Horowhenua DISTRICT COUNCIL

Horowhenua
Waste Minimisation and Management Plan
Draft

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Part A - Strategy

1. Introduction

Purpose of the Plan

This draft Waste Minimisation and Management Plan (WMMP) sets out how the Council will progress efficient and effective waste management and minimisation in the Horowhenua District.
It paves the way forward, considering current policy and the legal framework and Horowhenua District vision, with an overarching suite of guiding goals and objectives.

This Waste Minimisation and Management Plan fulfils Council's obligations under the Waste Minimisation Act (WMA) (2008). The plan uses the waste hierarchy (Figure 1) as a guide to prioritising activity, focussing on reducing waste before recycling or recovery of materials. Where materials cannot be recycled or recovered the focus is on safe treatment and disposal.

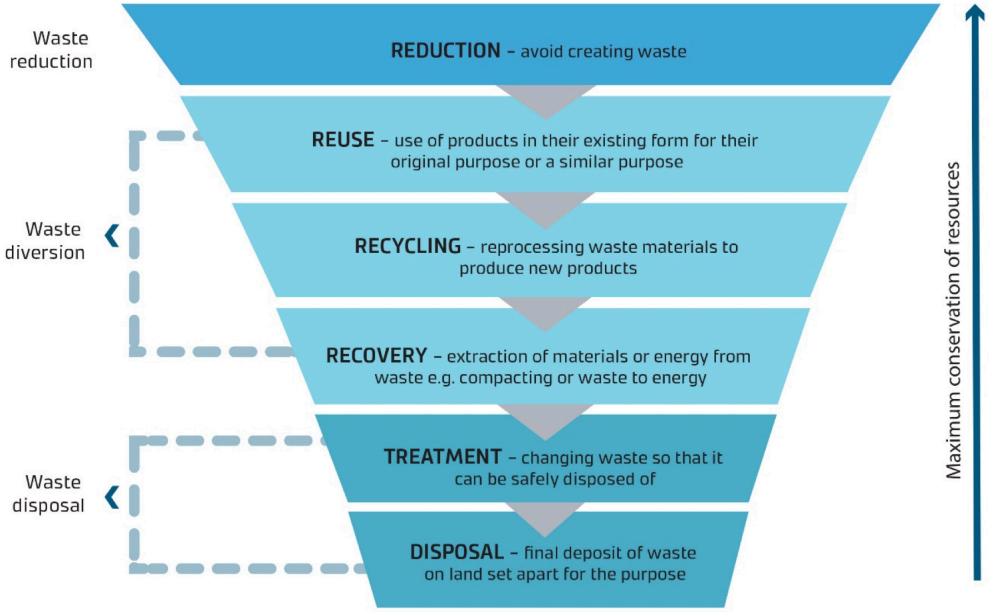


Figure 1: The Waste Hierarchy.

Scope of Plan

This draft Waste Minimisation and Management Plan and associated Waste Assessment covers solid waste generated in the Horowhenua District.

Current Status of Plan

March 2018

The plan is the draft of a new plan developed to replace the 2012 Waste Minimisation and Management Plan. This document will be revised and updated following public consultation prior to being adopted by Council as a framework and guide for waste minimisation and management activity in the Horowhenua District from 2018 to 2024.

Plan Review

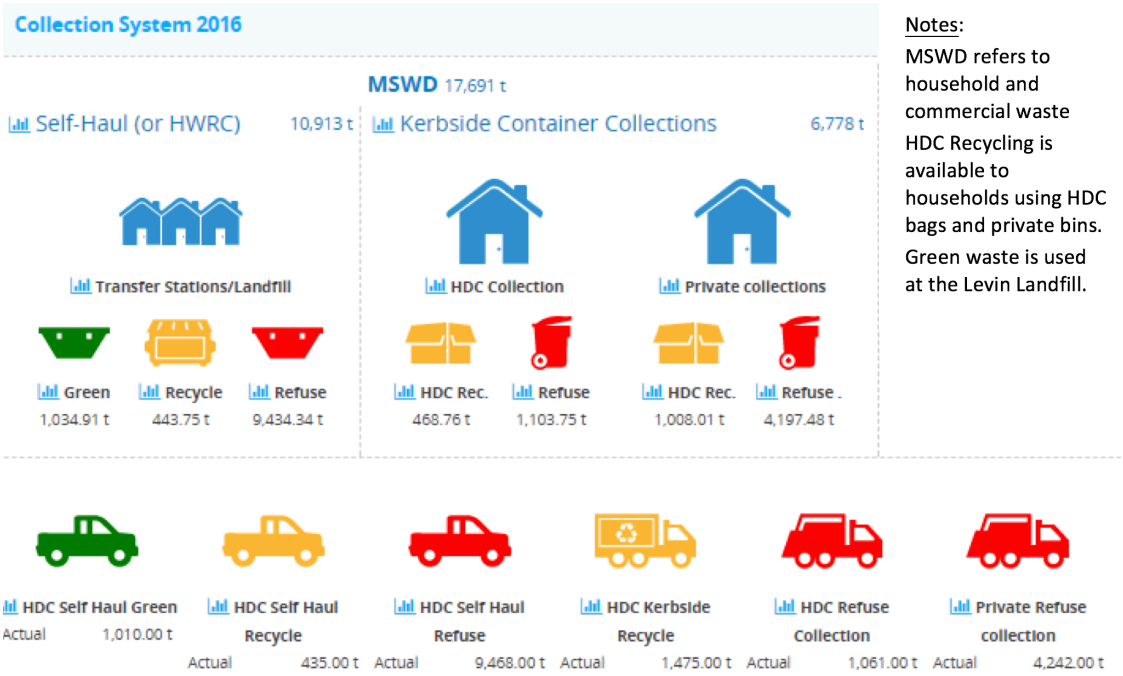
Once adopted this plan needs to be reviewed no later than 6 years from adoption. The plan will be reviewed within this timeframe, earlier if a change circumstances provokes a review of Horowhenua's waste minimisation and management policy framework.

2. The Waste Situation

2.1 Infrastructure and Services

2.1.1 Collection

The collection system for the Horowhenua District is represented schematically in Figure 2.



Notes:
MSWD refers to household and commercial waste
HDC Recycling is available to households using HDC bags and private bins.
Green waste is used at the Levin Landfill.

Figure 2: Horowhenua District waste collection system (2016 figures).

2.1.1.1 Residential Collection

Levin Container Rubbish (LCR) collects refuse bags throughout the district on behalf of Council. LCR also provides a kerbside recycling service as a sub-contractor to EnviroWaste Services Limited (ESL). LCR, Low Cost Bins, ESL, Lucy's Mini Bins and Waste Management NZ Limited (WMNZ) offer wheelie bin collection services for households on a commercial basis. LCR collect Council bags and their own wheelie bins at the same time. This allows LCR to service rural areas with the higher cost (lower property density) shared between Council bag and LCR's private customers.

Kerbside collection of refuse in bags and recycling in crates is available in urban and rural areas in the district (95% of residents have access to a kerbside service). Alternatively, the public may take household refuse and recycling to the transfer stations across the district, see Section 2.1.2.1.

Collection frequency is generally weekly although commercial services are offered on a fortnightly or monthly basis. Garden waste collections are available on a commercial basis.

Health and safety is an important issue for the collection of refuse and recycling with key risks including operating in a live traffic environment, manual handling of refuse bags and recycling crates, dangerous items in refuse and recycling (broken glass, needles, putrescible materials).

Common approaches to eliminating or mitigating these risks include:

- Automated collection 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 and side loading.

The Horowhenua collection services address some, but not all of the safety risks inherent in refuse and recycling collection services.

The recycling collection involves manual emptying of recycling crates into the collection vehicle with sorting of materials at Levin Container Rubbish yard in central Levin. The glass recovered from the kerbside crates is currently stockpiled at Levin Landfill and used for drainage or other construction activity. In some cases the glass is too contaminated with other materials and only suitable for disposal with general waste.

2.1.1.2 Commercial or Industrial Waste

Waste (both refuse and recycling) from commercial and industrial premises in Horowhenua District is currently collected and disposed of via Levin Transfer Station, direct to market or directly to Levin Landfill. No data is currently available about materials collected for recycling, treatment or disposal out of the District. Many national business with a local presence have comprehensive waste management and recycling systems in place, for example Progressive Enterprises (Countdown), Food Stuffs (New World, Pak n Save) and the Warehouse Group all operate waste management systems where some material is recovered and recycled (paper and cardboard) and organic material (food waste) is diverted with only residual waste disposed of at local Landfill.

2.1.1.3 Litter and Illegal Dumping

Litter bins are provided in the urban centres and popular visitors spots throughout the District. Litter bin collection is undertaken by Recreational Services Limited (Parks and Gardens) and Higgins (Road Network Maintenance) with their scope currently including:

- Litter bin emptying.
- Cleaning up after fly tipping.

Illegal dumping does occur including adjacent to transfer stations when they are closed.

2.1.2 Waste Transfer, Processing and Disposal

2.1.2.1 Transfer Stations and Recycling Drop-off

Transfer stations, where waste can be dropped off by the public, are located at Levin (owned and operated by MidWest Disposals Ltd), Foxton and Shannon. Static recycling drop-off points are provided year round at Levin, Foxton, Shannon, Opiki and Tokomaru with seasonal sites at Foxton Beach, Waitarere and Waikawa. The sites are operated under contract to HDC except Levin Transfer Station.

All of the green waste and most of the glass captured at the transfer stations and recycling stations is used at Levin Landfill. Glass from Foxton Transfer station is taken to Palmerston North's Awapuni Resource Recovery Park for recovery and transported to Auckland for recycling. Glass is used at Levin Landfill for construction (drainage, roads) unless it is too contaminated. Garden waste is shredded and mulched prior to use to make top soil replacement for landfill capping.

No weighbridge is currently installed at the Council operated transfer stations. Material from these sites is weighed as it enters Levin Transfer Station and/ or using local weighbridges e.g. Turks in Foxton. This means loads entering the transfer stations are charged on the basis of an assumed weight or estimated volume.

The Council operated transfer stations are in 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 pit (Foxton) or Huka bins (Shannon). There is potential to make changes from an operational and health and safety perspective at each site. Examples could include:

- Moving away from the general public loading into the transfer pit (Foxton) or huka bins (Shannon)
- There is a risk of falls into the bins or transfer pit during unloading, sometimes managed by dumping of material on a 'flat floor' with pushing/loading undertaken by transfer station staff.
- Flat floor designs can enable basic sorting before pushing waste into bins or transfer pit.
- Considering amended opening hours.

The recycle stations are of variable age with condition reflecting the period of time they have been in operation.

The Levin Transfer Station accepts well over 10,000 tonnes of material each year and is configured with a relatively steep constructed ramp to allow users to load materials directly into huka bins for transport to Levin Landfill. While the transfer station is a Midwest Disposal facility the site would benefit from re-development and there may be potential for Council to be involved in the development process.

The Horowhenua District waste management system and estimated quantities for 2016 are presented in Figure 3. Facility details are provided on the following pages. Figure 3 is a screen shot from a model of the Horowhenua waste management system developed for this Waste Assessment.

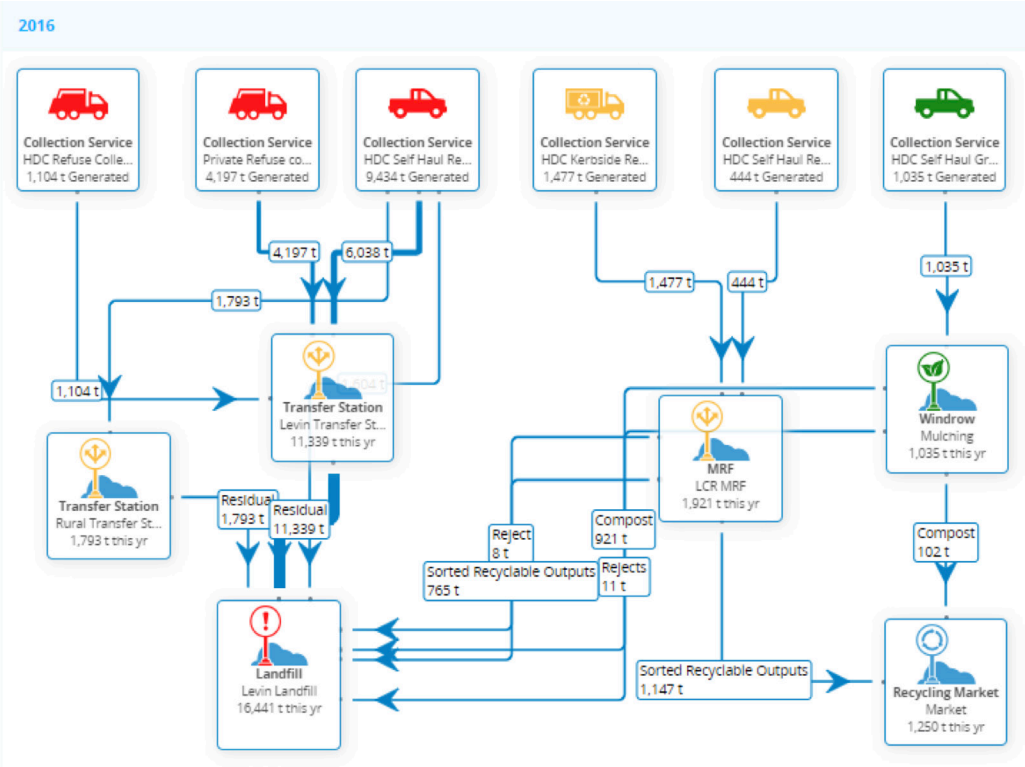


Figure 3: Waste flow diagram - collection, processing and disposal (2015/16 figures).

2.1.2.2 Materials Processing

Levin Container Rubbish operate a basic sort line for recyclable materials collected at the kerbside. This is currently operating at capacity and delivers mixed quality of materials. Glass is currently stockpiled at Levin Landfill and used in the place of aggregate at the landfill site. Other materials are marketed by LCR.

Commercial recyclables are handled through the LCR, consolidated on some sites (e.g. major retailers like supermarkets) or transported out of the district for consolidation and market or re-processing.

2.1.2.3 Markets for Recyclable Materials

Paper, plastics and cans are consolidated and processed in New Zealand (cardboard, some plastics, and colour separated glass) or exported for re-processing (some plastics, some paper, scrap metals). International markets for recyclable materials are subject to periodic uncertainty with the most recent (late 2017, early 2018) being the China's National Sword initiative that seeks to improve the quality of recyclable materials imported into China.

At the time of writing (early 2018) a number of New Zealand local authorities are advocating strongly for a container deposit scheme similar to those in place in many states in Australia. Typical proposals target beverage containers with a small refund payable on their return to an approved reception point. Introduction of this type of scheme is likely to have an impact on recyclable material markets with recovery rates likely rising (increasing supply). In some cases kerbside recycling schemes are able to claim refunds for eligible materials i.e. the scheme could provide another source of revenue for kerbside recycling.

2.1.2.4 Other Processing

Composting

Paranui Organics use wood waste and poultry manure to produce compost for sale to the general public and garden centres around the lower central north island. Their processing site is located north of Foxton.

Garden waste from Levin and Foxton Transfer stations is shredded and stockpiled at Levin Landfill. The resulting mulch is used as a soil conditioner at Levin Landfill (borrow area and former landfill cells)

Energy

Mitchpine Products Limited, north of Levin, have a wood waste fired boiler supplying a portion of the heat requirements for their site.

2.1.3 Landfills

The Levin Landfill is located 8km west of Levin on Hokio Beach Road. The site was developed by Council. The day to day operation of the landfill is contracted to Midwest Disposals Limited (Midwest). The current contract for landfill operations and management expires in 2021.

All residual waste from the district is transported to Levin Landfill. The landfill has sufficient volume to provide refuse disposal for the Horowhenua District for well in excess of the consented period of 20 years. Current operations including accepting over 15,000 TPA from Kapiti Coast District with current projections suggesting the site will be completed around 2030.

A key aspect of the arrangement with Midwest is the disposal of materials from Kapiti controlled by Midwest. This additional tonnage significantly reduces the per tonne cost of operating the Levin Landfill. Detailed analysis of the costs and revenue for the landfill operation indicates operating the landfill for Horowhenua sourced waste only would increase the per tonne cost significantly and may make out of district disposal more attractive financially.

Landfill charges reflect capital and operating costs and the landfill levy ($10 per tonne at the time of writing). The current government have indicated their intention to examine waste policies including the waste levy. This may result in changing the levy including increasing the amount charged per tonne and/or expanding the range of facilities subject to the levy[1].

[1] For example construction and demolition or industrial landfills.

2.1.4 Cost for Waste Management

2.1.4.1 Council Funding

The 2015-25 Long Term Plan sets 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 general rates. Expenditure is dominated by payments to contractors with finance costs and internal charges also featuring. This mix of funding and expenditure is projected in the 2015-2025 Long Term Plan to continue to 2025.

Refuse collection and transfer station services attract user charges. The user charges at Council operated transfer stations do not cover the full cost of providing the service with the shortfall covered from the targeted rate for waste management and general rates. The user charges for refuse collection (via bag sales) cover the full costs of providing the service with a small surplus.

This approach is consistent with the principles set out in the 2012 Waste Minimisation and Management Plan whereby Council costs for waste management services are, where possible, covered by the users of that service.

The kerbside recycling services are funded by a levy on all refuse collection services. Private service providers can either provide their own service or contract with the Council contractor to do so. In most cases they work with the Council contractor with Council paying a management fee and a contribution based on their market share for refuse collection. This a relatively complex arrangement for funding recycling and in practice the Council management fee appears to fund a large component of the recycling activity.

2.1.4.2 User Charges

Proposed rates for kerbside collection include (2017/18 figures):

- Council refuse bag (60 L): $4.00 per bag[2].
- Commercial wheelie bin services[3]:
  - $150 - $190/year for an 80L bin.
  - $250 - $400/year for bins ranging in size from 120 - 240 L.

Collection and transfer station services attract user charges. The user charges at Rural Transfer stations do not cover the full cost of providing the service with the shortfall covered from the targeted rate for waste management. The user charges for refuse collection (via bag sales) cover the full costs of providing the service and contribute to the recycling service. When compared with similar areas bag prices are high but this reflects the contribution towards the cost of kerbside recycling.

Table 1: Refuse bag retail costs - selected New Zealand councils

Area	Refuse Collection	Bag Charges
Horowhenua	Council - bags	$4.00/bag
Palmerston North	Council - bags	$2.60/bag
Manawatū District	Council - bags	$1.60/bag
Hastings	Council - bags	$2.40/bag
New Plymouth	Council - bags	$3.30/bag
Porirua, Wellington, Lower Hutt	Council - bags	$2.50/bag
Whangarei	Council - bags	$2.80/bag
Far North	Commercial - bag	$3.00/bag
Kaipara	Council - bags	$3.00/bag

[2] Including $1.00 per bag contribution to kerbside recycling service.
[3] Based on a review of prices published on service provider's websites, recycling contributions not stated.

Table 2: Horowhenua Rubbish and recycling - fees and charges

Activity/Service	Charge	
	Levin	Council
Disposal of official HDC Refuse Bag (up to 4)	$5	Free
Disposal of Private Plastic Bags (<10kgs)	$5	$4.70
Disposal of Private Plastic Bags (10kgs +)	$5	n/a
Cars - General	$28	$24
Cars - Green	$13	$12
Car boot - General	$20	$17
Car boot - Green	$10	$9
Vans/Ute/Utility - General	$42	$43
Vans/Ute/Utility - Green	$15	$17
Trailers - General (up to $2m^3$) up to 2.4m long x 1.2 wide	$53.50	$43
Trailers - Green (up to $2m^3$) up to 2.4m long x 1.2 wide	$19	$16
Large Trailers - General (per m^3) up to 4m long x 1.2 wide (minimum $45)	$178.70/T	$26/$m^3$
Large Trailers - Green (per m^3) up to 4m long x 1.2 wide (minimum $20)	$76/T	$12/$m^3$
Car Bodies (Foxton only)	n/a	Free
Paint Exchange	Free	Free
Waste Oil	$1/Ltr	$2/Ltr
Tyres (per tyre)	$6	$6
Truck/Tractor Tyres (per tyre)	$25	$12
Fridge/Freezer (per item)	$40	$31
General Whiteware (per item)	$19	$17.50
LPG Bottles/Tanks (per item)		$6

2.2 Volume and Composition of Waste and Diverted Materials

2.2.1 Waste Composition

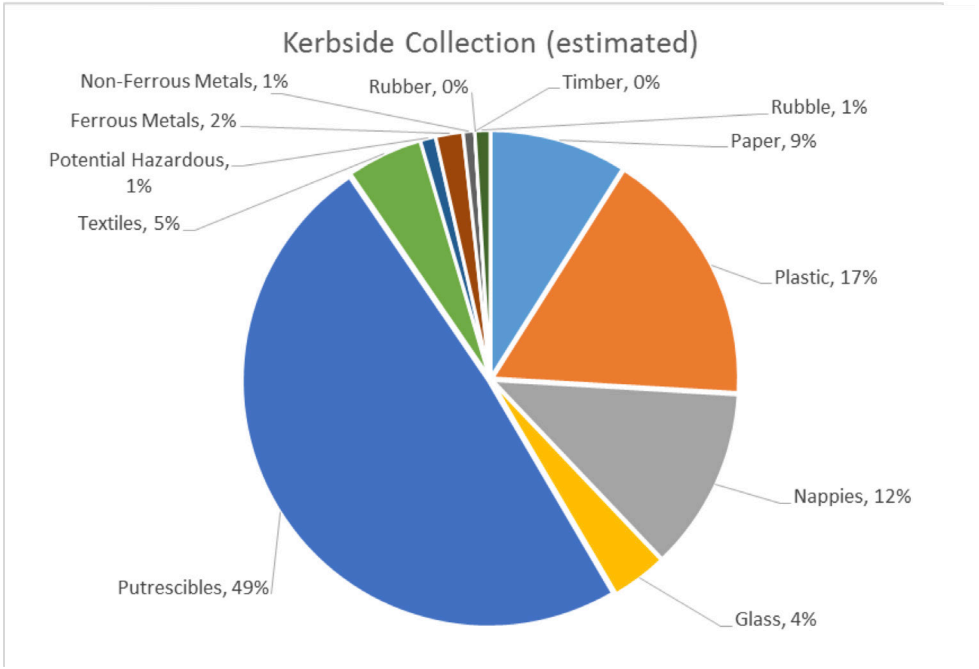
Waste composition audits provide information about the make-up of a waste stream, and can help identify materials that make up large or disproportionate parts of the waste stream to target when forming waste management and minimisation strategies. For this Waste Assessment typical waste composition data is used rather than data specific to Horowhenua District.This provides a general indication of likely waste composition in the Horowhenua District.

Data is presented in Table 3 and Figure 6.
Key points to note include:

- Putrescible material (garden waste and food scraps) make almost 50% of waste collected from households and almost a quarter of waste disposed of to landfill.
- Plastic is a significant portion of the waste stream. More detailed data for other districts suggests a significant portion of plastics are those that are not collected for recycling.
- Timber and rubble are significant for general landfilled waste.

Table 3: Waste composition

Primary Category	Kerbside collection	Direct to landfill
Paper	9%	9%
Plastic	17%	20%
Nappies	12%	5%
Glass	4%	2%
Putrescibles	49%	23%
Textiles	5%	6%
Potential Hazardous	1%	5%
Ferrous Metals	2%	3%
Non-Ferrous Metals	1%	1%
Rubber	0%	2%
Timber	0%	13%
Rubble	1%	11%
Total	100%	100%



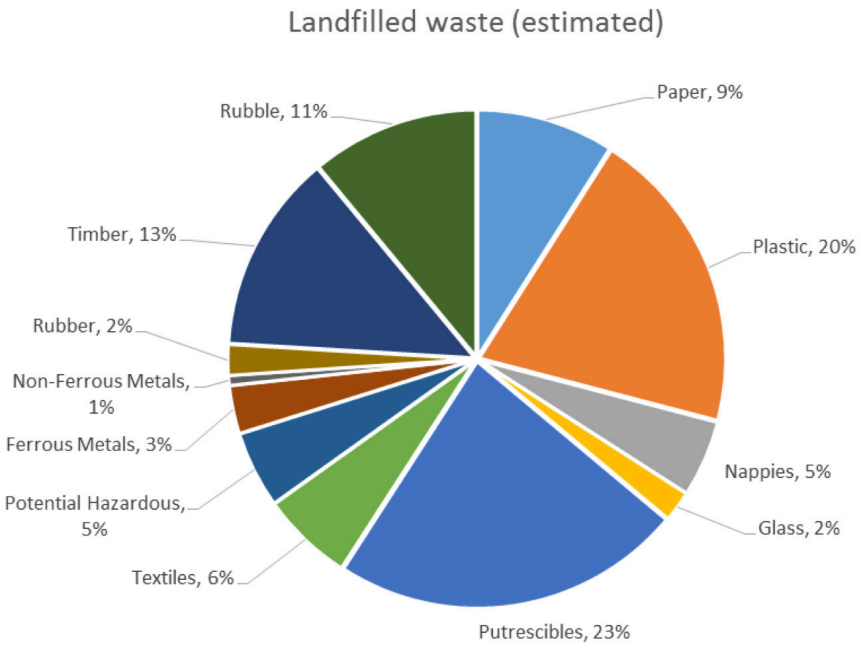


Figure 6: Refuse Composition - kerbside and landfilled.

Material taken directly to landfill or transfer station (self haul) material tends to have a larger proportion of bulky items (timber, rubble) and the putrescible fraction has a higher proportion of garden rather than food waste.

2.2.2 Kerbside and Self Haul Waste Quantities

2.2.2.1 Kerbside Waste Quantities

As noted above, Kerbside refuse in Horowhenua is collected in compactor trucks and transported to Levin Transfer station or landfill for disposal. Households can use Council refuse bags (sold at a range of retail outlets) or use one of several commercial collection services. Council also offer a crate based kerbside recycling service. Table 4 provides a summary of materials collected from the kerbside in the Horowhenua District. The total amount of refuse collected at the kerbside has been estimated using Council's estimated market share of 20% based on total bag sales per annum. Average bag weight is assumed to be around 7kg reflecting typical bag weights around New Zealand.

Table 4: Horowhenua District - kerbside waste quantities[4]

	2013	2014	2015	2016
Kerbside Refuse Collection (estimated)	3,836	5,156	5,239	4,913
HDC recycle collection	600	600	1,569	1,705
Toal Kerbside Waste	4,436	5,756	6,808	6,618
Recycling Rate	14%	10%	23%	26%

2.2.2.2 Waste Quantities at Refuse Transfer Stations and Landfill

Refuse and recyclable materials from the Horowhenua District are either transported directly to Levin Landfill or taken to one of three transfer stations noted in Section 2.1.2.1. Table 5 summarises the quantity of materials managed through the Horowhenua District transfer stations and landfills.

[4] Data sourced from waste collection and transfer station contract reporting and weighbridge records at Levin Transfer Station.

Table 5: Horowhenua District - estimated waste quantities via transfer stations or direct to landfill[5]

	2013	2014	2015	2016
Refuse to Foxton and Shannon	677	1,044	1,018	1,323
Refuse to Levin transfer station and to landfill	5,000	6,979	6,731	7,883
Recycle at transfer stations	870	935	1,580	1,563
Total waste to landfill (excluding household collections)	5,677	8,023	7,749	9,206
Recycling rate (%)	13%	10%	17%	1%
Total waste landfilled	9,513	13,213	12,801	13,755
Total waste recycled	1,470	1,535	3,149	3,268
Recycling rate (%)	10%	20%	19%	17%

2.2.2.3 Unquantified Waste

There are several waste streams that are known to exist but are difficult to quantify. Examples include rural waste managed on farms, 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. biosolids 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 waste management system, either via the transfer station network or through commercial on-farm collections.

[5] Data sourced from waste collection and transfer station contract reporting.

2.2.3 Collection and Drop-off System Performance

Combining the waste composition data with data on the quantity of waste disposed of to landfill and recycled provides a basis for determining the capture of various materials 'available' in the waste stream[6]. A summary assessment drawing on estimated quantities and composition is presented in Table 6.

Table 6: Horowhenua waste management system performance

	Bags/Bins		General		HDC Recovery	
	Composition	Tonnes/yr	Composition	Tonnes/yr	Composition	Tonnes/yr
Total	100%	5,303	100%	9,468	2,920	17%
Paper/card	14%	731	10%	964	718	30%
Plastic	20%	1,077	21%	2,017	228	7%
Recyclable plastic	2%	125	1%	68	228	54%
Organics	49%	2,599	11%	1,057	1,010	22%
Garden organics	14%	757	4%	403	1,010	47%
Ferrous	2%	95	3%	297	48	11%
Non Ferrous	1%	40	1%	61	22	18%
Glass	4%	194	1%	116	882	74%
Timber	3%	150	15%	1,403	0	0%
Other	8%	415	38%	3,555	0	0%

The available data suggests there are opportunities to capture additional recyclable material through the transfer stations and kerbside collections including organic material, timber, metals, paper, plastics and glass. Specifically:

- Paper/cardboard recovery is a relatively low 30%, it should be possible to increase the capture of paper and cardboard at both kerbside and transfer stations.
- Overall plastic recovery is low but the data suggests recovery of recyclable plastic is relatively high. Again it should be possible to increase the capture of materials at both kerbside and transfer stations.
- Organic waste recovery is under-estimated (there are no figures for material captured by commercial collections) but there is a significant

[6] From Table 3, Table 4 and Table 5

amount of material that could be targeted. There is also a need to identify long term use for material that is currently captured once capping is completed on older areas of Levin Landfill.

- Metals recovery is likely to be under-estimated, further detail is required on scrap dealer recovery but the data suggests there may be materials available for recovery in waste passing through the transfer station network.
- Glass recovery is at a good level. Some of the glass recovered is too contaminated for use and is disposed of with general waste. Further work is required to improve the quality of glass captured at the kerbside and identify higher value markets than the current use for low grade aggregate at Levin Landfill.

As noted in Table 5, recovery via transfer stations is around 20 %. This suggests there is potential to increase the recovery of materials with a focus on areas with low recovery and reasonable value. Examples include paper/cardboard and metals.

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).
- Difficult or special waste (tyres, bulk waste, dead animals).
- General waste (household and commercial waste).
- Rural waste - waste from the business of farming including agricultural plastics (wrap and chemical containers), unwanted chemicals, timber and machinery (including maintenance related waste like used oil).
- Waste from major processing sites - examples include waste treatment residuals (for example sludge), packaging (pallet wrap, broken pallets) and containers (cleaners, ingredients, oil).

2.3 Summary of District-Specific Issues

2.3.1 Waste Infrastructure - Issues Identified

In collating and considering information about the delivery of waste services in the Horowhenua District, a number of issues were identified. These issues represent challenges in delivering effective services and achieving the aims of the NZ Waste Strategy - reducing environmental harm and maximising resource efficiency. In many cases the issues also present opportunities for Council, the community and/or the private sector to improve waste minimisation and management in the District.

The issues identified include:

- Illegal dumping of waste as an ongoing issue including at transfer station gates when closed.
- The Foxton and Shannon transfer stations and network of recycling drop-off points are subsidised by rates.
- The cost for refuse bags is high compared to neighbouring Council areas.
- Rural residents are offered a roadside collection service (refuse and recycling) that is costly to operate on a per resident and per tonne basis.
- The funding arrangements for kerbside recycling are complex.
- Glass and garden waste are currently used at Levin Landfill, there are likely to be higher value uses for these materials.
- Commercial and construction waste makes up a large proportion of material disposed of to landfill from the Horowhenua District with limited information available regarding diversion activity focussed on these waste streams.
- The current kerbside collection service for recyclable materials poses health and safety risks (broken glass, manual handling) and limited capacity.
- Cost of services and sources of revenue may change over time.
- Increase or decrease in materials disposed of (and associated costs and revenue) at Levin Landfill.
- Value of recyclable materials may vary on New Zealand and international markets.
- There is potential for changes in how the waste levy is applied (levy rate, types of facilities covered).
- There is potential for the introduction of a container deposit scheme in New Zealand (that would have an impact on the value of recyclable materials).

2.3.2 Waste data - issues and constraints

While there is some information available about the quantity and composition of waste generated in the Horowhenua District the data is incomplete. The available data needs to be interpreted considering that:

- 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.
- The data regarding quantity of waste collected or processed is not complete. For example:
    - The quantity of waste composted by commercial composters has not been quantified.
    - The quantity of waste collected from commercial premises for recycling.
    - The quantity of waste generated on rural properties and processed or disposed on site.

There is a by-law in place (refer Section 3) that provides for collection of data on collection services including quantities of material collected, destination for disposal or processing and coverage, set out and participation rates. Implementation of the data provisions in the by-law in close consultation with collection and processing companies operating in the Horowhenua District will improve the availability and quality of data available.

There is also potential to improve the reporting of waste materials handled by contractors on behalf of Council. Reporting on activity as part of contract obligations should include appropriately detailed reporting on waste source, quantity and destination.

3. Policies, plans and regulation

3.1 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 minimisation and management in the Horowhenua District. These are summarised in Table 7, further detail is provided in the Horowhenua Waste Assessment (2018).

Table 7: Selected relevant policy for waste in Horowhenua District

National	Manawatu - Whanganui Region	Horowhenua
Waste Minimisation Act 2008	Horizons One Plan	Long Term Plan 2015-2025
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 Asset Management Plan
Local Government Act 2002		Previous Waste Minimisation and Management Plan
Climate Change Response Act 2002		
NZ Waste Strategy 2010		
NZ Emissions Trading Scheme		

3.2 Statutory Requirements

A 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 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

c. how implementing the plan is to be funded

d. 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 New Zealand Waste Strategy, and a Council's most recent Waste Assessment.

4. Vision, Goals, Objectives and Targets

4.1 Background

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

The relationship between Vision, Goals and Objectives is illustrated in Figure 5[7] and defined in Table 8[7].

Figure 5: Vision, goals, objectives and targets.

Table 8 provides definitions for vision, goals, objectives and targets

Vision	**The aspirational outcome for the Horowhenua District - providing an overall direction and focus**
Goal	**What the Council wants to achieve through the WMMP. The goal is not aspirational; it is achievable. It is a major step in achieving Council's vision for the WMMP.**
Objective	**The specific strategies and policies to support the achievement of the goals. Objectives are 'SMART' (specific, measurable, achievable, relevant and timely).**
Target	**A clear and measurable way to determine how well the Council is achieving its goals. Targets should also be SMART.**

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

4.2 Vision, Goals, Objectives and Targets

The vision for waste minimisation and management in the Horowhenua Region is[8].

To deliver community benefits and reduce waste [or work towards to zero waste]. Businesses and households in Horowhenua will be provided with efficient and effective waste minimisation and management services that recognise waste as a resource.

The goals for waste minimisation and management 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 can't be recycled.
3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.

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

1. To avoid creating waste.
2. To make it easy and safe to recycle.
3. To ensure households and businesses have access to appropriate disposal of residual waste.
4. To create opportunities for Horowhenua District - community partnerships, jobs, new products, more efficient businesses.
5. To reduce illegal dumping.
6. To improve community understanding of issues and opportunities for waste minimisation and management in the Horowhenua District.
7. To work with other territorial authorities, central government, industry and other parties to improve waste minimisation and management in New Zealand.

Table 9 provides a summary of the Vision - Goals and Objectives presented above and associated targets for waste minimisation and management in the Horowhenua District.

[8] This vision has been developed in workshops with Horowhenua District Council Councillors and staff.

Table 9: Vision - Goals - Objectives - Targets

Vision:	**To deliver community benefits and reduce waste or (work towards to zero waste). Horowhenua businesses and households will be provided with efficient and effective waste minimisation sand management services**	
Objective:	**Relevant Goal(s)**	**Target(s)**
1. To avoid creating waste	1. Avoid and reduce waste where we can. 3. Maximise community benefits employment, reuse of materials for economic benefit, cost effective services.	1.1 To reduce the total quantity of waste disposed of to landfill from Horowhenua on a per capita basis. The current figure is 536 kg per person ***Waste disposal < 400kg per person each year***
2. To make it easy to recycle	1. Avoid and reduce waste where we can. 2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled. 3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.	2.1 Increase in the proportion of material captured for recycling at kerbside and transfer stations. The current figures are 17% and 21% respectively. ***Kerbside recycling > 40% by 2023*** ***Recycling[9] at Refuse Transfer stations > 50 % by 2023*** 2.2 85% of people are satisfied with their recycling service. 2015/16 (Currently 75% satisfaction vs Annual Plan Target 75%). ***Residents satisfaction > 85%***
3. To ensure households and businesses have access to safe disposal of residual waste	2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled. 3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.	3.1 Satisfaction with kerbside refuse and transfer station services. Currently 75% satisfaction vs Annual Plan Target 75%. ***Residents satisfaction > 75%***
4. To create opportunities for Horowhenua District - jobs, new products, more efficient businesses	1. Avoid and reduce waste where we can. 2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled. 3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.	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***

[9] Including diverting materials from composting and reuse.

Continued from previous table

Vision:	**To deliver community benefits and reduce waste or (work towards to zero waste). Horowhenua businesses and households will be provided with efficient and effective waste minimisation sand management services**	
Objective:	**Relevant Goal(s)**	**Target(s)**
5. To reduce illegal dumping	2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled.	5.1 Reduction in illegal dumping incidents and quantity of material illegally dumped in the Horowhenua District. ***Quantity of illegally dumped waste < 2015/16 figure*** ***The number of illegal dumping incidents is < 2015/16 figure.*** 5.2 Residents satisfaction with litter and illegal dumping management. ***Residents satisfaction > 75 %***
6. To improve community understanding of issues and opportunities for waste management in the Horowhenua District.	1. Avoid and reduce waste where we can. 2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled. 3. Maximise community benefits - employment, reuse of materials for economic benefit, cost effective services.	6.1 Schools programmes delivered by Council ***Waste education is provided to >300 school aged students each year.*** 6.2 Council (or contractors) promote waste minimisation at events in the District. ***Council promotes waste minimisation at > 5 events in the District each year.***
7. To work with other territorial authorities, central government, industry and other parties to improve waste minimisation and management in New Zealand.	1. Avoid and reduce waste where we can. 2. Manage waste responsibly - make it easy to recycle and safely dispose of the materials that can't be recycled. 3. Maximise community benefits - employment, multi-use facilities, reuse of materials for economic benefit, cost effective services.	7.1 To support the implementation of product stewardship schemes in Horowhenua. ***>4 product stewardship schemes available to Horowhenua businesses and households.***

4.3 Council's Intended Role

Council will continue to adopt a largely user pays approach to delivery of waste transfer and disposal services in the District. Where there are services with a public good component Council will provide funding in whole or in part. Examples include kerbside recycling, rural transfer stations, 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 minimisation and management in the District. This includes the transfer stations in Foxton and Shannon and recycling centres across the District.

Council will provide information on waste minimisation and management to the community and make staff available for education purposes. Council will also work closely with other promoters of effective waste minimisation and management.

4.4 Protecting Public Health

Waste, particularly putrescible and hazardous waste, has the potential to be detrimental to health. Therefore, a key objective of any waste minimisation and management system is to protect public health. The risk of public health impacts can be significantly reduced by avoiding, where possible, and carefully managing, where not, contact with waste.
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.
- Excluding as far as possible vermin[10] that may spread waste or associated contaminants.

The measures proposed in the WMMP have been developed with public health objectives at the forefront.

[10] For example rodents, other stray animals, insects (flies, wasps).

5. Options for Achieving Effective and Efficient Waste Management and Minimisation

5.1 Introduction

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

This section summarises the identification and evaluation of options to meet the forecast demands of the district and to meet the goals set out in Section 0. The preferred options from this assessment will be incorporated into the WMMP as methods and feature in the Action Plan.

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

The available data suggests that there is potential to increase the diversion of material from the current estimate of around 17% across the waste management system. There are also ongoing issues with illegal dumping, challenges with obtaining robust data on waste and recycling activity and the potential for increasing quantities of materials entering the waste stream from rural properties. The focus of option identification and evaluation has been addressing these issues alongside meeting forecast demands.

5.2 Identifying Options

There are a wide range of approaches to providing waste minimisation and management services and programmes that could be adopted in Horowhenua. A useful way to consider options is the model set out in Figure 6. Simply put, effective waste minimisation and management relies on a combination of infrastructure (including collection), education/ information and regulation or policy. These are supported by having the right data to inform strategic and operational decision making.

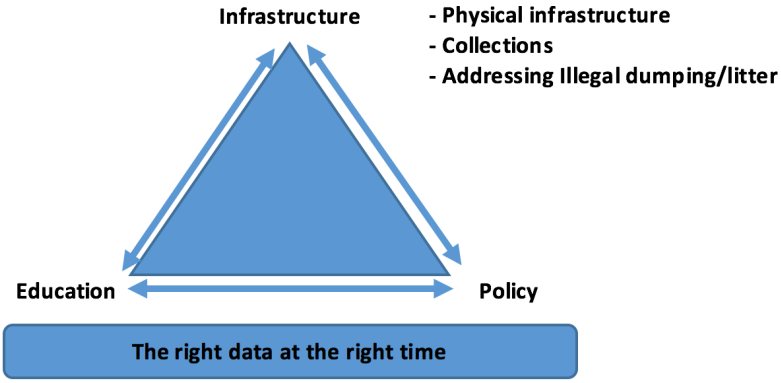


Figure 6: Effective Waste Minimisation and Management.

For this waste assessment options have been identified by considering key challenges for waste minimisation and management in the Horowhenua District (Refer Section 2.3), referencing approaches adopted elsewhere and looking for new solutions where appropriate. Options have also been considered with reference to the current recovery rates of key materials[11] (see Section 2.2.2.1).

Based on the model set out in Figure 6 options considered can be grouped 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 drop off facilities, waste sorting, waste processing and/or disposal facilities;
- Managing the negative impacts of waste - litter/ illegal dumping clean-up, closed landfills

Education

- Changing behaviour - education programmes targeting schools, businesses and/or households
- Support infrastructure - information on how to use collection and drop-off services to maximise recovery and maintain the quality of recovered materials (to maximise their value).
- Contributing to national education/information programmes.

[11] Key materials include paper/card, plastics, glass, organic waste, metals, glass and timber.

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 minimisation and management.
- Working with 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 in Section 2.2.2.1 and summarised in Table 10.

Table 10: Priority wastes and waste sources

National	Other materials requiring active management include:	Water sources
Organic Waste	Hazardous waste	Rural waste
Glass	Difficult or special waste	Industrial processing
Paper/Cardboard	General waste	
Metals	e-waste	
Plastics		
Timber		

5.3 Options for the Future

Based on the analysis and discussion presented in the Waste Assessment (Appendix A) the following options should be included in an action plan for the Horowhenua District Council Waste Minimisation and Management Plan.

Infrastructure Actions

- Progress procurement for a new refuse collection contract as a continuation of the existing service (user pays refuse bags) with a strong focus on managing health and safety and managing market share.
- Progress procurement for a new recycling collection contract focussed on reducing health and safety risks, producing high quality recyclable materials and increasing the capture of recyclable materials from households. Consider local and out of district sorting of co-mingled paper, plastics and cans.
- Progress procurement for a new transfer station operations contract (Foxton and Shannon) focussed on maintaining an acceptable level of service 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 food and garden waste collection and food waste only collection.
- Complete detailed analysis[12] of optimising services for bulky household waste including the role of transfer stations, potential for a voucher system and potential bulky waste collections.
- Complete detailed analysis of sorting of C&I and/or C&D waste prior to disposal of residual material. Include examination of linkages with sorting of kerbside recyclable materials and bulky waste collections.
- Council to confirm a medium term strategy for Levin Landfill that provides for full funding of historic and current development, operations, closure and appropriate management after closure.
- Work with producers and importers to improve the management of hazardous waste, including providing options in the District for specific waste streams like e-waste.

Education Actions

- Continue to update and maintain information on the Council website regarding waste and recycling collection and drop off services in the Horowhenua District.
- Provide clear information and education to promote the effective use of private sector (for example farm plastics, soft plastics recycling, Paintwise) and Council operated recycling services.
- Disseminate information to all 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.
- 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).

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 minimisation and management with consideration of co-funding. Applications for funding should also be assessed for their ability to deliver the promised benefits i.e. due diligence on organisation capability, governance and accountability. Consideration also needs to be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.

[12] Consider cost of service, diversion of materials, fairness/equity, safety and protection of the environment (illegal dumping).

- Review and amend the existing Solid Waste Bylaw (2014). This will focus on licensing, provision of recycling and consider limiting receptacle size[13]. With a small number of collection providers operating in the District Council is in a position to develop a pragmatic but effective approach. This will require consultation with the collection providers prior to formally notifying any proposed changes. The target implementation for the updated bylaw is December 2018.
- Continue to report on progress against the targets in the WMMP in Annual Reports.
- Collaborate with local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy.
- Continue to actively address illegal dumping activity including where possible identifying perpetrators and if required undertaking clean-up activity.

Indicative Costs

The evaluation of options included a high level estimate of costs for various actions. Appropriately staged option investigation, procurement and policy design can be accommodated within Council's existing budget for waste services. New contracts, new services and capital investment will all have an impact on costs. Indicative cost impacts are summarised in Table 11.

Table 11: Cost impact of proposed actions (potential actions in italics)

Year	Contracts/Services	Policy and Investigations
2017/18	No change from current	Rural waste
2018/19	New refuse, recycling and transfer station contract (estimate approx. 30% or 0.25M increase per annum).	Bylaw amendment Grant funding scheme development.
2019/20	No change from 2018/19	Investigate organic waste options
2020/21	No change from 2019/20	Investigate bulky, commercial and construction waste options
2021/22	No change from 2020/21	*LTP proposals for organic, bulky, commercial and/or construction waste recovery.*
2022/23	No change from 2021/22	*Potential procurement for organic and bulky waste recovery service*
2023/24	No change from 2022/23 *Potential new organic and/or bulky waste service (est 0.75 - 1.0M increase)*	*Potential procurement for commercial and construction waste recovery service.*

[13] The bylaw could limit size of new containers (120-140 L is common for Council provided collections or where limits have been introduced elsewhere. For existing containers collection frequency could be limited to provide similar weekly capacity e.g. fortnightly collection of 240L wheelie bin.).

6. Funding the plan

6.1 Plan Implementation Funding

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

User Charges

will fund kerbside refuse collection, disposal of materials at landfill and the disposal or management of materials at Transfer Stations.

Ratepayer Funds

will provide public good focussed services. Examples include roadside recycling collection, supporting transfer station operations where user charges are not adequate to cover the full cost of operation, illegal dumping clean-ups, litter bin servicing, licensing implementation, education activities and reporting on plan implementation.

Levy Payments

will fund activities that promote or achieve the Goals and Objectives of this Waste Minimisation and Management Plan.

6.2 Grants and Advances of Monies

As part of the implementation of the Waste Minimisation and Management Plan 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.

Criteria will be based on the funded activities contribution to promoting and achieving the Vision, Goals and Objectives for waste minimisation and management. Activities with co-funding will be preferred with Council expecting 50% or more contribution from partners other than council.

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.

6.3 Waste Minimisation Levy Expenditure

Council currently uses the Waste Levy to fund a small range of activities that includes waste minimisation education in schools. The remainder of the levy is used to help subsidise the kerbside recycling services in the district. There is scope here to improve effectiveness of the levy by funding services and programs directed towards developing new systems and programs, outside of typical Council services, that address waste minimisation.

7. Monitoring, Evaluating and Reporting Progress

This Waste Minimisation and Management Plan will only have an impact in the Horowhenua District if appropriate action is taken to achieve the Vision - Goals - Objectives. The Targets (Section 4.2) provide high level measure of progress. Monitoring, evaluation and reporting will focus on gathering data to assess progress against these targets.

7.1 Monitoring and Evaluation

The assessment of the current situation highlighted gaps in information about waste generation, collection, processing and management in the Horowhenua District. In some cases information exists but is not available to council[14] while in others data is not currently available[15].

Progress in achieving the Vision - Goals - Objectives of this Waste Minimisation and Management Plan will be monitored by collecting the data outlined in Table 12.

Table 12: Data source and description

Data Source	Information	Comment
Council contractors	Illegal dumping Litter (bins, clean-up) Kerbside refuse Kerbside recycling Transfer station refuse Transfer station recycling/recover Recycling station recycling Landfill refuse	Contract reporting
Other collectors	Kerbside/Business refuse	By-law data requirements
Waste processor	Materials processed	By-law data requirements
Council contact database	Illegal dumping incidents	
Customer Surveys	Residents satisfaction	
Council Activity Reporting (Annual Report)	By-law implementation (licensing) Data summary	

[14] For example regarding private sector collection services.
[15] For example regarding the number of households participating in the kerbside recycling collection service.

Continued from previous table

Data Source	Information	Comment
Targeted data collection	**Solid Waste Analysis Protocol** **Surveys (waste composition)** **Kerbside collection surveys (participation, set out rates)** **Recycling contamination survey**	**Contract requirement or targeted survey**

Some of the activities in the Action Plan are focussed on securing the information noted in Table 12. For example ongoing implementation of licensing (based on the existing by-law) and improving reporting under existing and future council contracts.

Evaluation of the data collected will focus on measuring progress against the targets set out in Section 4.2. The periodic review of the Action Plan (see Section 8 of the Action Plan) will consider how effective the actions underway or completed have been in achieving the Vision - Goals - Objectives of this Plan.

7.2 Reporting

Progress on implementing this Waste Minimisation and Management Plan will be reporting in the Horowhenua District Council's Annual Report each year. Reporting will note current performance against the targets based on available information. In the early stages of the Plan implementation it is likely that there will be significant gaps in the available data limiting Council's ability to quantify progress.

Part B – Action Plan

8. Introduction

This Action Plan sets out the programme of action for achieving the Vision - Goals - Objectives and targets of the Waste Minimisation and Management Plan, as described in Part A – Strategy (Section 0), and should be considered in conjunction with the full Waste Minimisation and Management Plan.

This Action Plan covers the full life (six years) of the Waste Minimisation and Management Plan but provides more detail for years one and two. The Action Plan sets out actions with operational and financial implications for Horowhenua District Council.

Consistent with Council's operational planning obligations under the Local Government Act 2002 activities set out in this Action Plan will need to be reflected in the relevant Horowhenua Long Term Plan and Annual Plan[16]. This means the plan should be reviewed as part of the annual planning process (with a focus on 12-18 months of future activity) and Long Term Planning process (with a focus on a 3-5 year horizon).

The operational planning and funding implications of the activities set out in this Action Plan are noted in the Action Planning tables.

9. Funding Structure

(see also Part A, section 6)

9.1 Plan Implementation Funding

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

User Charges

will fund kerbside refuse collection, disposal of materials at landfill and the disposal or management of materials at Transfer Stations.

Ratepayer Funds

will provide public good focussed services. Examples include roadside recycling collection, supporting transfer station operations where user charges are not adequate to cover the full cost of operation, illegal dumping clean-ups, litter bin servicing, licensing implementation, education activities and reporting on plan implementation.

Levy Payments

will fund activities that promote or achieve the Goals and Objectives of this Waste Minimisation and Management Plan.

Details of funding sources, quantities and allocation can be found in Council's Long Term Plan and Annual Plan updates to the Long Term Plan.

9.2 Grants and Advances of Monies

As part of the implementation of the Waste Minimisation and Management Plan 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.

Criteria will be based on the funded activities contribution to promoting and achieving the Vision, Goals and Objectives for waste minimisation and

[16] Currently 2015-2025 Long Term Plan and 2016/17 Annual Plan.

management. Activities with co-funding will be preferred with Council expecting 50% or more contribution from partners other than council.

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.

9.3 Waste Minimisation Levy Expenditure

Council currently uses the Waste Levy to fund a small range of activities that includes waste minimisation education in schools. The remainder of the levy is used to help subsidise the kerbside recycling services in the district. There is scope here to improve effectiveness of the levy by funding services and programs directed towards developing new systems and programs, outside of typical Council services, that address waste minimisation.

10. Targets and Measurements

The Targets set out in Section 4.2 of Part A of this Waste Minimisation and Management Plan 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 Waste Minimisation and Management Plan will be monitored by collecting the data outlined in Table 13 (repeating Table 12 from Section 7 Monitoring, evaluating and reporting progress).

Table 13: Data source and description

Data source	Information	Comment
Council contractors	Illegal dumping Litter (bins, clean-up) Kerbside refuse Kerbside recycling Transfer station refuse Transfer station recycling/recover Recycling station recycling Landfill refuse	Contract reporting
Other collectors	Kerbside/Business refuse	By-law data requirements
Waste processor	Materials processed	By-law data requirements
Council contact database	Illegal dumping incidents	
Customer Surveys	Residents satisfaction	
Council Activity Reporting (Annual Report)	By-law implementation (licensing) Data summary	
Targeted data collection	Solid Waste Analysis Protocol Surveys (waste composition) Kerbside collection survey (participation, set out rates) Surveys (waste composition) Recycling contamination survey	Contact requirement or targeted survey

Some of the activities in this Action Plan are focussed on securing the information noted in Table 13. For example ongoing implementation of licensing (based on the existing by-law) and improving reporting under existing and future Council contracts.

Periodic review of the Action Plan (see Section 8 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 14 links Targets to measures noted in Table 13. Table 15 provides definitions for key measures.

Table 14: Measuring progress against targets

Target	Measure
1.1 To reduce the total quantity of waste disposed of to landfill from Horowhenua on a per capita basis. The current figure is 536 kg per person. Waste disposal < 400 kg per person each year	T of waste disposed of to landfill per capita
2.1 Increase in the proportion of material captured for recycling at kerbside and transfer stations. The current figures are 21% and 13% respectively. *Kerbside recycling > 40% by 2023* *Recycling[17] at Refuse Transfer stations > 50 % by 2023*	% of waste recycled per year
3.1 Satisfaction with kerbside recycling and transfer station services. *Residents satisfaction > 75%*	Residents satisfaction survey results
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	Summary reporting on Waste Minimisation and Management Plan in Annual Report. Grant applications invited.
5.1 Reduction in illegal dumping incidents and quantity of material illegally dumped in the Horowhenua District.	Number of incidents and quantity of illegally dumped material
5.2 Residents satisfaction with litter and illegal dumping. Residents satisfaction > 75 %	Residents satisfaction survey results
6.1 Schools programmes delivered by Council Waste education is provided to >300 school aged students each year.	Number of students receiving waste education
6.2 Council (or contractors) promote waste minimisation at events in the District. Council promotes waste minimisation at > five events in the District each year.	Number of events addressing waste minimisation.

[17] Including diverting materials for composting and reuse.

Table 15: Measure definitions

Measure	Definition
T of waste disposed of to landfill per capita	Total quantity of waste disposed of to landfill (from contract and by-law reporting) divided by Horowhenua usually Resident Population
T of waste recycled per year	Total quantity of waste recycled or recovered (from contract and by-law reporting) divided by Total quantity of waste disposed of to landfill (from contract and by-law reporting)
Residents satisfaction	Measure as defined in LTP 2015-2025 or later LTP
T of illegal dumped material	Total quantity of illegally dumped material picked up by Horowhenua District contractors per year.

11. Action Plan

The action plan as set out in the following pages has been developed to enable the Horowhenua District Council and Horowhenua community to work towards achieving the Vision - Goals - Objectives set out in the Waste Minimisation and Management Plan. The Action Plan provides a detailed plan of action for years one and two with long term actions mentioned but not detailed. Where actions have operational or financial implications they need to be confirmed in the Councils core planning documents - the Long Term Plan and Annual Plan.

The Waste Assessment recommended the following options be included in an action plan for the Horowhenua District Council Waste Minimisation and Management Plan.

Infrastructure Actions

- Progress procurement for a new refuse collection contract as a continuation of the existing service (user pays refuse bags) with a strong focus on managing health and safety and managing market share.
- Progress procurement for a new recycling collection contract focussed on reducing health and safety risks, producing high quality recyclable materials and increasing the capture of recyclable materials from households. Consider local and out of district sorting of co-mingled paper, plastics and cans.
- Progress procurement for a new transfer station operations contract (Foxton and Shannon) focussed on maintaining an acceptable level of service 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 food and garden waste collection and food waste only collection.
- Complete detailed analysis[18] of optimising services for bulky household waste including the role of transfer stations, potential for a voucher system and potential bulky waste collections.
- Complete detailed analysis of sorting of C&I and/or C&D waste prior to disposal of residual material. Include examination of linkages with sorting of kerbside recyclable materials and bulky waste collections.

[18] Consider cost of service, diversion of materials, fairness/equity, safety and protection of the environment (illegal dumping).

- Council to confirm a medium term strategy for Levin Landfill that provides for full funding of historic and current development, operations, closure and appropriate management after closure.
- Work with producers and importers to improve the management of hazardous waste, including providing options in the District for specific waste streams like e-waste.

Education Actions

- Continue to update and maintain information on the Council website regarding waste and recycling collection and drop off services in the Horowhenua District.
- Provide clear information and education to promote the effective use of private sector (for example farm plastics, soft plastics recycling, Paintwise) and Council operated recycling services.
- Disseminate information to all residents (including holiday makers/temporary residents) including national programmes like Love Food Hate Waste.
- Maintaining school education programmes, support environmental education activities for schools, homes and businesses.
- 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).

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 minimisation and management with consideration of co-funding. Applications for funding should also be assessed for their ability to deliver the promised benefits i.e. due diligence on organisation capability, governance and accountability. Consideration also needs to be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.
- Review and amend the existing Solid Waste Bylaw (2014). This will focus on licensing, provision of recycling and consider limiting receptacle size[19]. With a small number of collection providers operating in the district, Council is in a position to develop a pragmatic but effective approach. This will require consultation with the collection providers prior to formally notifying any proposed changes. The target implementation for the updated bylaw is December 2018.
- Continue to report on progress against the targets in the WMMP in Annual Reports.
- Collaborate with local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy.
- Continue to actively address illegal dumping activity including where possible identifying perpetrators and if required undertaking clean-up activity.

[19] The bylaw could limit size of new containers (120-140 L is common for Council provided collections or where limits have been introduced elsewhere). For existing containers collection frequency could be limited to provide similar weekly capacity e.g. fortnightly collection of 240L wheelie bin.

11.1 Action Planning Tables

Proposed as part of this draft Waste Minimisation and Management Plan

Table 16: Infrastructure actions

Action (Infrastructure)	Timeline	Funding	Objectives(s)	Target(s)
a. Progress procurement for a new refuse collection contract as a continuation of the existing service (user pays refuse bags) with a strong focus on managing health and safety and managing market share.	December 2018	Rates (existing)[20]	3	3.1
b. Progress procurement for a new recycling collection contract focussed on reducing health and safety risks, producing high quality recyclable materials and increasing the capture of recyclable materials from households. Consider local and out of district sorting of co-mingled paper, plastics and cans.	December 2018	Rates (existing, likely to increase)[21]	1, 2	1.1, 2.1, 2.2
c. Progress procurement for a new transfer station operations contract (Foxton and Shannon) focussed on maintaining an acceptable level of service and maximising recovery of materials including recyclable materials, organic waste and reusable items.	June 2019	Rates (existing)	1, 2, 3	1.1, 2.1, 2.2, 3.1
d. Complete detailed analysis of organic waste collection options including the status quo (private sector services), a food and garden waste collection and food waste only collection.	June 2020	Rates (existing)	1, 2, 3	1.1, 2.1, 2.2, 3.1
e. Complete detailed analysis[22] of optimising services for bulky household waste including the role of transfer stations, potential for a voucher system and potential bulky waste collections.	June 2021	Rates (existing)	1, 2, 3	1.1, 2.1, 2.2, 3.1
f. Complete detailed analysis of sorting of C&I and or C&D waste prior to disposal of residual material. Include examination of linkages with sorting of kerbside recyclable materials and bulky waste collections.	June 2021	Rates (existing	1, 2, 3	1.1, 2.1, 2.2, 3.1

[20] Proposed changes to funding of recycling (via a levy on refuse collection) mean both costs and revenue are likely to change.
[21] With changes in the funding approach and value of collected materials and new recycling service (wheelie bins and glass crates) proposed costs are likely to increase.
[22] Consider cost of service, diversion of materials, fairness/equity, safety and protection of the environment (illegal dumping).

Continued from previous table

Action (Infrastructure)	Timeline	Funding	Objectives(s)	Target(s)
g. Council to confirm a medium term strategy for Levin Landfill that provides for full funding of historic and current development, operations, closure and appropriate management after close.	June 2018	Rates (existing)	3	3.1
h. Work with producers and importers to improve the management of hazardous waste, including providing options in the District for specific waste streams like e-waste.	December 2018 and ongoing	Rates (existing)	1, 3, 6, 7	1.1, 2.1, 2.2, 3.1, 7.1

Table 17: Education actions

Action (Education)	Timeline	Funding	Objectives(s)	Target(s)
i. Continue to update and maintain information on the Council website regarding waste and recycling collection and drop off services in the Horowhenua District.	Ongoing	Rates (existing)	2, 3, 6	1.1, 2.1, 2.2, 3.1, 6.2
j. Provide clear information and education to promote the effective use of private sector (for example farm plastics, soft plastics recycling, Paintwise) and Council operated recycling services.	Ongoing	Rates (existing)	2, 3, 6	1.1, 2.1, 2.2, 3.1
k. Disseminate information to all residents (including holiday makers/temporary residents) including national programmes like Love Food Hate Waste.	Ongoing	Rates (existing)	2, 3, 6, 7	1.1, 2.1, 2.2, 3.1, 7.1
l. Maintaining school education programmes, support environmental education activities for schools, homes and businesses.	Ongoing		6	6.1
m. 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).	Ongoing	Rates (existing)	5, 6	5.1, 5.2

Table 18: Policy actions

Action (Policy)	Timeline	Funding	Objectives(s)	Target(s)
n. 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 minimisation and management with consideration of co-funding. Applications for funding should also be assessed for their ability to deliver the promised benefits i.e. due diligence on organisation capability, governance and accountability. Consideration also needs to be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.	June 2019	Waste levy	4	4.1
o. Review and amend the existing Solid Waste Bylaw (2014). This will focus on licensing, provision of recycling[23] and consider limiting receptacle size[24]. With a small number of collection providers operating in the district, Council is in a position to develop a pragmatic but effective approach. This will require consultation with the collection providers prior to formally notifying any proposed changes. The target implementation for the updated bylaw is December 2018.	December 2018	Rates (existing)	1, 2, 3	1.1, 2.1
p. Continue to report on progress against the targets in the WMMP in Annual Reports.	June 2018 and ongoing	Rates (existing)	4	4.1
q. Collaborate with local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy.	Ongoing	Rates (existing)	7	7.1
r. Continue to actively address illegal dumping activity including where possible identifying perpetrators and if required undertaking clean-up activity.	Ongoing	Rates (existing)	5	5.1, 5.2

[23] Due to the complexity of the current system it is proposed to remove the requirement to provide a recycling service with Council providing a rates funded service. This will enable Council to reduce the cost of official refuse bags.

[24] The bylaw could limit size of new containers (120-140 L is common for Council provided collections or where limits have been introduced elsewhere). For existing containers collection frequency could be limited to provide similar weekly capacity e.g. fortnightly collection of 240L wheelie bin.

Table 19: Timeline

2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Infrastructure					
Services					
Contracts					
Refuse Collection	Refuse Collection	Refuse Collection	Refuse Collection	Refuse Collection	Refuse 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*
	Collaborate with product owners on problem products e.g. e-waste			*Tender/Appoint Bulky waste service*	*Bulky waste service*
					Tender/Appoint C&D / C&I waste serviceoblem products e.g. e-waste
Investigations					
	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*		
Education/ Information					
Green waste and food waste services	Green waste and food waste services	Green waste and food waste services	Green waste and food waste services	Green waste and food waste services	Green waste and food waste services
Council services	Council services	Council services	Council services	Council services	Council services
For holidaymakers	For holidaymakers	For holidaymakers	For holidaymakers	For holidaymakers	For holidaymakers
Schools	Schools	Schools	Schools	Schools	Schools
Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping

Continued from previous table

2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Policy					
Develop grant funding criteria	Grant funding round	Grant funding round	Grant funding round	Grant funding round	Grant funding round
By-law amendment	By-law amendment	By-law amendment	By-law amendment	By-law amendment	By-law amendment
Report on progress in 2017/18 Annual Report.	Report on progress in 2018/19 Annual Report.	Report on progress in 2019/20 Annual Report.	Report on progress in 2020/21 Annual Report.	Report on progress in 2021/22 Annual Report.	Report on progress in 2022/23 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

12. Applicability

This report is based off a report of the same name, produced by Tonkin & Taylor Ltd. It has been updated into a format that is in line with Council's policies. The content of this report, and the original, has been prepared for the exclusive use of Horowhenua District Council, with respect to the particular brief given and it may not be relied upon in other contexts or for any other purpose, or by any person other than the client without prior written agreement.

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