, M2) | Existing | Levy funding General rates | Ongoing |

| Actions | | Otago Region Waste Assessment Work Areas | New or Existing | Funding | Implementation timeframe |
|---|--|---|-----------------|---|---|
| 1.9. | Work with the local building sector to investigate and implement initiatives to increase Construction & Demolition waste diversion. | Strategic, Facilitation / Leadership, Funder, and/or Provider (IN1, LM4, R1, EE2) | New | Levy funding General rates | Assess FY2204/25, implement preferred option 2025/26 |
| 1.10. | Engage with mana whenua via Aukaha on waste minimisation, education, and diversion initiatives. | Facilitation / Leadership, Funder, and/or Provider (LM3, EE3) | Existing | Levy funding General rates | Ongoing |
| 2. Divert more from kerbside collection services | | | | | |
| 2.1. | Continue to provide kerbside recycling, organics and refuse collection services to residents in urban areas. Expand collection areas as new developments are established in the district. | Provider (CS1, CS2, CS4, MM1) | Existing | Targeted rates General rates | Ongoing |
| 2.2 | Review the provision of kerbside services to businesses to ensure fit for purpose collections. | Provider (CS1, CS2, CS4, CS5) | New | Targeted rates User charges | Feasibility assessment from FY2024/25 and implement preferred option by FY2206/27 |
| 2.3. | Continue to provide information to households that receive kerbside collection services to maintain high participation and low contamination rates. | Provider (EE1) | Existing | Targeted rates General rates Levy funding | Ongoing |
| 2.4. | Continue to measure diversion of kerbside materials with regular monitoring by contractor. A full kerbside mixed recycling collection Solid Waste Protocol Analysis (SWAP) will be done at 6 yearly intervals. | Provider (MM1, EE1, EE3) | Existing | General rates Levy funding | Ongoing SWAP to be carried out once during the term of this WMMP |
| 2.5. | Continue to adjust materials collected at kerbside to align with national standards and availability of end markets. | Strategic, Provider (IN6) | Existing | Targeted rates General rates Levy funds | Ongoing |

| Actions | | Otago Region Waste Assessment Work Areas | New or Existing | Funding | Implementation timeframe |
|--|---|---|-----------------|---|-----------------------------------|
| 3. Improve access to appropriate waste services beyond the kerbside | | | | | |
| 3.1. | Continue to operate the drop-off sites and transfer stations. | Provider (IN13) | Existing | User charges General rates | Ongoing |
| 3.2. | Continue to provide public place recycling and litter bins where appropriate. | Provider (CS1) | Existing | General rates | Ongoing |
| 3.3. | Re-introduce a Resource Recovery Centre (RRC) in Alexandra, to expand diversion services available to the community e.g. reusable household items, product stewardship scheme or reuse scheme collection points, repair cafe, venue for waste minimisation education and events. | Facilitate / Leadership, Provider (IN5, IN9, IN16, IN17, LM4) | Existing | General rates Levy funding | FY2024/25 |
| 3.4. | Investigate the establishment of a Resource Recovery Centre (RRC) in Cromwell to expand diversion services available to the community, e.g. reusable household items, product stewardship scheme or reuse scheme collection points, repair cafe, venue for waste minimisation education and events. | Facilitate / Leadership, Provider (IN5, IN9, IN16, IN17, LM4) | New | General rates Levy funding | During the term of this WMMP |
| 3.5. | Continue to collaborate with Queenstown Lakes District Council on the provision of a Materials Recovery Facility for mixed recycling for the two councils | Facilitate / leadership, Provider (IN9, IN12) | Existing | General rates | Ongoing |
| 3.6. | Develop the Central Otago composting facility for use as a sub-regional facility | Provider, Strategic, (IN2, IN13) | New | Levy funding General rates | During the term of this WMMP |
| 3.7. | Upgrade the existing transfer stations to improve signage traffic management and material storage, renew aging assets (e.g. compactors) and introduce other safety improvements. | Service, Influence (IN6) | Existing | General rates Fees and charges Levy funding | Ongoing |
| 3.8. | Undertake a SWAP at the transfer stations to monitor diversion and potential to increase recovery. | Service / Provider (MM1) | New | General rates | Once during the term of this WMMP |

| Actions | | Otago Region Waste Assessment Work Areas | New or Existing | Funding | Implementation timeframe |
|--|--|--|-----------------|---------------------------------|--|
| 3.9. | Complete and commission the glass crushing facility and ensure products meet end market specifications. | Provider (IN15) | Existing | General rates Targeted rates | Ongoing |
| 3.10. | Explore alternatives to landfill disposal for waste from Council's operations e.g. biosolids, road sweepings, excess soil from construction. | Strategic, Provider (MM2) | Existing | Levy funding General rates | Ongoing |
| 4. Ensure regulations and collaboration enable Council to achieve its targets and maintain resilient services | | | | | |
| 4.1. | Review policies and controls that support the Waste Management and Minimisation Bylaw to ensure it remains effective and enforceable e.g. three strikes policy, event waste minimisation plans, construction site waste management plans | Regulate (R1) | Existing | General rates Levy funding | Three Strikes in FY2024/2025 Event waste plans in FY2025/2026 C&D waste plans in FY2026/2027 |
| 4.2. | Work with neighbouring councils to develop a disaster waste management plan. | Facilitation / Leadership (LM6) | New | Levy funding General rates | Agree regional programme in FY2024/2025 |
| 4.3. | Review Council's public place waste and recycling bin policy to ensure the right bins and signage are provided in the right locations. | Regulate / Provider (CS1, R1) | Existing | Levy funding General rates | Ongoing |
| 5. Disposal and contaminated land management | | | | | |
| 5.1. | Ensure compliance with resource consents at Council's solid waste facilities. | Provider (IN4) | Existing | General rates | Ongoing |
| 5.2. | Monitor and assess risks associated with Council's closed landfills and other contaminated sites | Provider (IN4) | Existing | General rates | Ongoing |
| 5.3. | Investigate the availability of appropriate disposal facilities (Class 2-5 landfills) for hardfill, cleanfill and lightly contaminated soils. | Provider (IN1) | Existing | General rates | Ongoing |

| Actions | | Otago Region Waste Assessment Work Areas | New or Existing | Funding | Implementation timeframe |
|---------|---|--|-----------------|-----------------------------------|--------------------------|
| 5.4. | Work with medical and beauty sectors to ensure appropriate disposal of medical waste and sharps. | Facilitation / Leadership, Provider (EE2, MM2, IN8, LM1) | New | General rates | FY2025/2026 onwards |
| 5.5. | Provide facilities at transfer stations for the disposal of domestic quantities of hazardous waste. | Provider (IN1) | Existing | Fees and charges General rates | Ongoing |

6 Forecast future demand

Demand on waste services and facilities is linked to economic activity and population growth. According to StatsNZ population growth in Central Otago was 2.6% for the year ending June 2023. This growth in population is expected to continue over the next 5 to 10 years.

Council’s future waste services and actions this WMMP take this expected growth into account. Figure 1 illustrates Council-controlled waste generation in recent years, with projections of what the solid waste profile may be by 2030. Council-controlled refuse volumes are expected to reduce as a result of the introduction of new kerbside services in July 2023. Similarly, kerbside diversion is expected to increase, particularly as a result of the introduction of organics collection services. Further reductions in disposal are expected through improved processing systems for organics and glass (currently referred to as “landfill (processing)” in the figure below). Together these will help Council towards achieving its strategic targets and contribute to increasing circularity in the region.

In order to achieve Council’s waste generation reduction and diversion targets, refuse collected at the kerbside will need to decrease by 20% and refuse through the transfer stations by 25%, which together represents 1,800 tonnes reduced or diverted to landfill by 2030. Kerbside diversion is required to double by 2030, with 1,600 tonnes expected to be diverted by 2030.

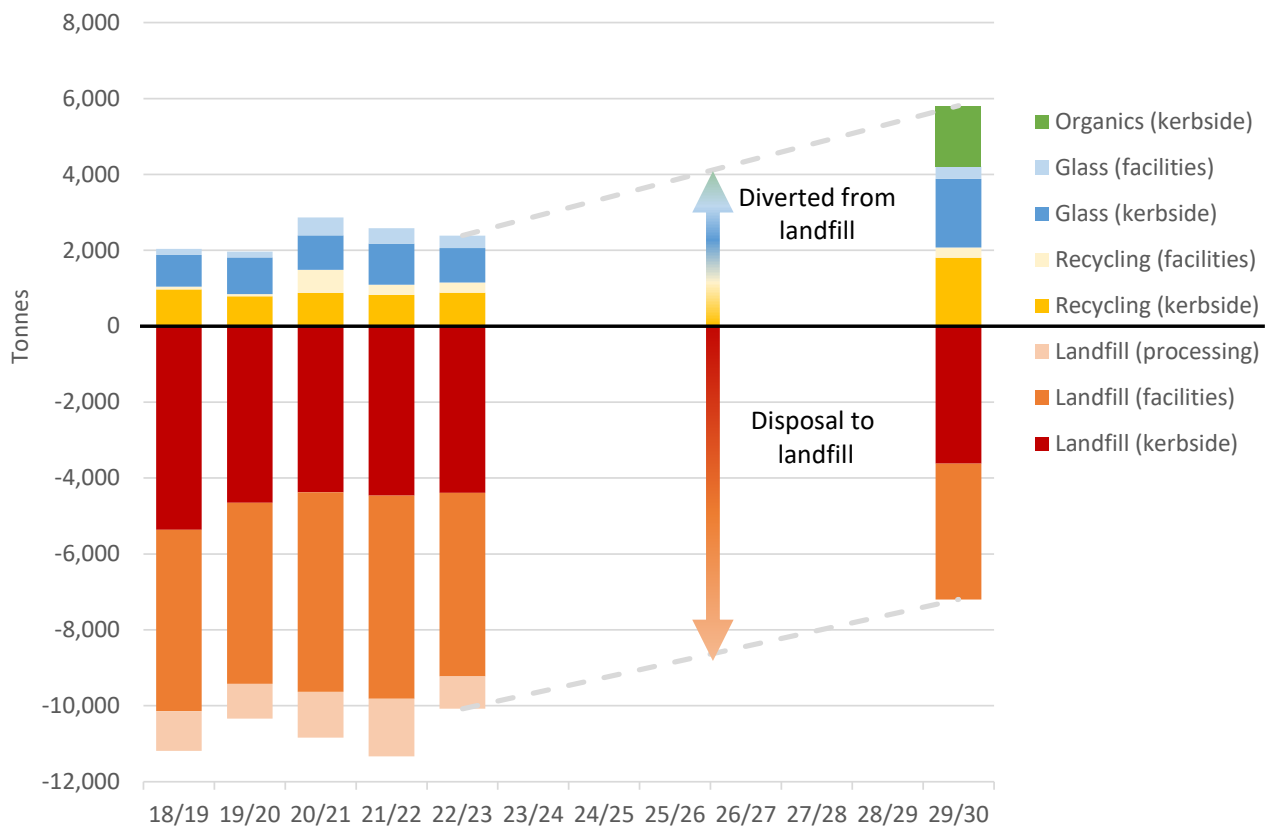


Figure 1 Projected waste generation, disposal to landfill and diversion

7 Funding

7.1 Funding the plan

The action plan will be funded using the suite of tools available to Council in the delivery of solid waste services. The activities will be funded by:

- General rates
- Targeted rates
- Fees and charges (including gate fees and user charges)
- Subsidies and grants, including Council's Waste Levy Funds and other MfE grants
- Debt (if required for capital works)

7.2 Waste minimisation levy funding expenditure

Council will continue to use the Waste Minimisation Levy funding income to fund waste education, investigations, trials, and to fund capital expenditure for diversion facilities.

7.3 Waste Levy grants

Section 47 of the WMA gives councils the ability to make grants to a person, organisation, or group to promote or achieve waste management and minimisation. Under this WMMP the Council will continue to give grants at its discretion and on any terms or condition it deems appropriate provided there is an allocated and approved budget for that activity. Specific grants (e.g. for local circular economy initiatives) will also be explored.

8 Monitoring, evaluating and reporting progress

8.1 Monitoring and evaluation

Council intends to continue to monitor and report on progress regarding the WMMP and will develop and implement a clear, transparent monitoring and reporting system. Accurate information on how services provided by Council are performing is essential for monitoring the effectiveness of the Plan's vision, objectives, goals, and targets, and planning for future demand.

Council's current level of service and performance measures are aligned with the 2021-2031 LTP and are focussed on reducing the residential waste to landfill. Council will review its performance measures as part of the 2024-2034 LTP to align with this WMMP.

Measures that provide a broader picture of the waste situation and how to minimise the amount of waste going to landfill will assist Council in identifying more targeted actions in the future. Data will be gathered through:

- Annual resident and ratepayer surveys
- Contractor reporting
- Solid Waste Analysis Protocol audits (SWAPs)
- Waste Assessments
- Consent compliance systems

8.2 Reporting

The Council will report progress of the implementation and effectiveness of this WMMP through:

- Annual reports
- Quarterly performance reports
- Council's website

The Council will also provide progress reports of expenditure of its Waste Levy Funds to MfE and provide data in accordance with national reporting systems.

Glossary

| Term | Definitions and abbreviations |
|---|---|
| Cleanfill/ cleanfill material | Inert materials disposed of, into or onto land, at a consented cleanfill. Materials typically include construction and demolition waste such as concrete, uncontaminated soil and rock. |
| Commercial waste | Waste from premises used wholly or mainly for the purposes of trade or business, recreation or entertainment, excluding, mines, quarries and agricultural waste. May also include some household waste collected by commercial operators. |
| Diverted material | Anything no longer required for its original purpose and, but for commercial or other waste minimisation activities, would be disposed of or discarded, and includes any materials that are recyclables, compostable, or can be recovered and/or re-used, as determined by the Council by resolution. |
| Hazardous waste | Waste that is potentially harmful to human and/or environmental health. It typically has one or more of the following hazard properties: explosive, flammable, oxidising, corrosive, radioactive, toxic or ecotoxic, or it may react with air or water to have one of these properties. |
| Household waste | Solid waste generated by households. Household waste does not include divertible waste, hazardous waste, commercial waste, prohibited waste, trade waste or liquid waste of any nature. |
| Organic waste | Compostable materials that are organic in origin and appropriate to be used as feedstock for composting and includes greenwaste and food waste. |
| Recycling | The reprocessing of waste or diverted material to produce new materials. |
| Resource Recovery Park (RRP) | A facility where solid waste materials such as residual waste, construction and demolition waste, recyclables, organic wastes, and household hazardous wastes are delivered for sorting or before being taken away for treatment, processing, recycling or disposal, and which may also include a retail outlet for the re- sale of used goods and materials deposited at the site. |
| Reuse shops | Items that are salvaged or diverted from the waste stream undergo little or no modification and are sold at shops run by the community or territorial authorities. |
| Solid Waste Analysis Protocol (SWAP) | A study to determine the composition of waste as described by Ministry for the Environment. |
| Transfer Station (TS) | A facility where solid waste materials such as residual waste, construction and demolition waste, recyclables, organics waste and household hazardous wastes are delivered for consolidation before being taken away for treatment, processing, recycling, or disposal. |
| Waste | 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. |
| Waste levy funds | A levy imposed under the Waste Minimisation Act 2008 on waste, with funds distributed back to local and central government. |
| Waste minimisation | The reduction of waste and the reuse, recycling and recovery of waste and diverted material. |

Part C – Supporting Information

Otago Region Waste Assessment