

# Waste Management and Minimisation Plan 2024





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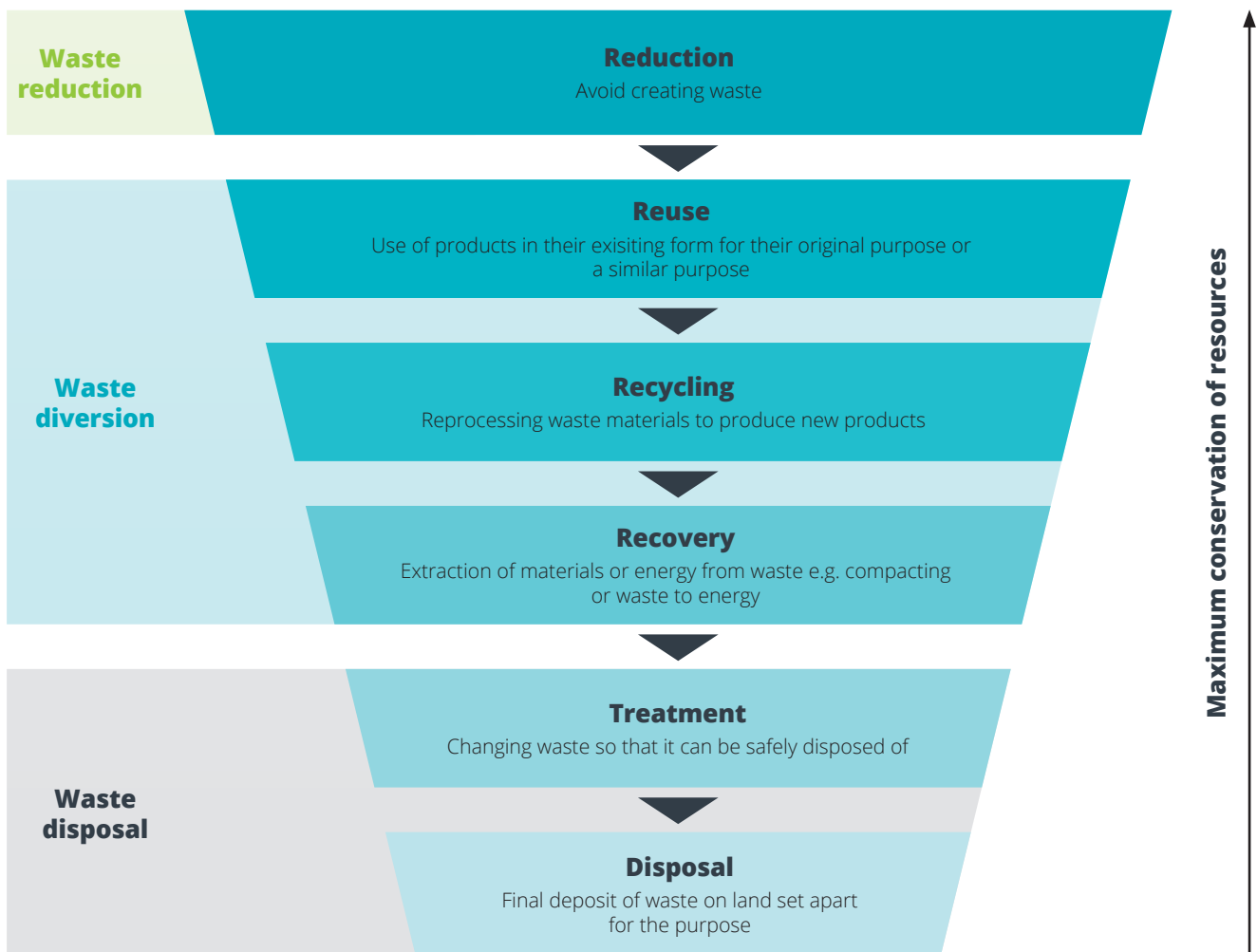
# 1. Introduction

## Purpose of the Plan

The Council has a statutory requirement under the Waste Minimisation Act 2008 (WMA) to promote effective and efficient waste management and minimisation within the Horowhenua District.

The Plan paves the way forward, considering current economic climate, government legislation, affordability, integrated policy frameworks and the Horowhenua district vision, with an overarching suite of guiding goals and objectives.

The Plan uses the Waste Hierarchy (Figure 1). This hierarchy essentially sets our agenda for reducing waste, that landfill is the last resort. By prioritising actions at the top of the hierarchy, we can save resources, reuse them, and stop them from being thrown away.



## Scope of the Plan

This Waste Management and Minimisation Plan (WMMP), the associated Waste Assessment and Activity Management Plan covers all solid waste generated in the Horowhenua..

Our community diverted 3,300 tonnes of material via Council lead initiatives in 2022.

However, the district sent just over 17,200 tonnes of waste to landfill in that same year, not including the 1,500 tonnes of sludge.

Half of the urban waste generated could have been composted. Organic waste volumes make up 52% of the urban waste stream.

Kerbside rubbish accounts for over a third of the district's waste, with construction, demolition, industrial and commercial operators accounting for the rest.

Council provides a user pays rubbish bag collection service. Yet, many households opt instead for a commercially available wheelie bin.

Residents who use 240L commercial rubbish wheelie bins often dispose of a considerable amount of material in landfills, much of which could actually be recycled. By choosing smaller Council rubbish bags or downsizing to smaller wheelie bins, we can actively promote increased recycling rates.

## Status of Plan in 2024

The Plan will be revised and updated following public consultation. It will then be approved by the Council as a roadmap for managing waste in the Horowhenua from 2024 to 2029.

## Plan Review

Once adopted, the Plan will continue to be reviewed no less than every 5 years. The Plan will only be reviewed within this timeframe, or earlier, if a change in circumstances provokes a review of the district's waste management and minimisation framework.

## What is waste and why is it a problem?

Things we do, buy, and consume generate various volumes of waste. Disposing of waste not only costs our community financially, it can also have detrimental effects on the environment and community health. Additionally, when waste is not managed properly, valuable resources such as metals and green waste are lost.

The Plan covers all solid waste and diverted material in our district, whether it is managed by Council or you as an individual or business. It also covers hazardous waste such as chemicals, and the sludge outputs of our wastewater treatment plants.

Together, the Council and community are responsible for prioritising waste reduction and reuse across our district. Through collaborative efforts we can effectively manage and minimise waste, fostering a circular economy and nurturing a healthier environment for all. Introducing incentives could further encourage this collaborative approach.

# 2. Background

## Waste Assessment

Council's recently drafted Waste Assessment 2024 provides an insight into the current waste situation in the Horowhenua based on the tonnages collected and managed via Council's solid waste activity.

The process to prepare the Waste Assessment builds a foundation of understanding that will allow Council to prepare its Waste Management and Minimisation Plan (WMMP), and to consider new or improved initiatives for the solid waste activity to deliver on the environmental, social, economic and cultural benefits encouraged by Section 3 of the Waste Management Act (WMA) 2008.

Local councils are legally required to carry out a Waste Assessment and take it into account when reviewing and preparing their Waste Management and Minimisation Plan (WMMP). The WMA (section 44) also requires that during community consultation, a Waste Assessment be notified with the statement of proposal.

The Council's last WMMP, adopted in 2018, set out a vision to: "deliver community benefits and continued waste reduction, promoting individual responsibility. Horowhenua businesses and households will be provided with efficient and effective waste management and minimisation services."

The goals for waste management and minimisation in the Horowhenua district are to:

1. Avoid and reduce waste where we can.
2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that cannot be recycled.
3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.

The objectives and targets for waste management and minimisation in the Horowhenua are:

1. Make it easy to recycle.
2. Reduce waste where we can.
3. Manage waste responsibly.
4. Maintain community services (i.e. kerbside recycling, transfer stations, kerbside bag collection).
5. Promote the environmentally safe disposal of all waste (including hazardous waste, herbicides, lithium ion batteries, paint etc.).
6. Educate the community on waste minimisation.
7. Promote reuse of waste.
8. Provide the best price disposal of urban waste
9. Provide high impact, low cost delivery of targeted waste diversion initiatives.
10. Council to advocate for our community on a regional and national level.



## Climate Change

Council is in the process of incorporating initiatives into our planning to address climate change concerns, particularly through controls set out in the District Plan. While climate change remains a concern, Council are actively supporting initiatives to ensure community outcomes and the ongoing protection of key infrastructure and important natural resources are met.

Horowhenua District Council is working with neighbouring councils in the Manawatū-Whanganui region through the Climate Action Joint Committee. Supported by the Emissions Reduction Plan (May 2022) with focus directed towards a circular economy, and prevention of organic waste entering landfills. Council's collaboration with other local authorities extends to the Greater Wellington region, through the Wellington Regional Leadership Committee and Growth Framework.

Consideration of climate change and the Council's response to it will be integrated in the WMMP 2024 discussions. Council have provided direction on climate change and plan to draft a Climate Action Plan by July 2024. This will mean that future reviews of the WMMP will need to align with strategic direction and support community outcomes, specifically:

- Partnership with tangata whenua: We will uphold Te Tiriti ō Waitangi and its Principles; and
- Fit for purpose infrastructure: Our community facilities and infrastructure are resilient, helping us to respond to climatic events and natural hazards; and
- Outstanding environment: We protect and maintain the important natural resources in our district.





# 3. The Waste Situation

## 3.1 Infrastructure and Services

### Residential Collection

Northland Waste is the Council's provider of all solid waste and recycling collection services. As part of delivery of these services, Northland Waste provides Council with regular data. It is important to note that Council does not manage all our district's waste, and that waste managed by private waste collectors is not reflected in Northland Waste provided tonnage reports. To gauge the total waste produced in Horowhenua, we rely on estimates based on population and types of waste generated, providing a general overview of landfill-bound waste for our district.

Northland Waste collects refuse bags throughout our district on behalf of Council, and also oversee kerbside commingle and glass collections. Northland Waste collects Council rubbish bags and services their own kerbside rubbish wheelie bins with the same collection vehicle.

Kerbside collection of refuse rubbish in bags and recycling in wheelie bins and crates is available in all urban and some rural areas of Horowhenua

Within our district all urban residents have access to a kerbside service. Residents and public may take household refuse rubbish and recycling to district transfer stations and community mobile recycling stations.

Collection frequency is weekly for rubbish bags and fortnightly for kerbside recycling. Garden waste collections are available on a limited commercial basis.

Operating safely is an important consideration for the collection of refuse and recycling. Key risks include operating in a live traffic environment (there is an increased risk on roads with speeds above 50km/h), manual handling of refuse rubbish bags, wheelie bins and recycling crates; and dangerous items in refuse and recycling, such as broken glass, needles, putrescible materials.

### Recycling & Waste Diversion

Council has several waste diversion initiatives in place:

- Kerbside recycling: Glass bottles and commingled recyclables
- Three Waste Transfer Stations: Foxton, Shannon (Both Council-owned) and Levin (Owned and operated independently by Midwest)
- Six Community Mobile Recycling Stations (MRSs): Foxton Beach, Tokomaru, Opiki, Waitāreere Beach, Waikawa Beach, Shannon



## Litter and Illegal Dumping

Litter bins are provided in urban centres, parks and popular visitor spots throughout our district.

Litter bin collection is undertaken by Green by Nature with a scope that includes:

- Emptying litter bins and
- Cleaning up after illegal dumping (fly tipping)

Illegal dumping occurs district-wide and often adjacent to transfer stations when they are closed. In 2022/23 approximately \$100k was spent on collecting and disposing of fly tipping. While attempts are made to manage this illegal activity, Council is currently investigating a formalised approach to managing this behaviour and minimising the impacts on the environment and associated clean-up and disposal costs.

### 3.1.1 Waste Transfer, Processing and Disposal

#### Transfer Stations and Recycling Drop-off

Transfer stations, where waste is dropped off by the public, are located in Levin, Foxton and Shannon (Shannon and Foxton are owned by Council and managed under contract by Northland Waste). Mobile Recycling Stations (MRSs) are provided year-round at Foxton, Shannon, Opiki, Tokomaru and Waitāreke Beach with seasonal sites at Foxton Beach and Waikawa Beach.

- Collection services commonly reduce or avoid safety risks by using these methods: Mechanical lifting e.g. wheelie bins, often with remote lifting arms for refuse and recycling containers.
- Specialised collection vehicles with left hand drive, standing driving position, low entry, rear loading and side loading.

The Horowhenua agreement for 'Provision of Refuse Collection Related Services Collection' contract addresses most, if not all safety risks associated with these services.

The kerbside recycling collection involves manual colour sorting of glass bottles from recycling crates into the collection vehicle. The glass recovered from the kerbside crates is taken directly to the Palmerston North City Council Material Recycling Facility (MRF) located at Awapuni. These glass bottles and jars are then bulk transported to Visy in Auckland to be made back into bottles. The commingle recycling wheelie bin collection is collected by the same vehicle as glass collection, with the bins emptied by way of a side operated lifting mechanism that raises the bin and then tips its contents into the vehicle hopper.

The contents of which are transported directly to the MRF located at Awapuni for sorting into different product lines and then baled for market.

#### Commercial or Industrial Waste

Waste, including both refuse rubbish and recycling, generated by commercial and industrial properties in our district is collected and transported off-site primarily through the Levin Transfer Station, which is owned by Midwest Disposals Ltd. While some materials are identified for potential reuse, the majority are sent directly to the Bonny Glen Landfill. Additionally, recyclable items such as scrap metals, paper, and cardboard are collected separately, with Oji Fibre Solutions handling this process. Some local businesses, like Progressive Enterprises (Woolworths), Foodstuffs (New World, Pak'nSave), and The Warehouse Group, have established comprehensive waste management and recycling systems. These systems recover and recycle materials like paper, cardboard, and organic waste (such as food waste), diverting them from disposal at local transfer stations, with only residual waste being disposed of there. The bottle glass collected at the transfer and mobile recycling stations is taken to Palmerston North's Awapuni Resource Recovery Park and transported to Auckland for recycling. Garden waste collected at the transfer stations is shredded and mulched to make soil conditioner by a local composting company.

The Council operated transfer stations are in a reasonable condition and have adequate space for the quantity of material they are required to manage. Both sites are configured with a raised off-loading area with waste deposited directly into the flat floor pit at Foxton, and dropped directly into hook bins at Shannon. The mobile recycling stations (MRSs) vary in age and condition, depending on how long they have been in use. Only one of these stations is owned by the Council, while the rest belong to the contractor.

The Levin Transfer Station accepts well over 20,000 tonnes of material each year and is configured with a steeply constructed ramp to allow users to load materials directly into hook bins for transport to Bonny Glen Landfill.

The Horowhenua district waste management system, and estimated quantities for 2022 are presented in Figure 2. Facility details are provided on the following pages. Figure 2 is an infographic of the district waste collection methods and infrastructure.

## DISTRICT WASTE MAP

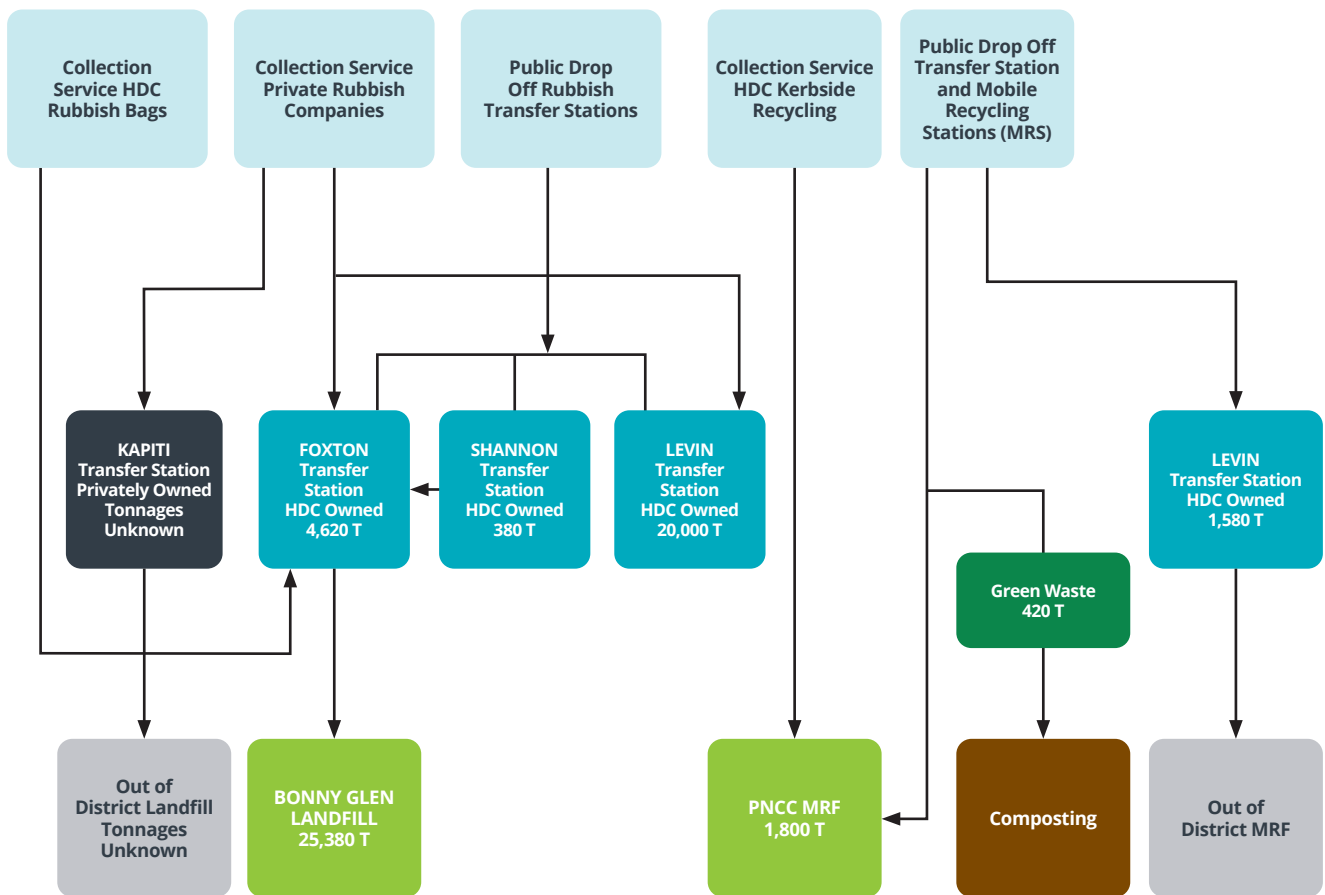


Figure 2: Waste flow diagram - collection, processing and disposal (2023 figures).

### Materials Processing

More garden waste could be received if the gate fees where set at an optimal rate and encouragement/ education was in place to make sure transfer station users separated their waste types before entering the transfer station. Garden waste from Foxtton Transfer Station is shredded and carted to a nearby compost facility. The resulting mulch is used as a soil conditioner.

### Energy

Mitchpine Products Limited, located north of Levin, have a wood waste-fired boiler supplying a portion of the heat requirements for their site. Opportunities may be available for more carbon rich wastes to be used for power generation. The flare at the closed Levin Landfill is also a potential source of untapped energy with some 750,000 Mega Joules of methane flared each day. The potential is there to provide 400kW of electrical power equivalent to powering 200 houses. An energy company may show interest in developing the full potential of the available gas.

### Landfills

The Levin Landfill (closed) is located 8km west of Levin on Hōkio Beach Road. The original landfill opened in the 1950s, with two sites within the boundary used for disposal. In 1990s the Council built a Class I category New Landfill. This landfill, unlike its predecessors, is fully protected with a 2mm thick high-density polyethylene (HDPE) liner. This liner prevents any liquid contaminates from leaching into the adjacent environment. All leachate generated by the anaerobic decomposition of waste is collected and piped to the Levin Wastewater Treatment Plant (WTP). The methane gas is also collected and flared resulting in the destruction of the methane to inert CO<sub>2</sub> and H<sub>2</sub>O compounds.

When the New Landfill was in operation, the waste was covered daily to prevent it becoming airborne and odour was managed mostly by the installation of a flare that burnt the methane and hydrogen sulphide gases.

Due to ongoing concerns raised by local neighbours and Iwi, the Council decided to close the landfill. The Council passed the motion to close the New Levin Landfill which includes the New Landfill on 31 May 2023.

Currently, all district waste is transported to Bonny Glen Landfill, a Class I Landfill situated 6 kilometres west of Marton.

Council as part of the Long Term Plan (LTP) process are consulting on how our district will fund the ongoing maintenance of all closed landfills and the resulting funding shortfall for district recycling. This includes working with our Iwi partners, Neighbourhood Liaison Group (NLG) and Project Management Group (PMG) in the development of the Closed Landfill Management Plan and changing the discharge consent conditions with the environmental regulator, Horizons Regional Council.

There are other closed landfills in our district located in Foxton, Foxton Beach, and Shannon. These landfills are inspected and monitored each year to ensure they are maintained and within the consent conditions.

### **Markets for Recyclable Materials**

Paper, plastics (1, 2 and 5) and cans are consolidated and processed in New Zealand. The paper is reprocessed into cardboard boxes, paper towels and tissues. The glass is recycled back into glass bottles.

A container deposit scheme (CDS), like those in place in some states in Australia, is likely to be rolled out for New Zealand. A typical scheme would target beverage containers with a small refund payable on their return to an approved reception point. The introduction of this type of scheme is likely to have an impact on recyclable material markets with recovery rates rising (increasing supply of plastic bottle feed stock). Presently, there is only a market for clear plastic bottles. A CDS has the benefit of reducing the littering of discarded containers, particularly through people returning the used bottles for a cash payment.

Commercially sourced recyclables are handled mainly through Northland Waste, Waste Management NZ and Oji Fibre Solutions. Major retailers, such as supermarkets, collect their own recyclable materials and transport them out of our district for further consolidation and re-processing.

### **Processing Organics**

Paranui Organics, located north of Foxton, use wood waste and poultry manure to produce compost for sale to the public and garden centres around the lower central North Island. Garden waste from the Foxton Transfer Station is shredded and carted to this compost facility. The resulting mulch is used as a soil conditioner.



### 3.1.2 Cost for Waste Management

#### Council Funding

The Council Long Term Plan 2024-44 will set the budget for the waste management activity with provision to make amendments if required, through the Annual Plan process. Funding for operations is through targeted rates and user charges. Funding for capital projects is from the general rate. Funding for some waste minimisation expenditure is via the Ministry for the Environment (MfE) Waste Levy account. Note: Levy funding is not sourced from rates. Expenditure is dominated by payments to contractors and waste disposal to the Bonny Glen Landfill. Council's internal charges also feature in the costs for the solid waste activity. This mix of funding and expenditure is projected in the Long Term Plan 2024-2044 and beyond.

Refuse collection and transfer station services attract user charges. These charges have previously been used to reduce the overall costs of providing this community service. The Council must rely upon the

general rate to fund most of the transfer station costs (contractor management). The user charges for kerbside refuse collection (via Council rubbish bag sales) and transfer station operations, like most Council community focused activities do not cover the full costs of providing the service and are funded in part by the public rate.

This approach is consistent with the principles set out in the 2018 WMMP whereby Council costs for waste management services are, where possible, covered by the users of that service.

The kerbside recycling services are scheduled to be funded via a targeted general rate. Presently it is funded by a loan funding mechanism due to the revenue loss associated by the closure of the Levin New Landfill.

There is a differential rate applied to rural zones that does not cover kerbside recycling collections. The rural recycling service model is currently being reviewed as part of the Long Term Plan 2024-44 planning process.

#### User Charges

Proposed rates for kerbside collection include (2023-24 figures).

Council refuse bag (60L): \$6.00 per bag<sup>1</sup>.

Commercial wheelie bin services<sup>2</sup>:

LITRES	WEEKLY FOR A FULL YEAR	FORTNIGHTLY FOR A FULL YEAR
80l	\$252	\$163
120l	\$325	\$185
240l	\$470	\$252

Table 1. Commercial wheelie bin service prices.

AREA	REFUSE COLLECTION	BAG CHARGES
Horowhenua	Council - bags	\$6.00/bag
Palmerston North	Council - bags	\$2.90/bag
Manawatū District	Council - bags	\$2.50/bag
Hastings	Council - bags	\$2.40/bag
Porirua, Wellington,		
Lower Hutt	Council - bags	\$4.00/bag
Whangārei	Council - bags	\$4.00/bag
Far North	Commercial - bag	\$3.00/bag
Kaipara	Council - bags	\$4.10/bag

Table 2: Refuse bag retail costs.

1 Including \$6.00 per bag contribution to kerbside recycling service.

2 Based on a review of prices published on service provider's websites, recycling contributions not stated.

Kerbside rubbish collection and transfer station services attract user charges. The user charges at the transfer stations do not cover the full cost of providing the service, with the shortfall covered from the targeted rate for solid waste activity. The user charges for kerbside rubbish collection (via Council rubbish bag sales) only cover part of the costs of the collection service. Efficiencies and possible cost savings for both services will be reviewed via Council's upcoming Section 17A review.



## Horowhenua Rubbish and recycling - fees and charges

AREA	LEVIN CHARGE	COUNCIL CHARGE
Disposal of official HDC Rubbish Bag	\$6.50	Free (up to 4)
Disposal of Private Plastic Bags	\$6.50 (up to 60L)	\$6 (<10kgs)
Cars – General	\$43	\$40
Cars - Green	\$17	\$13.50
Car boot - General	\$26.50	\$27
Car boot - Green	\$17	\$10.50
Vans/Ute/Utility - General	\$65	\$62 min charge
Vans/Ute/Utility - Green	\$28	\$21
Trailers - General (up to 2m3) up to 2.4m long x 1.2 wide (Foxton)	\$87	\$281/Tonne
Trailers - General (up to 2m3) up to 2.4m long x 1.2 wide (Shannon)	N/A	\$65/m3
Trailers - Green (up to 2m3) up to 2.4m long x 1.2 wide	\$35	\$24/m3
Large Trailers - General (per m3) up to 4m long x 1.2 wide (minimum \$45)	\$290/Tonne	\$281.00/Tonne (Foxton) \$100.00 or \$50.00 per m <sup>3</sup> (Shannon)
Large Trailers - Green (per m3) up to 4m long x 1.2 wide (minimum \$20)	\$140/Tonne	\$33/Tonne
Heavy Trucks >5 Tonne	\$290/Tonne	\$281.00 per tonne (Foxton) \$50.00 per m3 (Shannon)
Domestic Users - Concrete Load - up to Large Trailers (up to 4.0m long x 1.2m wide)	\$150	\$33.00 per tonne (minimum charge \$20.00)
Car Bodies (Foxton only)	N/A	Free
Paint Exchange	Free	Free
Waste Oil	\$1.5/Litre	\$2.50/Litre
Tyres (per tyre)	\$8	\$9
Truck/Tractor Tyres (per tyre)	\$35	\$21
Fridge/Freezer (per item)	\$40	\$32.60
General Whiteware (per item)	\$20	\$21
LPG Bottles/Tanks (per item)	\$13	\$6.30

Table 3: Horowhenua Rubbish and recycling - fees and charges 2023/24

### 3.2 Volume and Composition of Waste Diverted Materials

#### Waste Composition

Waste composition audits provide information about the make-up of a waste stream and can help identify materials that make up large or disproportionate parts of the waste stream to target when forming waste management and minimisation strategies. For this Waste Assessment, data specific to the Horowhenua via Solid Waste Analysis Protocol (SWAP) has been used. This provides a reasonable indication of the waste composition across our district.

Data is presented in Table 4 and Figure 3.

Organics (garden waste and food scraps) comprise 52% of waste collected from households. Food scraps make up 32% of the whole waste composition. If this waste could economically be diverted, then that would be a significant diversion. However, it is important to note that such collections typically only achieve a 30% presentation rate. This means less than one-third of the 32% of food scraps would be set out at kerbside for composting. Implementing some form of incentive would be recommended to increase participation levels.

#### HOROWHENUA DISTRICT COMBINED RESIDENTIAL KERBSIDE WASTE DATA

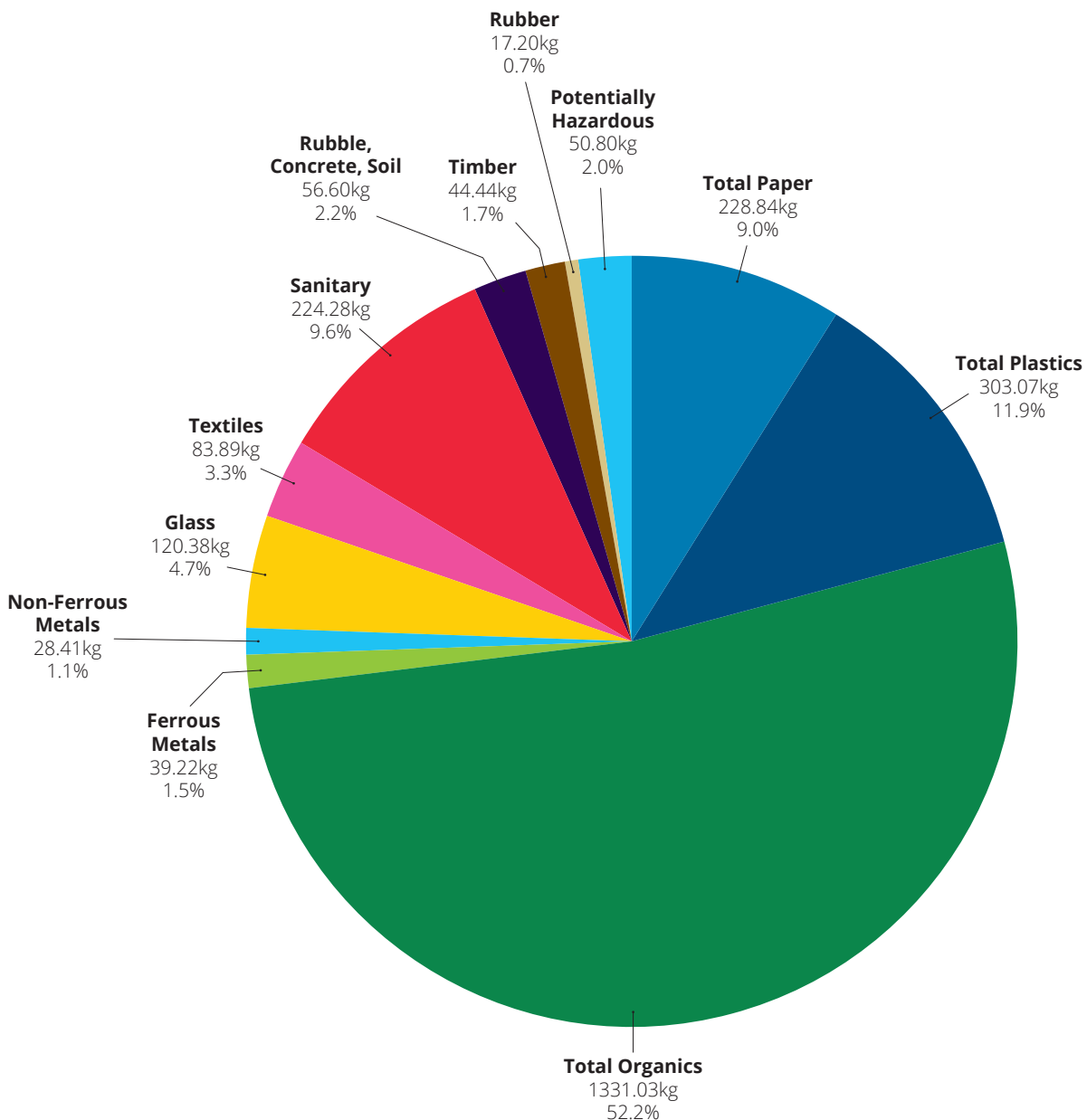


Figure 3. Waste Composition Combined



Below is the combined data set table – All types of kerbside urban rubbish receptacles combined.

<b>WASTE CATEGORY - COMBINED DATA SET</b>	<b>COMBINED WEIGHT OF SAMPLES</b>	<b>COMBINED PROPORTION OF TOTAL</b>
Paper (Recyclable)	80.67	3.2%
Paper (Non-recyclable)	86.57	3.4%
Paper (Cardboard)	61.70	2.4%
<b>Total Paper</b>	<b>228.84</b>	<b>9.0%</b>
Plastics (1,2,5)	74.71	2.9%
Plastics (3,4,6,7, Other)	81.06	3.2%
Plastics (Soft Packaging)	147.30	5.8%
<b>Total Plastics</b>	<b>303.07</b>	<b>11.9%</b>
Organics (Food)	819.68	32.2%
Organics (Green)	329.42	12.9%
Organics (Other)	181.94	7.1%
<b>Total Organics</b>	<b>1331.03</b>	<b>52.2%</b>
Ferrous Metals (Steel, Other)	39.22	1.5%
Non-Ferrous Metals (Aluminium, Other)	28.41	1.5%
Glass	120.38	1.1%
Textiles	83.89	3.3%
Sanitary	244.28	9.6%
Rubble, Concrete, Soil	56.60	2.2%
Timber	44.44	1.7%
Rubber	17.20	0.7%
Potentially Hazardous	50.80	2.0%
<b>Total All Waste Categories</b>	<b>2548.16</b>	<b>100%</b>

Table 4. All types of kerbside urban rubbish receptacles combined.

240 litre wheelie bins waste audit - 2022.

<b>WASTE CATEGORY - 240 LITRE BINS</b>	<b>PROPORTION</b>	<b>MEAN WEIGHT</b>
Paper (Recyclable)	2.7%	0.48
Paper (Non-recyclable)	2.4%	0.42 kg
Paper (Cardboard)	2.3%	0.41 kg
<b>Total Paper</b>	<b>7.5%</b>	<b>1.31 kg</b>
Plastics (1,2,5)	3.1%	0.54 kg
Plastics (3,4,6,7, Other)	2.9%	0.51 kg
Plastics (Soft Packaging)	3.8%	0.66 kg
<b>Total Plastics</b>	<b>9.38%</b>	<b>1.71 kg</b>
Organics (Food)	23.0%	4.03 kg
Organics (Green)	21.4%	3.74 kg
Organics (Other)	7.8%	1.37 kg
<b>Total Organics</b>	<b>52.2%</b>	<b>9.14 kg</b>

<b>WASTE CATEGORY - 240 LITRE BINS</b>	<b>PROPORTION</b>	<b>MEAN WEIGHT</b>
Ferrous Metals (Steel, Other)	1.6%	0.28 kg
Non-Ferrous Metals (Aluminium, Other)	1.1%	0.19 kg
Glass	6.4%	1.13 kg
Textiles	2.7%	0.48 kg
Sanitary	7.7%	1.35 kg
Rubble, Concrete, Soil	5.4%	0.94 kg
Timber	2.7%	0.48 kg
Rubber	0.9%	0.15 kg
Potentially Hazardous	2.1%	0.37 kg
<b>Total All Waste Categories</b>	<b>100.0%</b>	<b>17.52 kg</b>

Table 5. Waste Composition 240L Wheelie Bins

### 60L rubbish bags audit of waste materials - 2022

<b>WASTE CATEGORY - 60 LITRE RUBBISH BAG</b>	<b>PROPORTION</b>	<b>MEAN WEIGHT/SET OUT</b>
Paper (Recyclable)	3.1%	0.19 kg
Paper (Non-recyclable)	4.8%	0.30 kg
Paper (Cardboard)	2.0%	0.13 kg
<b>Total Paper</b>	<b>9.9%</b>	<b>0.62 kg</b>
Plastics (1,2,5)	2.8%	0.18 kg
Plastics (3,4,6,7, Other)	3.4%	0.22 kg
Plastics (Soft Packaging)	9.5%	0.59 kg
<b>Total Plastics</b>	<b>15.7%</b>	<b>0.99 kg</b>
Organics (Food)	42.6%	2.67 kg
Organics (Green)	3.4%	0.22 kg
Organics (Other)	4.8%	0.30 kg
<b>Total Organics</b>	<b>50.8%</b>	<b>3.19 kg</b>
Ferrous Metals (Steel, Other)	1.0%	0.06 kg
Non-Ferrous Metals (Aluminium, Other)	0.9%	0.05 kg
Glass	2.4%	0.15 kg
Textiles	4.1%	0.26 kg
Sanitary	12.0%	0.75 kg
Rubble, Concrete, Soil	0.9%	0.06 kg
Timber	0.1%	0.00 kg
Rubber	0.3%	0.02 kg
Potentially Hazardous	2.0%	0.12 kg
<b>Total All Waste Categories</b>	<b>100.0%</b>	<b>6.27 kg</b>

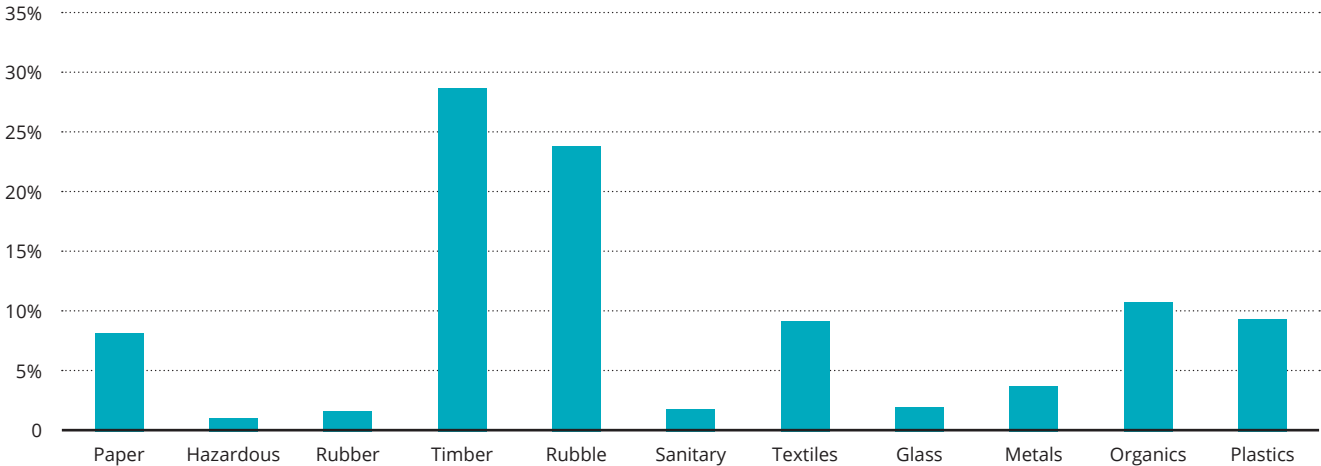
Table 6. Waste Composition Bags

### 3.2.1 Transfer Station Waste Composition

Waste taken directly to landfill or transfer stations tend to have a larger proportion of bulky items from construction and demolition waste. An investigation of this waste stream may provide a way in which builders and construction companies can move towards diverting this waste from landfill.

The putrescible waste fraction has a higher proportion of garden waste rather than kitchen waste. Greater levels of composting would be achievable if the gate charges at the transfer station are appropriate and therefore move encourage more residents to drop off their organic waste.

#### TYPICAL TRANSFER STATION WASTE



Figures 4: Refuse Composition - landfilled.

### 3.2.2 Kerbside and Transfer Station Waste Quantities

#### Kerbside Waste Quantities

Kerbside rubbish is collected in compactor trucks and transported to transfer stations (both district and out of district) or direct to landfill for disposal. Households can use Council rubbish bags (sold at retail outlets and some Council facilities) or use one of several commercial collection services. Council also offers a kerbside recycling wheelie bin and glass crate collection. Figure 5 provides a summary of materials collected from the kerbside in the Horowhenua.. The total amount of rubbish collected kerbside has been estimated using Council's total rubbish/refuse bag sales per annum, with an average bag weight surveyed (2023) at 5.59kg. This equates to approximately 27 tonnes of kerbside rubbish collected per month.

#### KERBSIDE RUBBISH COLLECTION 2022

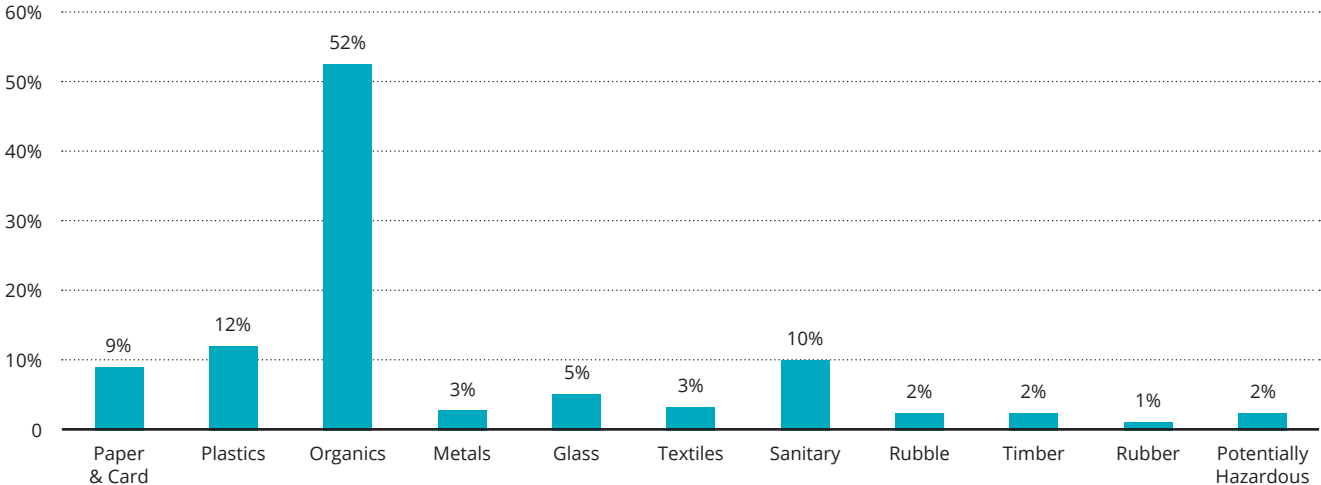


Figure 5. Kerbside Rubbish Collection 2022

<b>HDC CONTROLLED WASTE</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>HDC Kerbside Bag Rubbish Collection</b>	378	373	390	328
<b>HDC Recycle Collection</b>	1,908	1,808	1,673	1,766
<b>Total HDC Kerbside Waste</b>	2,286	2,181	2,063	2,094

Table 7. Horowhenua District Kerbside Waste Quantities<sup>3</sup>

### TOTAL KERBSIDE RECYCLING HOROWHENUA

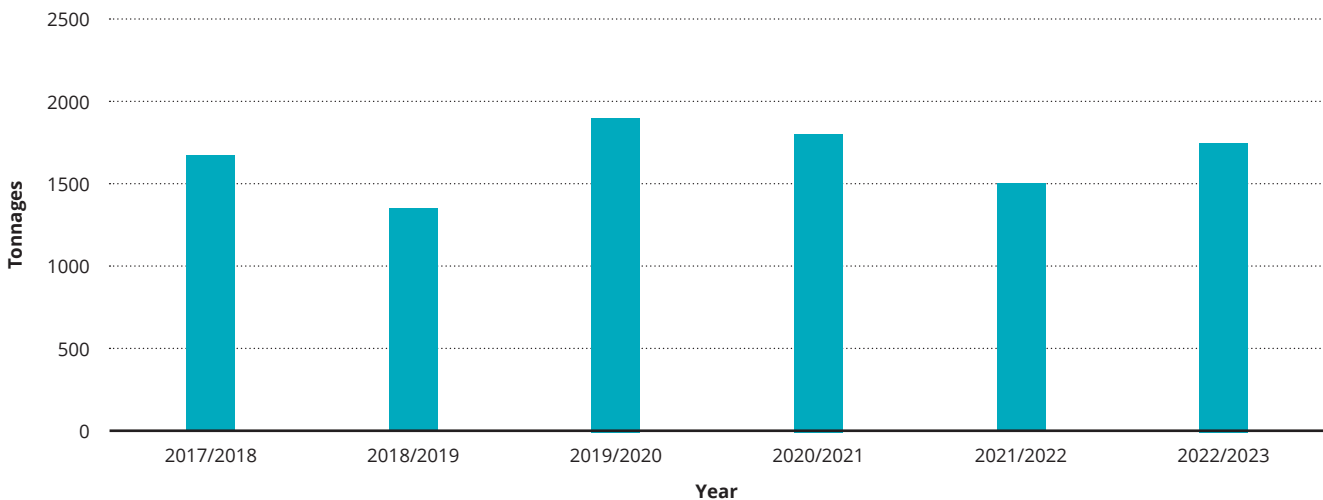


Figure 6. Horowhenua Kerbside Recycling Quantities

### Waste Quantities at Refuse Transfer Stations and Landfill

Refuse and recyclable materials from the Horowhenua district are either transported directly to Bonny Glen Landfill or taken to one of three transfer stations noted in Section 3.1.1.

Figure 7 summarises the quantity of materials managed through the Horowhenua district transfer stations and landfills.

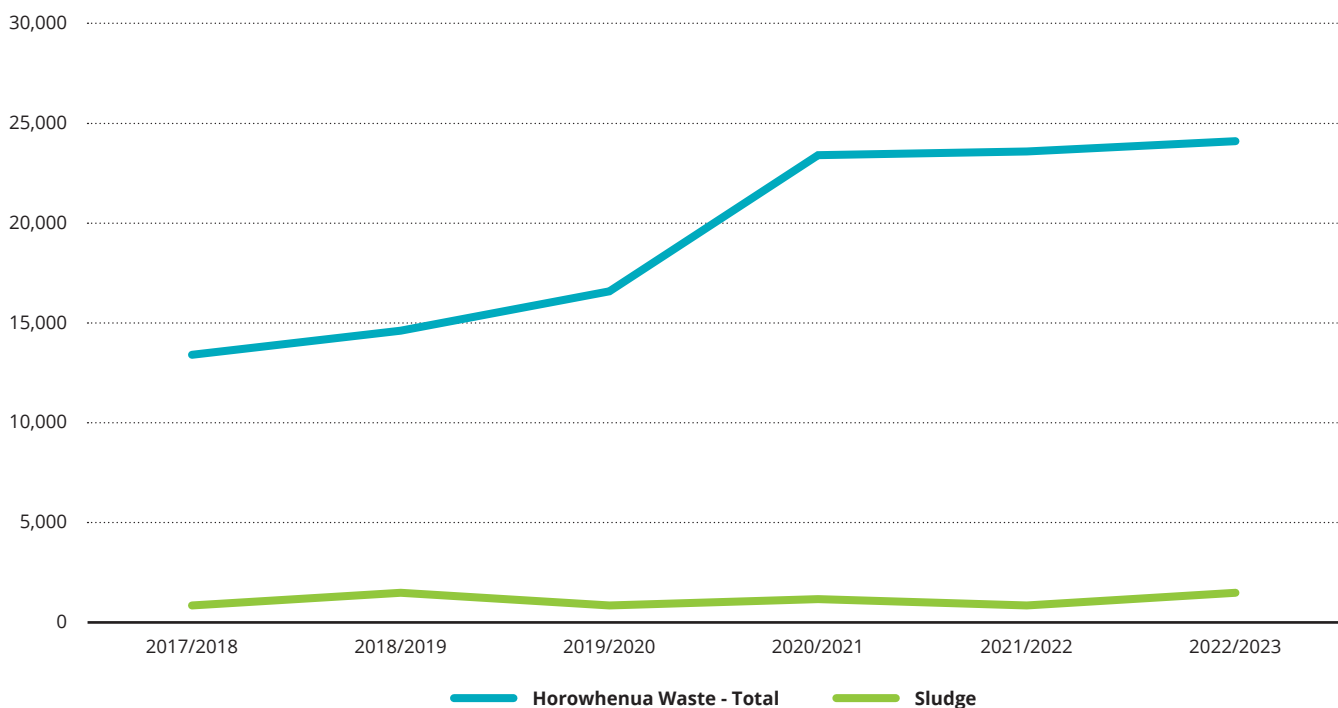


Figure 7. Horowhenua Total Tonnes to Landfill

<sup>3</sup> Data sourced from waste collection and transfer station contract reporting and weighbridge records at Levin Transfer Station.

## YEARLY TONNAGES TO BONNY GLEN (2022/2023)

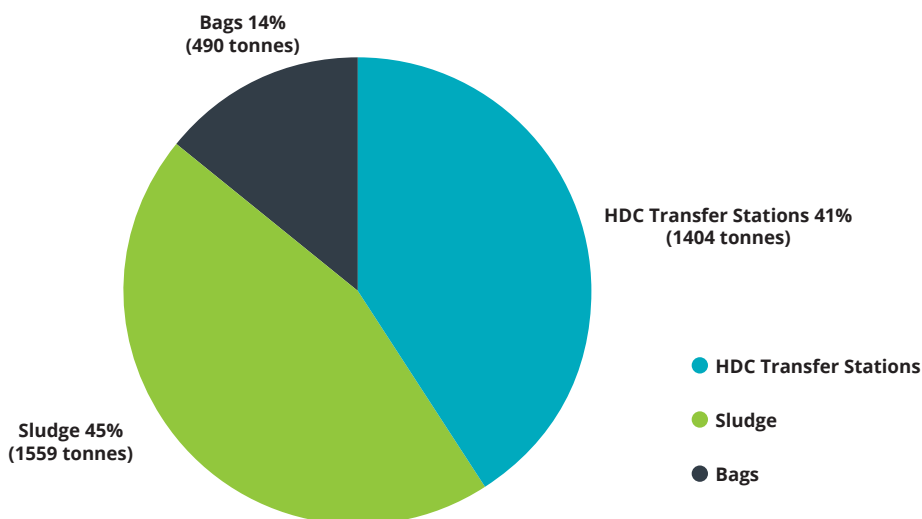


Figure 8. Yearly Tonnages to Bonny Glen Landfill (2022/2023).

<b>HOROWHENUA DISTRICT ESTIMATED WASTE QUANTITIES VIA TRANSFER STATIONS OR DIRECT TO LANDFILL (TONNES)</b>	<b>2019/20</b>	<b>2020/21</b>	<b>2021/22</b>	<b>2022/23</b>
<b>Refuse to Foxton and Shannon transfer stations</b>	1,630	1,950	2,150	5,320
<b>Refuse to Levin transfer station and to landfill</b>	14,980	21,030	16,880	18,350
<b>Recycle at transfer stations</b>	845	1,075	780	2,380
<b>Total waste to landfill (excluding household collections)</b>	17,455	24,055	19,810	26,050

Table 8. Horowhenua District - estimated waste quantities via transfer stations or direct to landfill<sup>4</sup>

### 3.2.3 Unquantified Waste

There are several waste streams that exist but are difficult to quantify. Examples include rural waste managed on farms, waste transported to adjacent districts, materials captured as part of commercial activity (e.g. scrap metal, industrial by-products, commercial recycling) and waste materials managed within manufacturing operations (e.g. bio-solids from food processing operations applied to land, wood processing residues). This means that both waste disposed to landfill, and waste diverted/recovered are likely to be underestimated.

There is an increasing level of interest in rural waste across New Zealand. As the rural sector considers the implications of current waste management approaches, it is likely that increasing quantities of materials from farming activities will enter the Council via transfer stations or into commercial waste management systems.

The infographic on page 20 shows how challenging it is for the Council to accurately determine the total waste generated in the Horowhenua and then calculate the amount of waste produced per person. Not all waste collected in our district ends up at the local transfer stations. A considerable portion is sent to adjacent transfer stations or, in some instances, directly to other landfills, not Bonny Glen. Licensing waste collectors is considered a potential solution to this challenge. However, this approach assumes that contractors have the necessary weighing and measuring systems in place to accurately weigh individual loads within specific districts. Waste companies may be hesitant to share commercially sensitive data with the Council. Building a trusting relationship with collectors will be essential to facilitate data sharing, bearing in mind that the Council competes in, and regulates, the waste management sector.

<sup>4</sup> Data sourced from waste collection and transfer station contract reporting.

## WASTE COLLECTION VIA 4 DISTRICTS

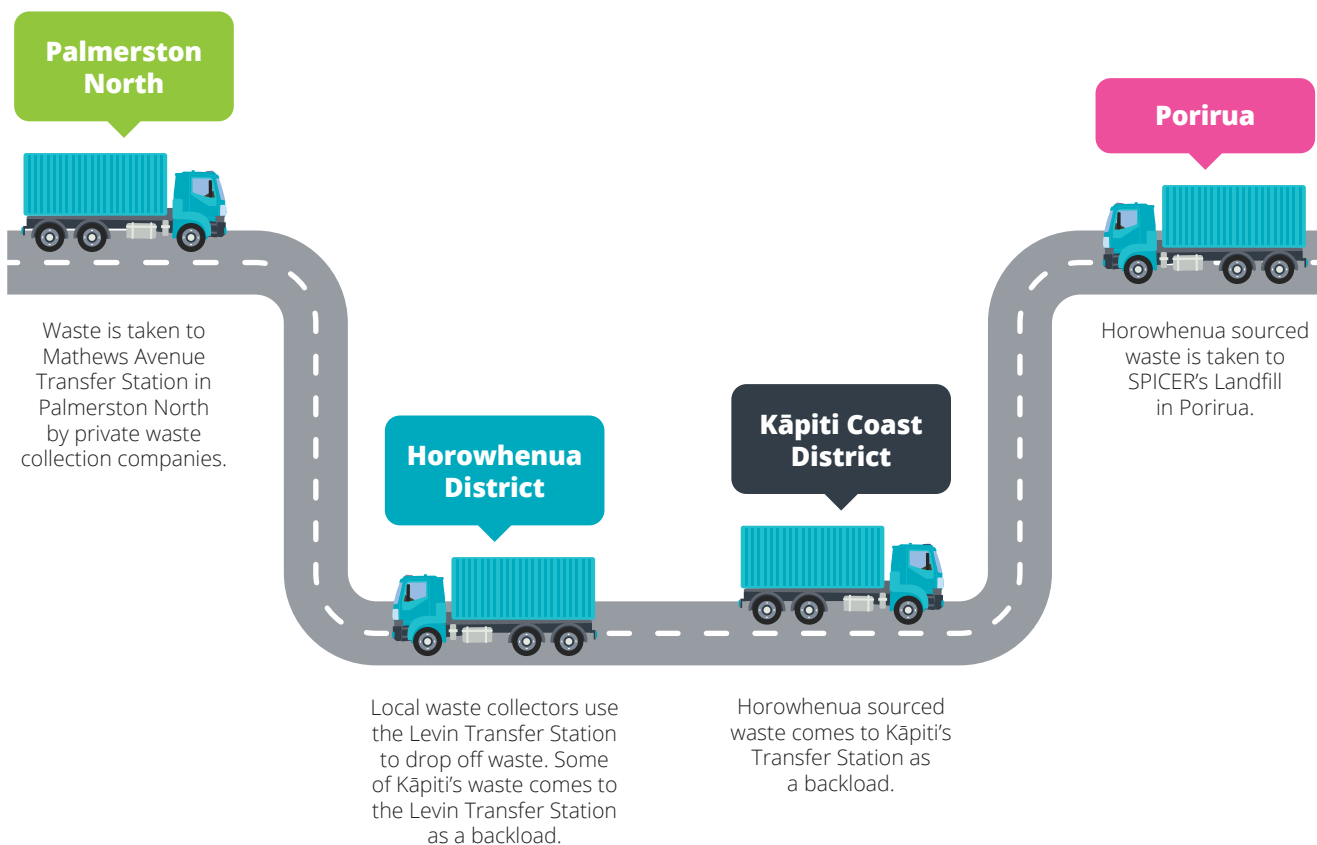


Figure 9. Waste Collection via 4 Districts

## Kerbside Recycling Collection Composition of Recyclables

Some 32% of the population are of the belief that Council collected recycling is sent to landfill. This view affects peoples support of the waste diversion initiatives. Below is a breakdown, by product category, of the amount of diverted recyclable material that is collected, separated, baled and transported to reuse markets. Summary assessment of percentages of recyclables by composition is presented in Table 9.

HDC KERBSIDE RECYCLING	COMPOSITION	TONNES/YEAR
Paper/card	50%	884
Plastics 1	4%	69
Plastics 2	2%	35
Plastics 5	2%	34
Ferrous	4%	63
Non-Ferrous	2%	27
Glass bottles	21%	376
Residual	16%	278
<b>Total</b>	<b>100%</b>	<b>1766</b>

Table 9. Horowhenua waste by Composition

## RECYCLING AT PNCC MRF

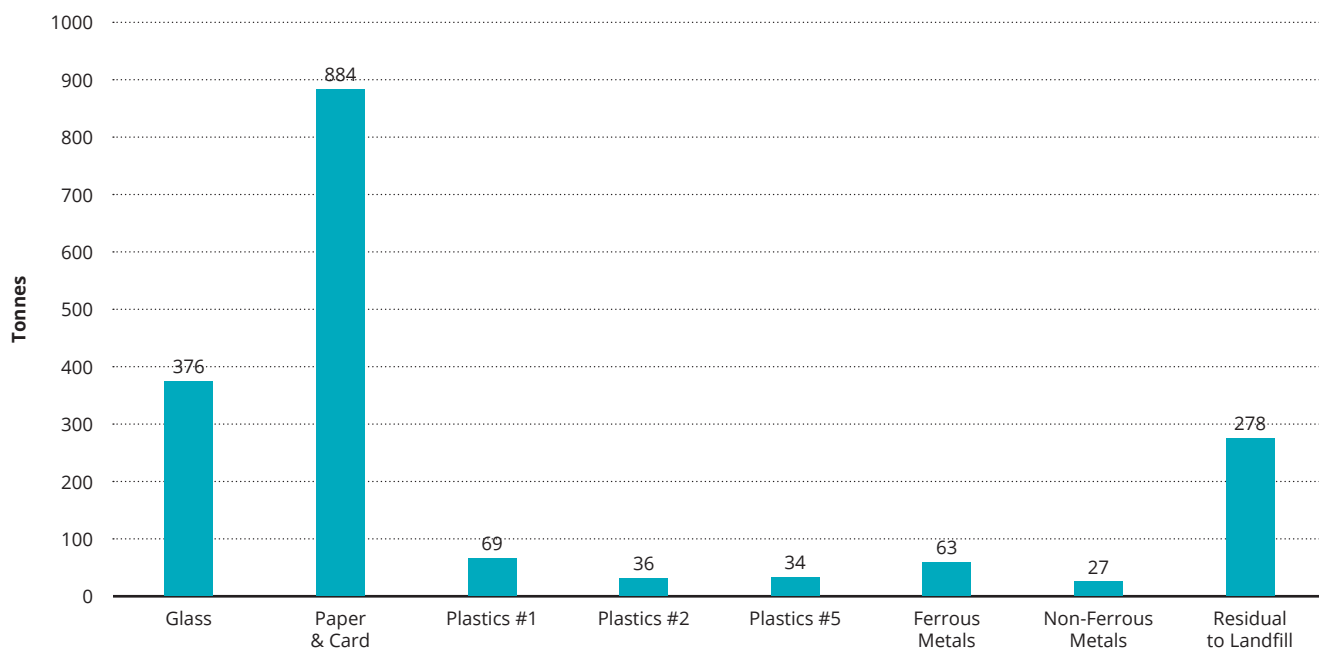


Figure 10. Horowhenua district recycling 2022/23 as received at PNCC MRF

There are further opportunities to capture additional recyclable material through the transfer stations and kerbside collections, including organic material, timber, metals, paper, plastics 1,2,5 and glass bottles. Specifically:

- Paper/cardboard recovery appears at relatively moderate levels. It is to be noted that a considerable amount of paper and cardboard is collected by private enterprise (Oji Fibre Solutions). These annual tonnages are presently unknown.
- Recent waste surveys suggest recovery of 'recyclable' plastic is relatively high. Note: Markets dictate what plastics can be collected and reused. Many plastics have limited or no market in New Zealand or anywhere else. Note: Greater public participation in recycling could be obtained if the Council rolled out its own kerbside rubbish bin collection service and used the smaller 120L rubbish sized bins.
- Organic waste recovery is relatively low and would be improved with a combination of an urban kerbside organics collection and appropriate gate pricing mechanisms at the three district transfer stations. Organic waste recovery is lower than it could be in part due to the influence of commercial waste operators marketing of large wheelie bins. Large wheelie bins for rubbish have been found to discourage recycling/diversion activity. Note: Ministry for Environment (MfE) require councils to introduce urban kerbside kitchen waste collections by 2029.
- Metals recovery is an under-estimated activity. Further networking with local scrap metal dealers may assist in the sharing of data on the volume of recycled metals exported out of our district.

- Bottle glass recovery is at a good level. Council contractors have moved to colour sorting the glass at kerbside which has dramatically improved the marketability/reuse of the collected product. Note: Sorting at source invariably produces a higher grade and more saleable commodity. This is due to minimal contamination.

As noted in Table 8, diversion of recyclable materials at transfer stations is quite low. This suggests there is potential to increase the recovery of materials with a focus on areas with low recovery and modest value. Examples include organics, whiteware, scrap metals and construction and demolition materials. Note: There is a need for additional investment in infrastructure, in addition to implementing pricing mechanisms to encourage changes in behaviour.

There are other materials present in the waste stream that require careful management to avoid negative impacts. These include:

- Hazardous waste (chemicals, e-waste, used oil, asbestos).
- Rural waste - waste from the business of farming including agricultural plastics (wrap and chemical containers), unwanted chemicals, and redundant treated timber.
- Waste from major processing sites - examples include waste treatment residuals (for example sludge), packaging (pallet wrap, broken pallets) and containers.



Visy New Zealand - Bottle glass manufacturing

### 3.3 Summary of District-Specific Issues

As we explore waste services in the Horowhenua, some issues have been identified. These issues make it challenging to provide effective services and achieve the goals of the NZ Waste Strategy, such as reducing our impact on the environment and using resources well. But these problems also present opportunities. The Council, the community, and businesses can work together to improve waste management in our district.

The issues identified include:

- Illegal dumping of waste will likely increase due in part to increased disposal charges and limited compliance prosecutions. If people learn they can get away with fly tipping, the noncompliance will compound in frequency and in cost. Council could reduce the incidence of illegal dumping by way of reasonably priced kerbside rubbish bags and increased resourcing of the enforcement activity.
- The cost for refuse bags is high compared to neighbouring council areas. The small 60 litre bag encourages residents to divert more recyclable material into the Council provided large kerbside recycling bin. A high bag price drives consumers towards large bins provided by private operators, effectively undermining waste minimisation objectives.
- In some parts of our district rural residents have a roadside collection service (rubbish and recycling) that is costly to operate per resident. The low rural household density makes it difficult to justify the continuation of such a service. Note: Rural residents presently do not contribute towards the costs for the rural kerbside recycling service.
- Commercial and construction waste makes up a large proportion of material disposed of to landfill from the Horowhenua district. Estimates place construction and demolition waste at around 30% of transfer station waste.
- The current kerbside collection service for rural roads (roads with permitted speeds above 50km/h) place road users both following and oncoming travellers, at considerable risk of collision from a collection vehicle that cannot remove itself from the live lane when stopped. This leads to the dangerous situation of following vehicles overtaking the stopped vehicle and moving into the oncoming traffic lane.
- Cost of the kerbside recycling service has increased considerably over the last few years. A 29% increase since contract commenced in 2018.
- The value of recyclable products is extremely variable with some baled ready-for-market materials having a negative value.



- Ministry for the Environment requires increased levels of urban waste diversion. The downside is that additional collections will add to annual rates costs.
- While the Levin Landfill was operational, the revenue from this activity was used to fund the kerbside recycling costs. With the Levin Landfill now closed, revenue will need to be sourced directly from ratepayers.
- The data regarding quantity of waste collected is not complete. For example:
  - The quantity of all organic waste composted by commercial composters.
  - The quantity of waste collected from commercial premises for recycling.
  - The quantity of waste generated on rural properties and processed or disposed on site.

### **Waste Data - Issues and Constraints**

While there is some information available about the quantity and composition of waste generated in our district, the data is incomplete.

The available data needs to be interpreted to consider:

- There is a mix of volume-based estimates and measured weights.
- The source of waste is not always clear.
- There is limited data on market share, coverage, set out rate or participation rates for kerbside collection or refuse and recyclable material.

Council has a Solid Waste Bylaw in place that mandates the collection of data on collection services, such as the amount of material collected and where it goes for disposal or processing. Collaborating closely with collection and processing companies operating in the Horowhenua to implement these data provisions will enhance the availability and quality of information. For the ready flow of commercially sensitive data, it is essential to foster a trusting relationship between commercial operators and Council.



# 4. Policies, Plans and Regulation

## 4.1 Summary of Guiding Policies, Plans and Legislation that Affect the WMMP

There is wide a range of statutory documents and associated policy that impacts on waste management and minimisation in the Horowhenua district. These are summarised in Table 10; further detail is provided in the Horowhenua Waste Assessment (2024).

CENTRAL GOVERNMENT	MANAWATŪ - WHANGANUI REGION	HOROWHENUA
Waste Minimisation Act 2008	Horizons One Plan	Long Term Plan 2021 - 2044
Health Act 1956		Horowhenua District Plan
Hazardous Substances and New Organisms Act 1996		Solid Waste Management Bylaw including licence terms and conditions
Resource Management Act 1991		Solid Waste Activity Management Plan 2024
Local Government Act 2002		Waste Minimisation and Management Plan 2018
Climate Change Response Act 2002		Waste Assessment 2024
Aotearoa New Zealand Waste Strategy 2023		
NZ Emissions Trading Scheme		

Table 10. Selected relevant policy for waste in Horowhenua District

## 4.2 Statutory Requirements

A Waste Management and Minimisation Plan (WMMP) must contain a summary of the Council's objectives, policies and targets for waste management and minimisation. The Plan should clearly communicate how the Council will deliver on these objectives.

Section 43 of the Waste Minimisation Act (WMA) states that a WMMP must provide for:

- a. objectives and policies for achieving effective and efficient waste management and minimisation within the territorial authority's district
- b. methods for achieving effective and efficient waste management and minimisation within the territorial authority's district, including –
  - i. collection, recovery, recycling, treatment, and disposal services for the district to meet its current and future waste management and minimisation needs (whether provided by the territorial authority or otherwise); and

- ii. any waste management and minimisation facilities provided, or to be provided, by the territorial authority; and
- iii. any waste management and minimisation activities, including any educational or public awareness activities, provided, or to be provided, by the territorial authority.
- iv. how implementing the plan is to be funded
- v. if the territorial authority wishes to make grants or advances of money in accordance with section 47, the framework for doing so.

A WMMP must have regard to the waste hierarchy, the Aotearoa New Zealand Waste Strategy 2023, and a Council's most recent Waste Assessment.



## Policy

- Implementation of licensing provisions in the existing by-law (funding, service level, litter, data provision).
- Data collection via licensing of waste operators (as above).
- Targeted data collection, for example waste surveys.
- Making information on waste issues and opportunities available.
- Grant co-funding for projects that deliver on the goals and objectives for waste management and minimisation.
- Working with neighbouring councils and other stakeholders to progress national debate on waste issues and policy.

These options focus on the priority waste streams identified through the review of the current situation and summarised in the following list.

## National

- Organic waste
- Glass bottles
- Paper/Cardboard
- Metals
- Plastics
- Timber

### Other materials requiring active management include:

- Hazardous waste
- Difficult or special waste
- General waste
- e-Waste

### Waste sources

- Rural waste
- Industrial processing

# 5. Vision, Goals, Objectives and Targets

## 5.1 Background

The preparation of this Waste Assessment has included review of the Vision - Goals - Objectives framework set out in the previous Waste Management and Minimisation Plan (WMMP).

The relationship between Vision, Goals and Objectives is illustrated in Figure 10 and defined in Table 12<sup>5</sup>.

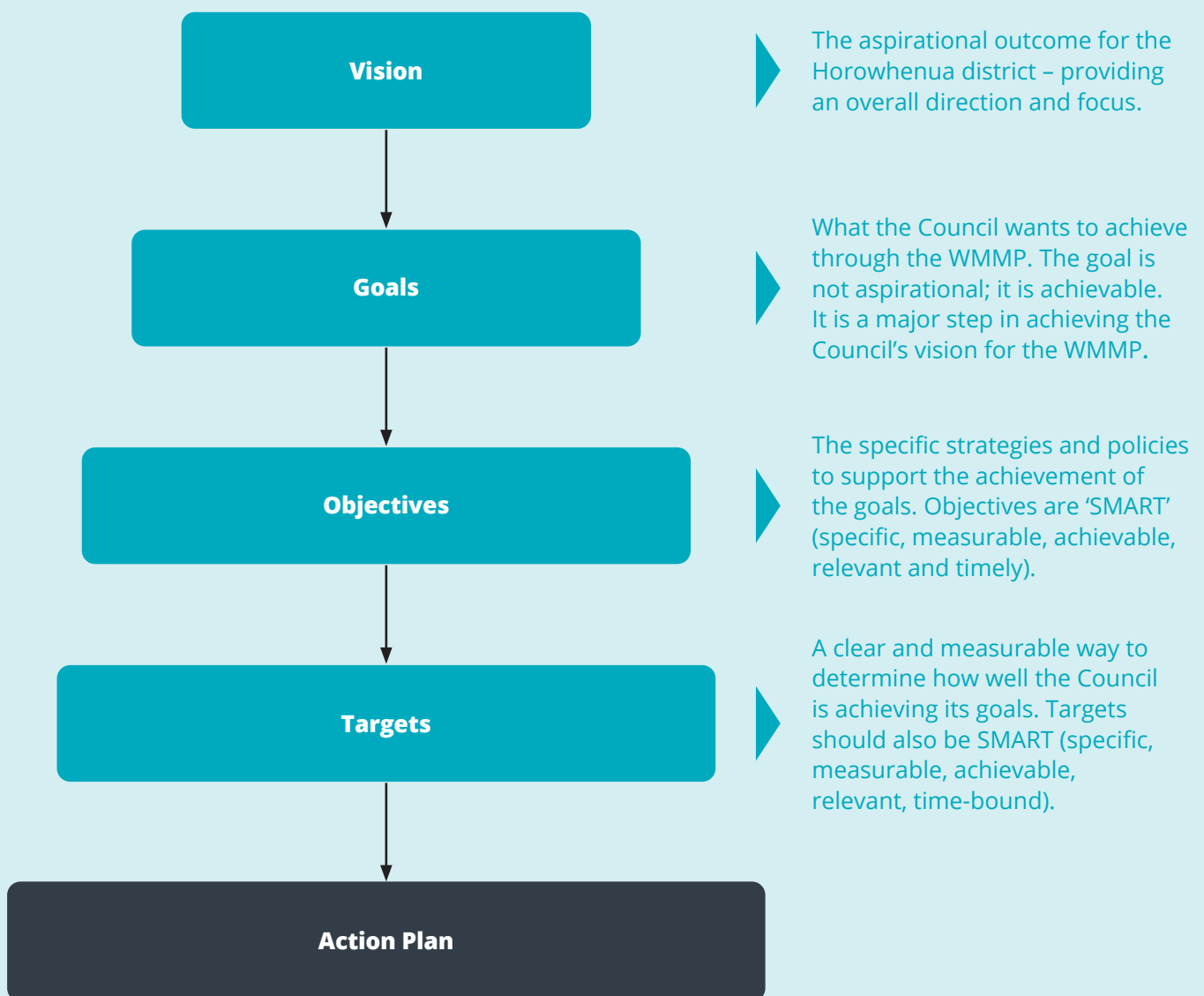


Table 12. WMMP Vision, goals, objectives and targets.

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

## 5.2 Vision, Goals and Objectives

### Vision

To provide households and businesses with affordable and impactful waste management and minimisation services. To promote community empowerment, individual responsibility and positive behaviour change.

This vision reflects the intended direction for our district in putting maximum effort into diversion and using landfill disposal as a last resort. This approach is aligned with the waste hierarchy, reflects the Aotearoa New Zealand Waste Strategy, and acknowledges our responsibility to manage our waste responsibly and minimise the impact on our environment; particularly as all landfill waste must be transported out of our district to a large regional facility.

Our vision will be realised through achieving a set of supporting goals and objectives set out below.

### Goals

The goals for waste management and minimisation in the Horowhenua District are to:

1. Make it easy to recycle
2. Reduce waste where we can
3. Manage waste responsibly
4. Maintain community services (i.e. kerbside recycling, transfer stations, kerbside bag collection)
5. Promote the environmentally safe disposal of all waste (including hazardous waste, herbicides, lithium ion batteries, paint etc.)
6. Educate the community on waste minimisation
7. Promote reuse of waste
8. Provide the best price disposal of urban waste
9. Provide high impact, low cost delivery of targeted waste diversion initiatives
10. Council to advocate for our community on a regional and national level

### Objectives

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

1. To reduce waste disposed to landfill
2. Enable data sharing with private waste collectors
3. Enable data sharing with private waste recycling companies
4. Provide the community with access to recycling services
5. Ensure households and businesses have access to the safe disposal of general waste
6. Provide environmentally safe disposal of hazardous wastes



7. To reduce illegal dumping
8. To provide waste minimisation education in schools
9. To educate the community in waste minimisation
10. To work collaboratively with other territorial authorities, central government, industry and other parties to improve waste management and minimisation in New Zealand
11. Provide high impact, low cost waste diversion initiatives

Table 13 provides a summary of the Vision - Goals and Objectives presented above and associated targets for waste management and minimisation and in the Horowhenua District.

### Tangata Whenua Worldview of Waste Management

Our vision aligns with principles of tangata whenua, such as kaitiakitanga, which involves taking a holistic view of the environment and striving to safeguard the land, air, and water from potential harm caused by improper waste management practices.

Historically, tangata whenua communities primarily produced organic waste, which could be managed by returning it to the land. However, in modern times, this approach is no longer feasible due to the increase in waste volumes and the emergence of non-organic and potentially hazardous waste materials.

Kaitiakitanga, mauri, and the waste hierarchy are regarded as interconnected principles that reinforce our goal of reducing the amount of waste sent to landfill.

## VISION

To provide and households and businesses with affordable and impactful waste management and minimisation services. Promoting community empowerment, individual responsibility and positive behaviour change.

OBJECTIVE	RELEVANT GOAL(S)	TARGET(S)
<b>1. To reduce waste disposed to landfill</b>	Reduce waste where we can.	Waste disposal < 600kg per person (urban areas) by 2029
	Manage waste responsibly.	
	Make it easy to recycle.	
	Provide high impact, low cost delivery of targeted waste diversion initiatives.	
	Educate the community on waste minimisation.	
<b>2. Enable data sharing with private waste collectors</b>	Reduce waste where we can.	To achieve Council's Solid Waste Statement of Service Performance measures.
	Manage waste responsibly.	
<b>3. Enable data sharing with private waste recycling companies</b>	Reduce waste where we can.	Reach MfE urban waste diversion targets.
	Manage waste responsibly.	Urban kerbside recycling 30% by 2026 Urban kerbside recycling 40% 2028
<b>4. Provide the community with access to recycling services</b>	Make it easy to recycle.	Satisfaction with Council kerbside recycling and transfer station services. Residents satisfaction > 75%
<b>5. Ensure households and businesses have access to the safe disposal of general waste</b>	Maintain community services.	Satisfaction with Council kerbside rubbish and transfer station services.
	Provide the best price disposal of urban waste.	Residents satisfaction > 75%
<b>6. Provide environmentally safe disposal of hazardous wastes</b>	Promote the environmentally safe disposal of all waste (including hazardous waste, herbicides, lithium ion batteries, paint etc).	Foxton and Levin Transfer Stations have facilities with appropriate fees to accept hazardous waste (domestic quantities only) by 2026
<b>7. To reduce illegal</b>	Manage waste responsibly.	Quantity of illegally dumped waste <2023/24 amount
<b>8. To provide waste minimisation education in schools</b>	Educate the community on waste minimisation.	Schools programmes delivered by Council waste educators is provided to >700 school aged students each year.
<b>9. To educate the community of waste minimisation</b>	Educate the community on waste minimisation.	Council to have 3 waste minimisation campaigns a year.
<b>10. To work with collaboratively with other territorial authorities, central government, industry and other parties to improve waste management and minimisation in New Zealand</b>	Council to advocate for our community on a regional and national level.	Council to attend > 5 events (including, TA forums and national events).
<b>11. Provide high impact, low cost waste diversion initiatives</b>	Reduce waste where we can.	Implement pilot trail of cost effective/ logistically attainable options:
	Manage waste responsibly.	2026
	Make it easy to recycle.	2027
	Provide high impact, low cost delivery of targeted waste diversion initiatives.	2028

Table 13. WMMP Vision, goals, objectives and targets 2024

### 5.3 Council's Intended Role

Council will continue to adopt a part user pays and part community funded approach to the delivery of waste transfer and disposal services in our district. Some services will be fully funded by community public funding. Examples include kerbside recycling, servicing of litter bins, cleaning up illegal dumping, and the management of closed landfills.

Council will continue to own and support the operation of some key infrastructure for waste management and minimisation in our district. This includes the transfer stations in Foxton and Shannon, and the community mobile recycling stations across Horowhenua.

Council will provide information on waste management and minimisation to the community and have staff or Council funded contractors available for education purposes. Council will work closely with other approved promoters of effective waste management and minimisation.

### 5.4 Protecting Public Health

Waste, especially hazardous and rotting materials, poses potential health risks. Therefore, a primary objective of waste management is to safeguard public health. This is ensured by minimising contact with waste and managing it carefully. In practice this means:

- Containing waste effectively, including:
- Providing appropriate containers at point of generation e.g. workspace, kitchen, etc.
- Providing appropriate containers for storing waste prior to collection – these may be reusable (wheelie bins) or single use (rubbish bags).
- Providing dedicated public drop off areas at transfer stations and landfills.
- Regular collection and disposal.
- Suitable collection and transport vehicles.
- Disposal at a well-constructed and operated landfill including provision of appropriate barrier systems such as base liner and adequate daily, intermediate and final cover. (a Class I landfill)
- Excluding as far as possible vermin (such as rats, cockroaches) that may spread waste or associated contaminants.

### 5.5 Actions for Achieving Effective & Efficient Waste Management & Minimisation

#### Introduction

Section 51 of the Waste Management Act says that a Waste Assessment must include a list of options to meet the district's future needs, along with an evaluation of how suitable each option is.

This section outlines how we identify and evaluate actions to meet our district's future needs and goals. The preferred options from this assessment will be included in the WMMP as strategies and featured in the Action Plan.

For Horowhenua, waste production is expected to increase with population and economic growth during this Plan's duration. So, it is essential for infrastructure planning to consider this expected growth.

Data suggests there is room to increase material diversion from the current 20% across the waste management system. Challenges include illegal dumping, getting reliable waste data, and more materials entering the waste stream from rural properties. Our focus is on addressing these issues while meeting future needs.



## 5.6 Identifying Options and Actions

There are a wide range of approaches to providing waste management and minimisation services and programmes that could be adopted in Horowhenua. One helpful approach for assessing these options is the model illustrated in Figure 11. Effective waste management and minimisation relies on a combination of infrastructure (including collection), education and regulation or policy.

These are supported by having the right data to inform decision making.

For the Waste Assessment, Council has identified options by looking at the main challenges for waste management in Horowhenua, checking what has been done elsewhere, and finding new solutions when needed. Options have also been considered with reference to the current recovery rates of key materials.<sup>6</sup>

Using the model shown in Figure 11, we can group the options as follows:

### Infrastructure

- Providing collection services – collection of waste, recyclable materials (at kerbside or transfer station), organic waste and/or bulky items, litter bins;
- Providing physical infrastructure – fixed location or mobile recycling stations (MRSs), waste sorting, waste processing and/or disposal facilities;
- Managing the negative impacts of waste – litter/illegal dumping clean-up, closed landfills;
- Council will support recycling efforts which may include the purchasing of end products which have been produced through closed loop systems or made from natural materials.

### Education

- Changing behaviour – education programmes targeting schools, businesses and/or households;
- Support infrastructure – information on how to use kerbside collection and community mobile recycling stations to maximise recovery and maintain the quality of recovered materials (to maximise their resale value);
- Contributing to national education/information programmes.

<sup>6</sup> Key materials include paper/card, plastics, glass, organic waste, metals, glass and timber.



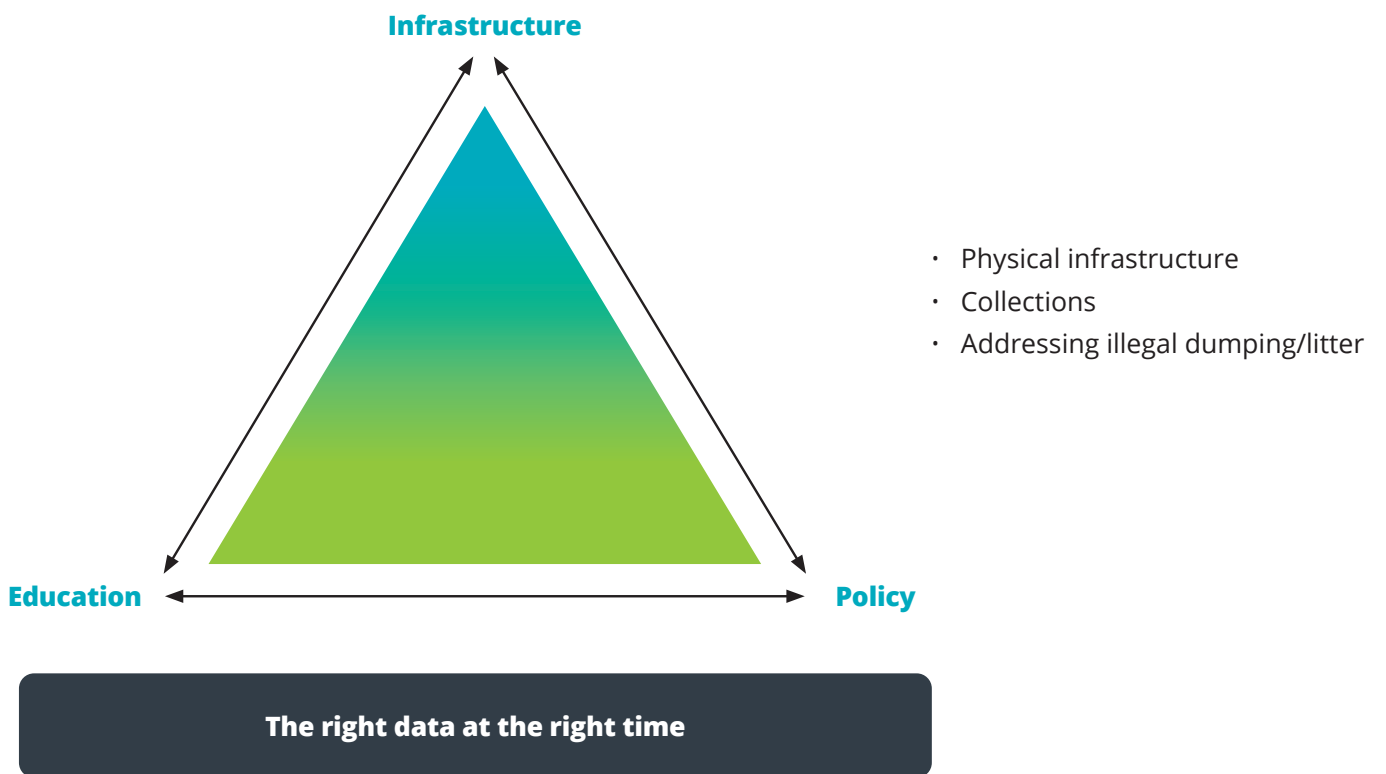


Figure 11. Effective Waste Management and Minimisation

## 5.7 Options & Actions for the Future

Based on findings in the Waste Assessment (Appendix A), the following options should be included in our Waste Management and Minimisation action plan.

### Infrastructure Actions

- Progress procurement for a new refuse collection contract (1st Oct 2025) as a continuation of the existing service (part user pays rubbish bags) with a strong focus on managing health and safety and managing market share.
- Progress procurement for a new recycling collection contract (01 July 2026) focused on reducing health and safety risks, producing high quality recyclable materials and increasing the capture of presently advertised recyclable materials from urban households and residents who use transfer stations and Mobile Recycling Stations (MRSs).
- Progress procurement for a new transfer station operations contract – Foxton and Shannon (01 Oct 2025). The contract will focus on maintaining an acceptable level of service, reducing costs and maximising recovery of materials including recyclable materials, organic waste and reusable items.
- Complete detailed analysis of organic waste collection options including the status quo (private sector services), a kitchen and garden waste collection and kitchen waste only collection.
- Complete detailed analysis of sorting of Commercial and Industrial (C&I) and/or Construction and Demolition (C&D) waste prior to disposal of residual material.
- Council to confirm a medium to long term strategy for Levin Landfill that provides for full funding of non-compliant legacy matters, operations, and post closure maintenance.
- Work with herbicide product users and hazardous waste disposal companies to improve the management of end of use hazardous waste, including providing options in the district for specific processing of waste streams such as e-Waste.

### Education Actions

- Continue to update and maintain information on the Council website regarding waste and recycling collection and community Mobile Recycling Stations in the Horowhenua district.
- Provide clear information and education to promote the collection of quality product suitable for resale by the private sector or Council operated/funded recycling services, e.g. farm plastics, soft plastics recycling, Paint-wise

- Disseminate information to all catchment residents (including holiday makers/temporary residents) including national programmes like Love Food Hate Waste.
- Maintaining school education programme, support environmental education activities for schools, homes and businesses.
- Maintain funding for Waste Minimisation Officer role. Either by Council public funding or Ministry for the Environment (MfE) levy funding provision.
- Provide information to our community about the negative impact of illegal dumping and alternatives available to them e.g. kerbside recycling collection, part public funded rubbish bag collection, commercial skip bins and transfer stations.

### Policy Actions

- Develop criteria for making grants available from Council's allocation of Waste Levy funds. Provisionally criteria will be based on contribution to the Vision, Goals and Objectives for waste management and minimisation with consideration also to co-funding arrangements. Applications for funding should be assessed for their ability to deliver the promised benefits i.e. diversion from landfill of 50 tonnes plus per annum, due diligence on organisation capability, governance and accountability. Within financial constraints consideration also needs to be given to ensuring that funding supports new or expanded activities rather than only supporting the status quo.
- Continue to report on progress against the targets in the Waste Management and Minimisation Plan (WMMP) in Annual Reports.
- Collaborate with local government organisations, non-government organisations (NGO) and other key stakeholders to progress national activity on waste management and minimisation policy directives.
- Continue to actively address illegal dumping activity by adequate resourcing of Council's Compliance Team. And where possible prosecuting non-compliant behaviour.

<b>ACTION PLAN (INFRASTRUCTURE)</b>	<b>TIMELINE</b>	<b>FUNDING</b>
<b>a. Provide future service delivery options for urban kerbside recycling including funding options. Note: Rural kerbside recycling requires a feasibility study looking at financing and safety concerns. (integrated with Action d)</b>	June 2024	User Pays & Rates (existing) Targeted Rate Waste Levy Funding
<b>b. Adjust rubbish bag service delivery options to facilitate either service delivery growth or greater user pays ratio that ensures the service delivery remains viable and minimises impacts of rate increases (integrated with Action c)</b>	June 2025	User Pays & Rates (existing) User Pays
<b>c. Investigate feasibility of clean fill operations at Levin Landfill or another site</b>	July 2027	Revenue Opportunity Waste Levy Funding
<b>d. Progress procurement for a new rubbish collection contract as a continuation of the existing service (user pays rubbish bags) with a strong focus on managing health and safety and managing market share.</b>	October 2025	User Pays & Rates (existing)
<b>e. Progress procurement for a new kerbside recycling collection contract focused on reducing health and safety risks, producing high quality recyclable materials and increasing the capture of recyclable materials from households.</b>	July 2026	User Pays & Rates (existing) Waste Levy Funding
<b>f. Progress procurement for a new transfer station operations contract (Foxton and Shannon) focused on maintaining an acceptable level of service and maximising recovery of materials including recyclable materials, organic waste and other reusable items.</b>	July 2026	User Pays & Rates (existing)
<b>g. Complete detailed analysis of organic waste collection options including the status quo (private sector services) of a kitchen and garden waste collection and kitchen waste only collection i.e. MfE target for 2029 – All towns with populations greater than 1,000 people</b>	Dec 2025 & June 2026	Rates (existing) Waste Levy Funding
<b>h. Council to confirm a strategy for closed Levin Landfill that provides for full funding of historic and current development, operations, closure and appropriate management post closure.</b>	June 2024	Rates (existing)
<b>i. Council to confirm urban and rural kerbside recycling options and service delivery and appropriate management of any confirmed changes</b>	June 2024	Rates (existing)
<b>j. For the Foxton and Shannon Transfer Stations:</b> 1. Improve design to facilitate more recycling opportunities. 2. Increase capacity for acceptance of environmentally harmful waste streams e.g. Lithium-Ion batteries, pesticides, waste oils	2028-2030	Rates (existing) Waste Levy Funding

Table 12. Infrastructure Actions

<b>ACTION (EDUCATION)</b>	<b>TIMELINE</b>	<b>FUNDING</b>
<b>k. Continue to update and maintain information on the Council website regarding waste and recycling collection and drop off services in the Horowhenua district.</b>	Ongoing	User Pays & Rates (existing) Targeted Rate
<b>l. Provide clear information and education to promote the effective use of private sector waste disposal options (For example, farm plastics, soft plastic recycling, PaintWise) and Council operated recycling services.</b>	Ongoing	Rates (existing) Waste Levy Funding
<b>m. Disseminate information to all residents (including holiday makers/ temporary residents) including national programmes like Love Food Hate Waste.</b>	Ongoing	Rates (existing) Waste Levy Funding
<b>n. Maintaining school education programmes, support environmental education activities for schools, homes and businesses.</b>	Ongoing	Waste Levy Funding
<b>o. Provide information to the community about the negative impact of illegal dumping and alternatives available to the community (kerbside collection, commercial skip bins and transfer stations).</b>	Ongoing	Rates (existing)

Table 13. Education Actions

<b>ACTION (POLICY)</b>	<b>TIMELINE</b>	<b>FUNDING</b>
<b>p. Develop criteria for applications for grants via Council's allocation of Waste Levy funds. 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 be assessed for their ability to deliver the promised benefits i.e. due diligence on organisation capability, governance and accountability. Volume of waste materials diverted from going to landfill. Consideration also needs to be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.</b>	June 2025	Waste Levy Funding
<b>q. Continue to report on progress against the targets in the WMMP in Full Operational Performance Reports and Annual Reports.</b>	June 2024 and Ongoing	Rates (existing)
<b>r. Collaborate with local government organisations, non-government organisations (NGO) and other key stakeholders to progress national activity on waste management and minimisation policy.</b>	Ongoing	Rates (existing)
<b>s. Continue to actively address illegal dumping activity including where possible identifying perpetrators in order to issue litter infringement penalties.</b>	Ongoing	Rates (existing)

Table 14. Policy Actions



# 6. Monitoring, Evaluation and Reporting Progress

The success of the Waste Management and Minimisation Plan (WMMP) relies on taking effective action to achieve the Vision, Goals, and Objectives it sets out. The targets outlined in Section 5 provide key benchmarks for measuring progress. Monitoring, evaluation, and reporting efforts will center on gathering data to track progress towards these targets.

## 6.1 Monitoring and Evaluation

The assessment found gaps in available waste information. Some data exists but is not accessible to the Council<sup>7</sup> while other data is not available at all<sup>8</sup>.

To track progress on the WMMP goals, Council will gather the data listed in Table 15.

Some Action Plan tasks aim to get the data from Table 15. For instance, Council will keep licensing in line with the current by-law and enhance reporting in Council contracts.

Council will evaluate collected data to measure progress against targets in Section 4.2. The periodic review of the Action Plan will assess how effective Council's actions have been in reaching the WMMP goals.



7 For example, regarding private sector collection services.

8 For example, regarding the number of households participating in the kerbside recycling collection service.

<b>DATA SOURCE</b>	<b>INFORMATION</b>	<b>COMMENT</b>
<b>Council contractors</b>	Illegal dumping	Contract reporting
	Litter (bins, clean-up)	Contract reporting
	Kerbside refuse	Contract reporting
	Kerbside recycling	Contract reporting
	Transfer station refuse	Contract reporting
	Transfer station recycling/recover	Contract reporting
	Recycling station recycling	Contract reporting
	Landfill disposal	Contract reporting
<b>Other collectors</b>	Kerbside/Business refuse	By-law data requirements
<b>Waste processor</b>	Materials processed	By-law data requirements
<b>Council contact database</b>	Illegal dumping incidents	Compliance Team issuing infringement fines
<b>Customer Surveys</b>	Residents satisfaction	Council survey
<b>Council Activity Reporting (Annual Report)</b>	By-law implementation (licensing) Data summary	Contract requirement or targeted survey
<b>Targeted data collection</b>	Solid Waste Analysis Protocol Surveys (waste composition)	Contract required
	Kerbside collection surveys (participation, set out rates)	Contract required
	Recycling contamination survey	Contract required

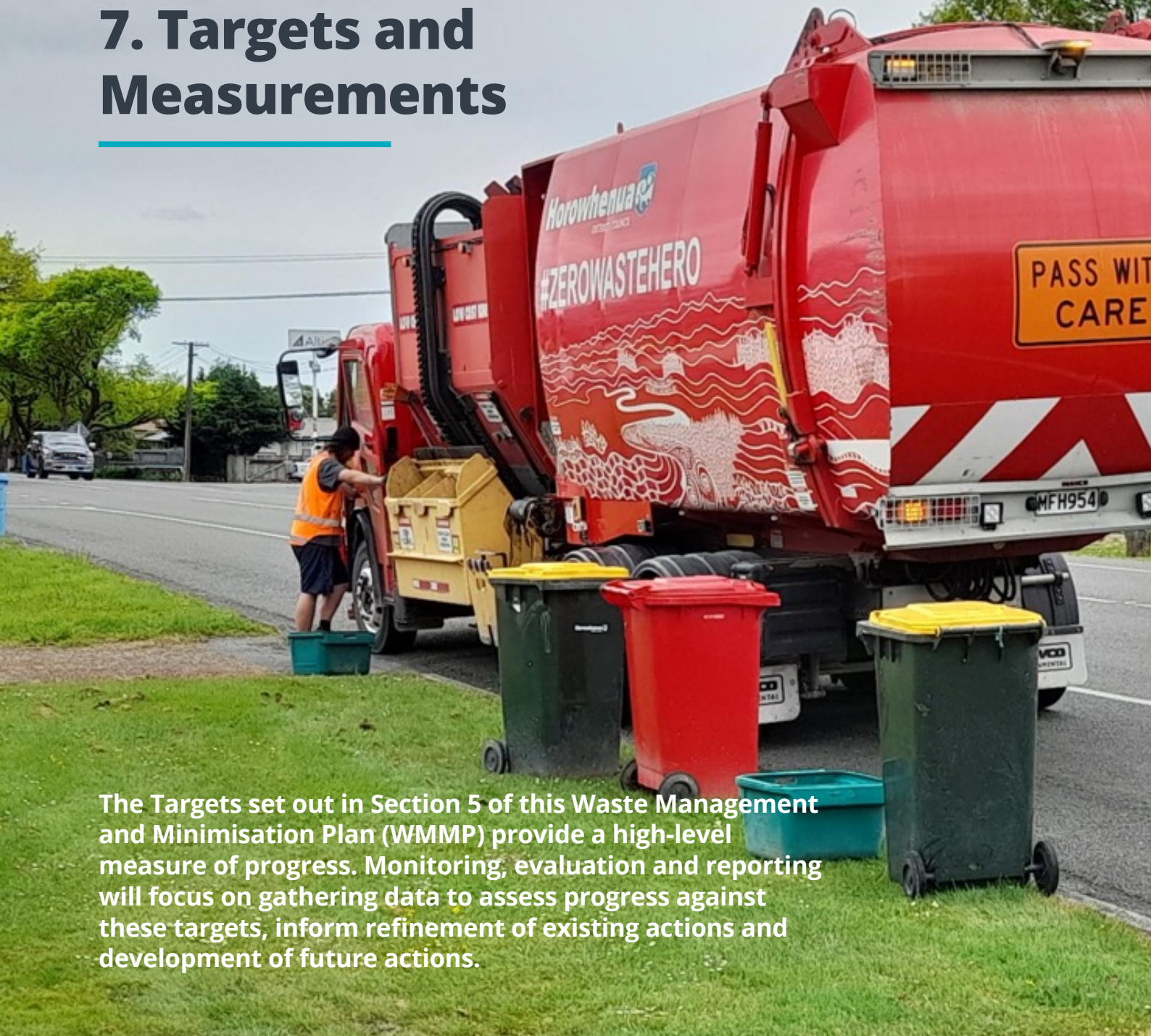
Table 15. Data source and description

## 6.2 Reporting

Progress on implementing the actions from this WMMP will be providing status reporting in Council's Annual Report each year. Reporting will note current performance against the targets, based on available information.

# 7. Targets and Measurements

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**The Targets set out in Section 5 of this Waste Management and Minimisation Plan (WMMP) provide a high-level measure of progress. Monitoring, evaluation and reporting will focus on gathering data to assess progress against these targets, inform refinement of existing actions and development of future actions.**

Progress in achieving the Vision - Goals - Objectives of this WMMP will be monitored by collecting the data outlined in Table 13.

Some of the activities in this Action Plan are focused on securing the information noted in Table 10. For example, ongoing implementation of licensing (based on the existing Bylaw) and improving reporting under existing and future Council contracts.

Periodic review of the Action Plan (see Section 5 of the Action Plan) will consider how effective the actions underway or completed have been in achieving the Vision - Goals - Objectives of this Plan. Table 13 links Targets to measures noted in Tables 16 and 17.

TARGET	MEASURE
<p><b>1.1 To reduce the total quantity of waste disposed of to landfill from Horowhenua on a per capita basis. The national figure is presently 756 kg per person. (Note: Improvement dependant on addition of new services)</b></p> <p><b>Waste disposal &lt; 600 kg per person each year</b></p>	Tonnes of waste disposed of to landfill per capita (Urban only)
<p><b>2.1 Increase in the diversion rate for recycling at kerbside and transfer stations.</b></p> <p>The current figures are 21% and 13% respectively.</p> <p><i>Kerbside recycling &gt; 40%2029.</i></p> <p>Note: Increase governed by implementation of other types of kerbside recycling e.g. kerbside kitchen waste collection.</p> <p><i>Recycling at Refuse Transfer Stations increase over present rate by 50% by 2029</i></p>	% of waste recycled per year
<p><b>3.1 Satisfaction with kerbside recycling and transfer station services.</b></p> <p><i>Residents satisfaction &gt; 75%</i></p>	Residents Satisfaction Survey results
<p><b>4.1 To publish a summary of available data on waste generation and management with each Annual Report. Summary data published in Annual Report to create a grant scheme to support new initiatives to reduce waste</b></p>	Summary reporting on Waste Management and Minimisation Plan in Annual Report. Grant applications invited.
<p><b>5.1 Reduction in illegal dumping incidents and quantity of material illegally dumped in the Horowhenua district.</b></p>	Number of incidents and quantity of illegally dumped material
<p><b>5.2 Residents satisfaction with litter and illegal dumping management. Residents satisfaction &gt; 85 %</b></p>	Residents satisfaction survey results
<p><b>6.1 Schools programmes delivered by Council</b></p> <p>Waste education is provided to &gt;700 school aged students each year.</p>	Number of students receiving waste education
<p><b>6.2 Council promotes waste minimisation at &gt; five events in the Horowhenua each year.</b></p>	Number of events addressing waste minimisation.

Table 16. Measuring progress against targets

MEASURE	DEFINITION
<b>Total of waste disposed of to landfill per capita</b>	Total quantity of waste disposed of to landfill (from contract and licensing reporting) divided by Horowhenua resident population
<b>Total of waste recycled per year</b>	Total quantity of waste recycled or recovered (from contract and licensing reporting) divided by total quantity of district waste disposed of to landfill (from contract and licensing reporting)
<b>Residents satisfaction</b>	Measure as defined in Long Term Plan 2024-2044 or LTP.
<b>Total of illegal dumped material</b>	Total quantity of illegally dumped material picked up by Horowhenua District contractors per year. And total cost to collect and deliver to transfer stations.

Table 17. Measure definitions



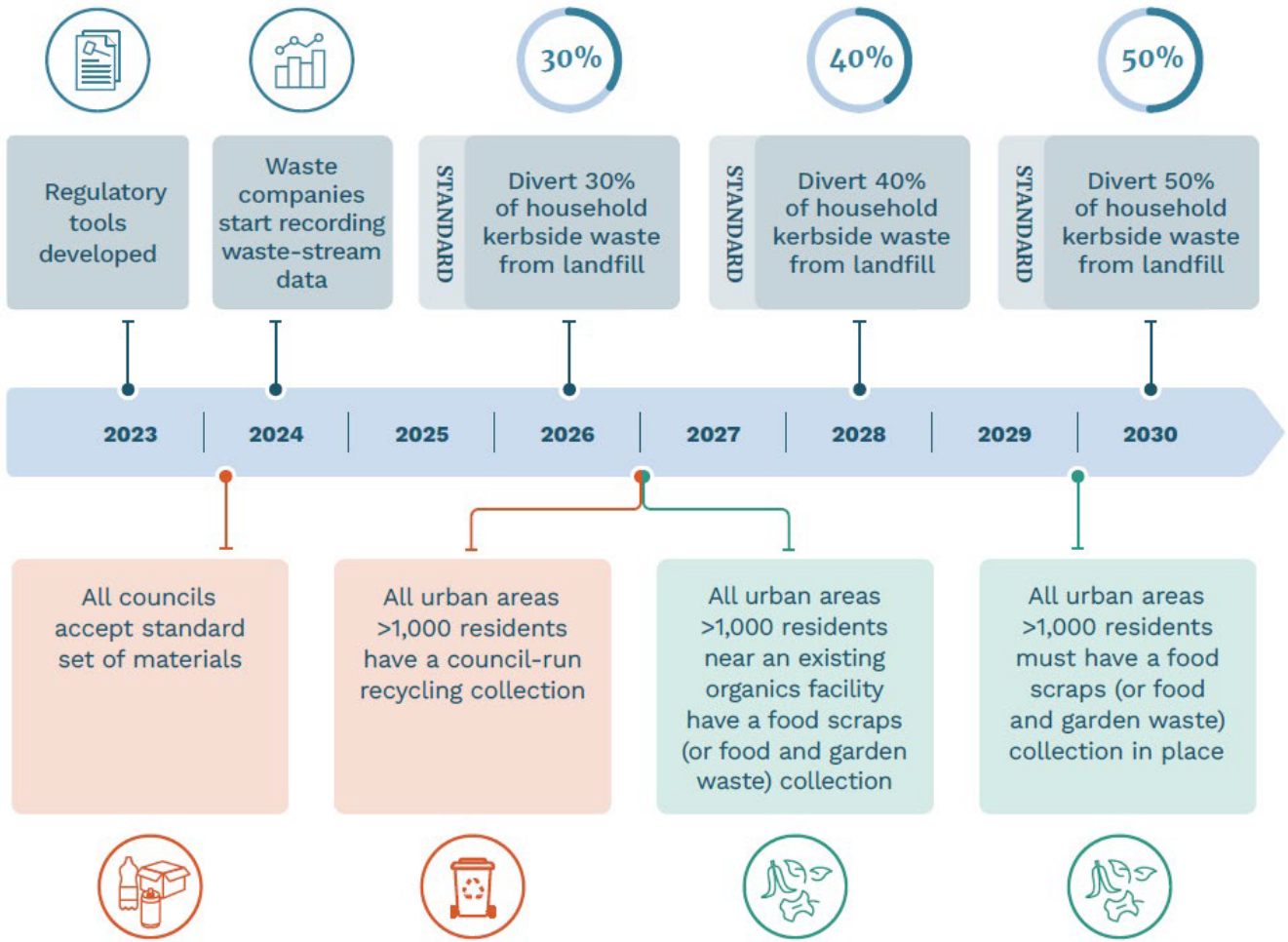


Figure 12. Ministry for the Environment timeline for waste Diversion Targets

2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
<b>Infrastructure Services</b>					
Contracts					
Rubbish Collection	Rubbish Collection	Rubbish Collection	Rubbish Collection	Rubbish Collection	Rubbish Collection
Kerbside Recycling	Kerbside Recycling	Kerbside Recycling	Kerbside Recycling	Kerbside Recycling	Kerbside Recycling
Transfer Stations	Transfer Stations	Transfer Stations	Transfer Stations	Transfer Stations	Transfer Stations
Potential new services	Household hazardous waste			Tender/Appoint Organic waste service	Organic waste service
	e.g. e-waste			Tender/Appoint Bulky waste service	Bulky waste service
					Tender/Appoint C&D / C&I service- problem products e.g. e-waste
<b>Investigations</b>					
	Complete study on organic waste collection		LTP Proposal for organic waste		
		Complete study on bulky waste options	LTP Proposal for bulky waste		
		Complete study on C&D and C&I waste sorting	LTP Proposal on waste sorting at designated facility. (Council Road?)		
<b>Education/Information</b>					
Kerbside collections (various types)	Kerbside collections (various types)	Kerbside collections (various types)	Kerbside collections (various types)	Kerbside collections (various types)	Kerbside collections (various types)
Council services	Council services	Council services	Council services	Council services	Council services
For holiday makers	For holiday makers	For holiday makers	For holiday makers	For holiday makers	For holiday makers
Schools	Schools	Schools	Schools	Schools	Schools
Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping
<b>Policy</b>					
Develop grant funding criteria	Grant funding round	Grant funding round	Grant funding round	Grant funding round	Grant funding round
By-law revision					By-law revision
Report on progress in 2024/25 Annual Report.	Report on progress in 2025/26 Annual Report.	Report on progress in 2026/27 Annual Report.	Report on progress in 2027/28 Annual Report.	Report on progress in 2028/29 Annual Report.	Report on progress in 2029/30 Annual Report.
Collaborate with others national activity and policy.	Collaborate with others national activity and policy.	Collaborate with others national activity and policy.	Collaborate with others national activity and policy.	Collaborate with others national activity and policy.	Collaborate with others national activity and policy.
Illegal dumping investigation and enforcement activity	Illegal dumping investigation and enforcement activity	Illegal dumping investigation and enforcement activity	Illegal dumping investigation and enforcement activity	Illegal dumping investigation and enforcement activity	Illegal dumping investigation and enforcement activity

Table 18???

# 8. Funding the Plan

## 8.1 Plan Implementation Funding

The funding of the implementation of this Waste Management and Minimisation Plan (WMMP) will come from user charges, rate payer funds and levy payments returned to the Council.

### User Charges

Fund kerbside refuse collection, disposal of kerbside waste to landfill and the disposal or management of waste materials at the two Council owned transfer stations.

### Rate Payer Funding

Provide public good focused services. Examples include kerbside recycling collection, supporting transfer station operations/maintenance where user charges are not adequate to cover the full cost of operation, public part funding of kerbside rubbish bag collection, illegal dumping clean-ups, litter bin servicing, licensing implementation, education activities, closed landfill maintenance and reporting on the Plan implementation.

### Levy Payments

Fund activities that promote or achieve the Goals and Objectives of this WMMP.

## 8.2 Grants and Advances of Monies

As part of the implementation of the WMMP Council will develop criteria for making grants available from Council's allocation of Waste Levy funds.

The amount of money available for grants will be determined as part of the Annual Plan process but is expected to be in the order of 15% of the levy funding received by Council. Note: Funding is sourced from Levy payments made by the Ministry for the Environment not rates, therefore will not be affected by the setting of annual rate increases. It is a stand-alone account outside of rates.

Criteria will be based on the funded activities contribution to promoting and achieving the Vision, Goals and Objectives for waste management and minimisation. Activities with co-funding will be preferred with Council expecting 50% or more contribution from partners other than Council. Projects that deliver waste diversion quantities greater than 100 tonnes per annum would be given greater weighting for approval than lower annual diversion quantities. Variation to the rule would be at the discretion of the appointed Council Officer.

Applications for funding will also be assessed for their ability to deliver the promised benefits. Specific areas for assessment will include organisation capability to deliver the project, governance arrangements, accountability and track record in delivering similar projects.

## 8.3 Waste Minimisation Levy Expenditure

Council will use the Waste Levy to fund a range of activities that includes waste minimisation education in schools, the waste minimisation officer role, grants, new infrastructure purchases and builds. The remainder of the levy will be used to help subsidise a range of kerbside recycling collections in the Horowhenua including an organics and construction and demolition service if such programmes are implemented. The Levy can also be used to fund pilot programmes directed towards developing and operating new systems and programmes that further contribute toward waste minimisation.



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