

# Whangarei Waste Minimisation and Management Plan

September 2017

## Table of contents

Part A – Strategy .....	5
1. Introduction .....	6
1.1 Purpose of the plan.....	6
1.2 Scope of plan .....	6
1.3 Current status of plan .....	7
1.4 Plan review .....	7
2 The waste situation.....	8
2.1 Volume and composition of waste and diverted materials .....	8
2.1.1 Waste composition .....	8
2.1.2 Collection and drop-off system performance.....	10
2.2 Infrastructure and services .....	11
2.2.1 Collection .....	11
2.2.2 Waste transfer, processing and disposal.....	12
2.2.3 Costs for waste management.....	14
2.2.4 Waste data - issues and constraints.....	14
2.2.5 Waste infrastructure - issues identified.....	14
3 Policies, plans and regulation.....	15
3.1 Summary of guiding policies, plans and legislation that affect the WMMP .....	15
3.2 Statutory requirements .....	15
4 Vision, goals, objectives and targets .....	16
4.1 Background.....	16
4.2 Vision, goals, objectives and targets .....	17
4.3 Council’s intended role .....	20
4.4 Protecting public health .....	20
5 Options for achieving effective and efficient waste management and minimisation .....	21
5.1 Introduction .....	21
5.2 Identifying options.....	21
5.3 Options for the future .....	23
6 Funding the plan.....	25
6.1 Plan implementation funding .....	25
6.2 Grants and advances of monies .....	25
6.3 Waste minimisation levy expenditure .....	25
7 Monitoring, evaluating and reporting progress .....	26
7.1 Monitoring and evaluation.....	26
7.2 Reporting .....	27
Part B – Action Plan.....	28
8 Introduction.....	29
9 Funding structure [see also Part A, section 6] .....	30

9.1	Plan implementation funding .....	30
9.2	Grants and advances of monies .....	30
9.3	Waste minimisation levy expenditure .....	30
10	Targets and measurement.....	31
11	Action plan .....	33
11.1	Action planning tables.....	35
12	Applicability .....	40



**Appendix A : Whangarei Waste Assessment (2017)**



**Part A – Strategy**

# 1. Introduction

## 1.1 Purpose of the plan

As a Council we recognise the importance of looking after our environment for future generations. This is reflected in our commitment to Kaitiakitanga/guardianship and leads us to actively consider how to use resources wisely and ensure that we manage waste in ways that protect the environment.

This Waste Minimisation and Management Plan (WMMP) sets out how the Whangarei District Council (Council) will progress efficient and effective waste management and minimisation in the Whangarei District. The Plan paves the way forward and belongs to the people of Whangarei. It considers current policy and the legal framework and Whangarei 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.

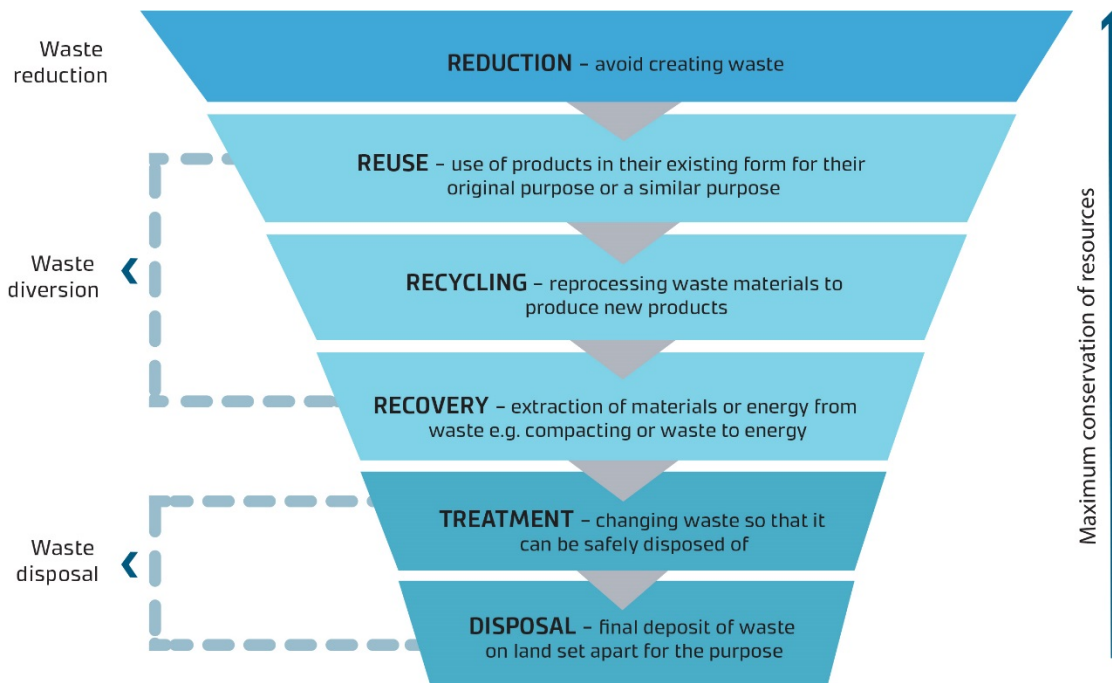


Figure 1 The Waste Hierarchy

## 1.2 Scope of plan

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

### **1.3 Current status of plan**

#### **September 2017**

This plan is a new plan developed to replace the 2012 Waste Minimisation and Management Plan. The plan reflects input from Councillors and the public including through a formal consultation process. The Plan was adopted on 28 September 2017 by Council as a framework and guide for waste minimisation and Management activity in the Whangarei District from 2017 to 2023.

### **1.4 Plan review**

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

## 2 The waste situation

### 2.1 Volume and composition of waste and diverted materials

#### 2.1.1 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 which can then be targeted when forming waste management and minimisation strategies. Historic and current waste composition in Whangarei is shown in Figure 2.

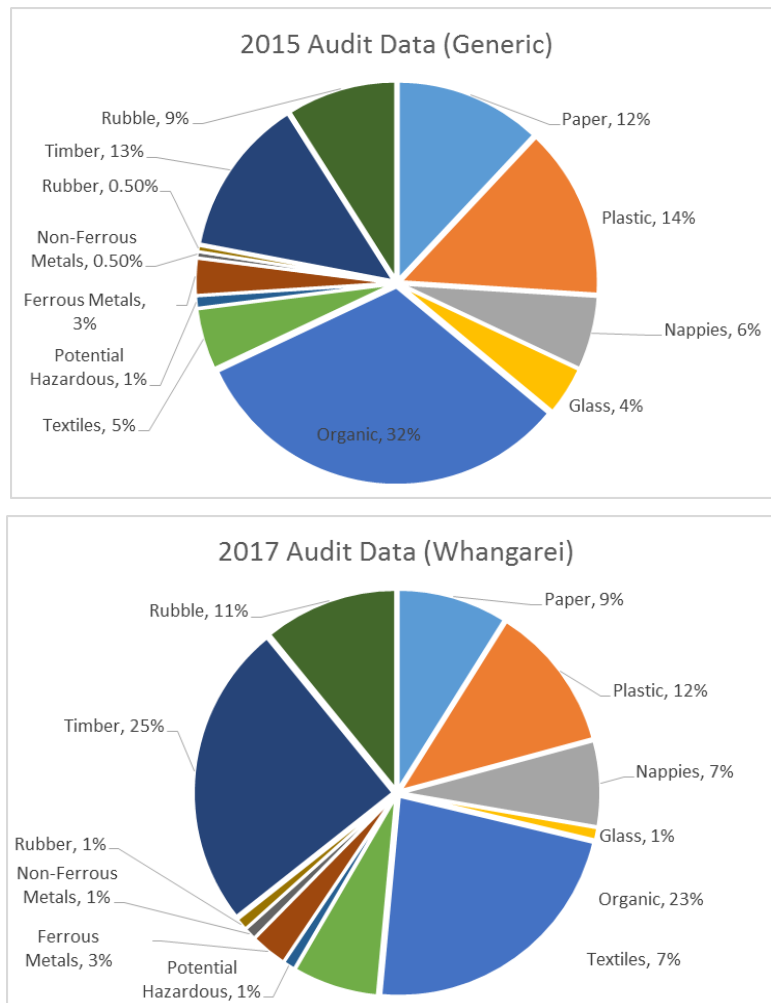


Figure 2 Refuse Composition 2008 and 2017<sup>1</sup>

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

#### Kerbside and self haul waste quantities

Kerbside refuse in Whangarei District is collected in compactor trucks and consolidated at ReSort or transported directly to Puwera Landfill. Households can use Council refuse bags or stickers (sold at a range of retail outlets) or use one of several commercial wheelie bin services. Based on bag and

<sup>1</sup> 2008 data sourced from 2012 WMMP, 2017 data is from preliminary reporting of waste composition surveys completed in mid 2017.



sticker sales, around 75 % of households use the Council collection service. Using average container weights and assuming the remaining houses predominantly use 240 L wheelie bins provides a basis for developing the estimate of total kerbside refuse collected presented in Table 1.

Kerbside recycling is collected from rural and urban households with materials collected at the kerbside in Council provided crates. Materials are sorted at the kerbside and consolidated at ReSort and Uretiti Transfer Station prior to transport to markets or for further sorting. The data summarised in Table 1 suggests a diversion rate of around 25 % of materials collected from households in 2015/16.

**Table 1 Kerbside waste quantities<sup>2</sup>**

	2011/12	2012/13	2013/14	2014/15	2015/16
Kerbside refuse collection	16,990	17,736	14,990	17,366	18,424
WDC recycle collection	4,524	4,767	5,509	5,824	6,195
<b>Total kerbside waste</b>	<b>21,514</b>	<b>22,503</b>	<b>20,499</b>	<b>23,190</b>	<b>24,619</b>
<b>Recycling rate (%)</b>	<b>22%</b>	<b>21%</b>	<b>21%</b>	<b>27%</b>	<b>25%</b>

Total refuse quantities are measured in tonnes as they leave each transfer station and are reported for the rural transfer stations by the transfer station operations contractor. The data records material leaving each transfer station and their final destination, i.e. transported to Puwera Landfill or sold. There is no breakdown of where the waste originates i.e. kerbside or self haul from households (Municipal Solid Waste or MSW), businesses (Commercial and Industrial or C&I) or construction activity (Construction and Demolition or C&D).

The data presented in Table 2 suggests a diversion rate of 44 % of materials entering the transfer stations. The diversion rate at rural transfer stations is lower, reflecting the lack of green waste diversion at some sites. When all waste (i.e. via transfer station or transported directly to Puwera Landfill) is taken into account, the diversion rate drops to around 29 %

**Table 2: Estimated Waste Quantities via transfer stations or direct to landfill 2011 - 2016<sup>3</sup>**

	2011/12	2012/13	2013/14	2014/15	2015/16
Refuse via transfer stations					
Casual transfer station users <sup>4</sup>	9,526	9,660	9,665	9,367	8,241
Commercial	8,646	8,768	8,772	8,502	7,480
Recycle (transfer stations only)	12,697	12,697	12,876	12,882	12,485
Total waste via transfer stations	30,869	31,125	31,313	30,751	28,206
<b>Recycling rate (%)</b>	<b>41%</b>	<b>41%</b>	<b>41%</b>	<b>42%</b>	<b>44%</b>
Total waste landfilled	50,160	51,375	48,644	49,983	47,121
Total waste recycled	18,586	19,092	19,421	19,170	19,407
<b>Recycling rate (%)</b>	<b>27%</b>	<b>27%</b>	<b>29%</b>	<b>28%</b>	<b>29%</b>

<sup>2</sup> Data sourced from waste collection and transfer station contract reporting and weighbridge records at Resort and Puwera Landfill.

<sup>3</sup> Data sourced from waste collection and transfer station contract reporting, ReSort weighbridge records and Puwera Landfill weighbridge records.

<sup>4</sup> Includes waste from households and commercial activities transported directly to transfer station i.e. not by a waste collector.

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 (scrap metal, industrial by-products, commercial recycling) and waste materials managed within manufacturing operations (e.g. biosolids from food processing operations applied to land, refining 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 system.

### 2.1.2 Collection and drop-off system performance

The Whangarei District Council Resident Satisfaction Survey (May 2016) suggests 90 % participation rate for recycling collection and 85-90 % participation in the kerbside refuse collection. Average bag weight (from the waste composition survey) is around 6 kg.

Market share is difficult to estimate without detailed surveys of the refuse collection service and data for private sector collections. If it is assumed households put out an average weight bag every week, the collected waste tonnage suggests the market share is closer to around 75 % of households. If the average weight of a wheelie bin is also taking into account, Council market share by tonnage could be more like 45 to 50 %.

The available composition data suggests there are opportunities to capture additional recyclable material through the transfer stations and kerbside collections, including:

- While **paper/cardboard** recovery is reasonable it should be possible to increase the capture of paper and cardboard at both kerbside and transfer stations.
- **Plastic** recovery is low, again it should be possible to increase the capture of materials at both kerbside and transfer stations.
- Although **organic** waste recovery is underestimated as there are no figures for material captured by commercial composters, there is a significant amount of material that could be targeted.
- **Metals** recovery is underestimated, however further detail is required to determine how much could be diverted.
- **Glass** recovery is estimated at almost 70%.
- The historic (2008) and generic composition figures suggest there could be a significant amount of **timber** available for recovery in the general waste stream.

Recovery via transfer stations is around 44 %, largely at ReSort. Care needs to be taken in comparing the diversion rate with other reported recovery percentages around New Zealand. In some areas where community based recycling centres have been established (Far North District, Waiuku) recovery percentage is reported after exclusion of domestic and commercial refuse. If measured on this basis the recovery percentage at ReSort would be 72%. Whangarei District's preferred approach is to consider all waste streams entering the site.

There are other materials present in the waste stream that require careful management to avoid negative impacts, including:

- Hazardous waste (chemicals, e-waste, used oil, asbestos)
- Difficult or special waste (tyres, bulk waste, dead animals)

General waste (household and commercial waste)

Waste from certain sources can also present challenges or opportunities and is worthy of consideration. Examples include:

- **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, maintenance products).

## 2.2 Infrastructure and services

### 2.2.1 Collection

#### Residential collection

Northland Waste Limited (NWL) provide bag based refuse and crate based recycling collection throughout the District on behalf of Council. NWL and Waste Management NZ Limited (WMNZ) offer wheelie bin collection services for households on a commercial basis.

Kerbside collection of refuse in bags and recycling in crates (sorted at the roadside) is available in urban and rural areas in the District<sup>5</sup>. Alternatively, the public may take household refuse and recycling to the transfer stations across the district.



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.

#### Commercial or industrial waste

Waste (both refuse and recycling) from commercial and industrial premises in Whangarei District is currently collected and disposed of via ReSort, direct to market or directly to Puwera Landfill or other landfills. Where material is disposed of at Puwera Landfill total figures are available. Materials collected for recycling, treatment or disposal out of the District, no data is available. Many national business with a local presence have comprehensive waste management and recycling systems in place, for example Countdown operates a waste management system where some material is recovered and recycled (paper and cardboard), organic material (food waste) is diverted to animal feed with only residual waste disposed of at local Landfill. Foodstuffs (New World and PAK'nSAVE), the Warehouse and Fonterra all operate similar systems.

A food rescue service is currently being set up in Whangarei. The service will divert food from landfill to those in need.

#### 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 a contractor with their scope currently including:

- Litter bin emptying.
- CBD cleaning and custodial duties (incl. cleaning, sweeping etc).
- Cleaning up after fly tipping.
- Twice weekly servicing during peak holiday periods.

<sup>5</sup> About 5% of residents have to take bags/recycling to collection points.

Illegal dumping does occur and costs the Council around \$9,000 per month. Where fines are imposed around \$2,400 per month is collected. Records indicate around 75 % of illegal dumping occurs in city locations however, 63 % of Council’s costs are incurred addressing dumping in rural and coastal settlement areas. The same data suggests illegal dumping is static when population increase is taken into account.

### 2.2.2 Waste transfer, processing and disposal

Transfer stations, where waste can be dropped off by the public, are located at Hikurangi, Tauraroa, Uretiti, Kokopu, Ngunguru, Ruatangata, Oakura and Parua Bay. The transfer stations are operated under contract to Council. The sites provide refuse and recycling facilities for public usage. At the Whangarei facility (ReSort, see below) a small number of items, typically inorganic items that could be reused, are manually removed from the waste stream by transfer station staff for recycle or sale.

No weighbridge is currently installed at any of the Council owned sites. Material is weighed as it enters ReSort or Puwera Landfill from each transfer station. Council pays for disposal on that basis.

The Whangarei District waste management system and estimated quantities for 2015/16 are presented in Figure 3. Facility details are provided on the following pages. Figure 3 is a screen shot from a model of the Whangarei waste management system developed for the Waste Assessment used to inform this Plan.

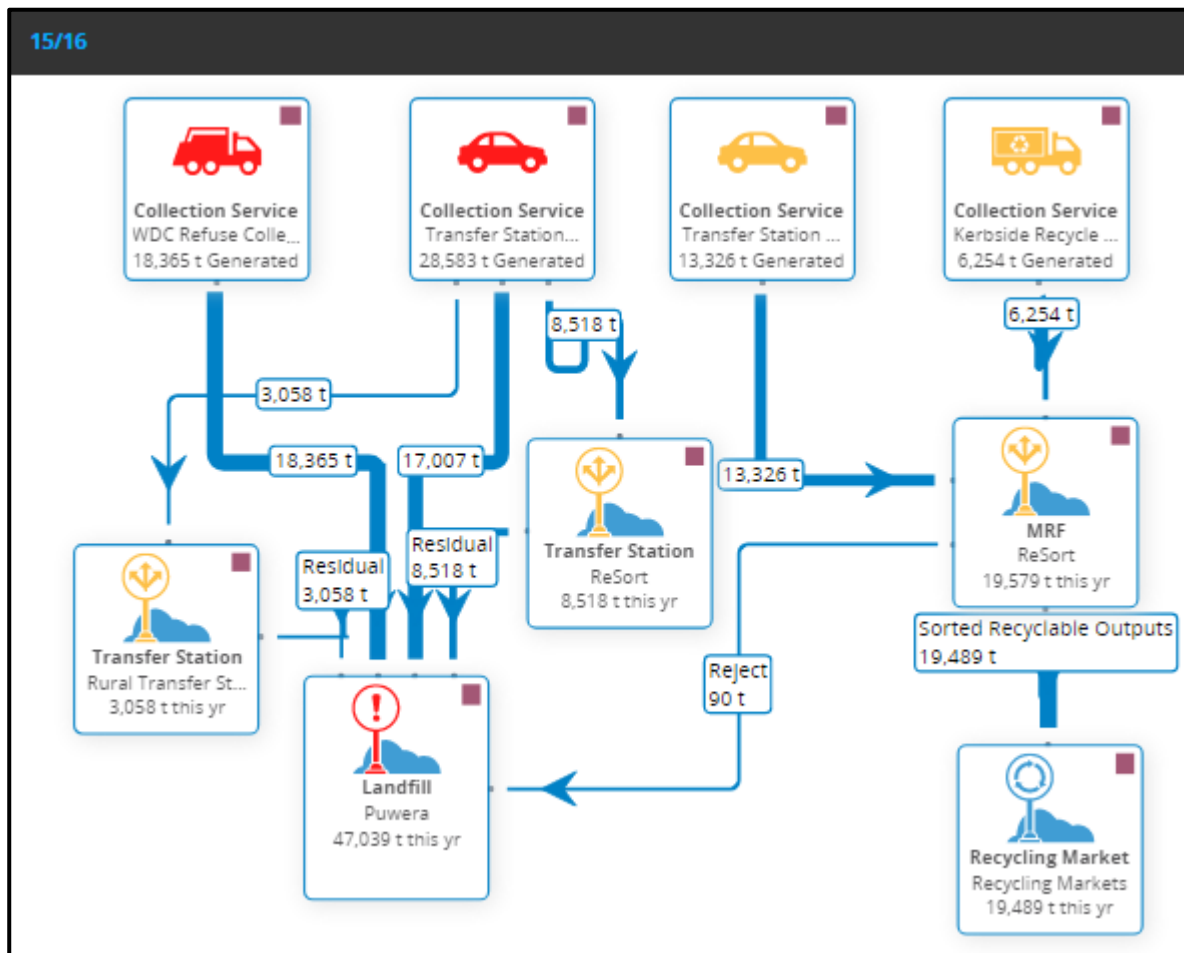


Figure 3: Waste Flow Diagram - Collection, Processing and Disposal (2015/16 figures)

## Rural transfer stations

The five larger rural transfer stations have jumbo bins (one for scrap metal, two for refuse). There are no greenwaste bins at three of them. Hikurangi and Uretiti have on site green waste disposal. The smaller three sites are used largely for refuse bags and recycling. Two of the coastal stations have mini bins.

## ReSort

Whangarei's resource recovery park, ReSort, is located at 201 Kioreroa Road, Whangarei. ReSort is set up to recover materials from the waste stream with a reuse shop and targeting scrap and waste wood (viable markets). The site is owned and operated by a joint venture company, Northland Regional Landfill Limited Partnership (NRLLP). NRLLP is a 50/50 joint venture between the Council and NWL. The partnership also owns Puwera Landfill.



Figure 4: ReSort Resource Recovery Park<sup>6</sup>

## Other Processing

### Composting

Kerigreen - green waste separated at ReSort is processed by Kerigreen, a green waste processor based in Kerikeri.

Avoca - Composting takes place at Avoca's Rarewa site near Whangarei, where a variety of waste products, including paunch, chicken manure, wood shavings and coal ash, are processed to create compost. Avoca's supply compost in bulk (for pasture or horticultural crops) or in smaller volumes for domestic or landscaping use.

Greenfingers - Pine bark is processed in a number of ways including composting to produce growing media and other gardening products by Greenfingers at their in Kamo site.

### Energy

Rosval Sawmill, Carter Holt Harvey (CHH) Marsden Point and Golden Bay Cement are examples of the use of wood waste for energy production. Rosval and CHH use wood waste from their own operations while Golden Bay Cement are using urban wood waste including some from Auckland. Marsden Point Refinery - uses some residuals from the oil refining process for energy.

<sup>6</sup> Screenshot from <https://www.wdc.govt.nz/Services/Rubbish/Rubbish-Stations>

### 2.2.3 Costs for waste management

#### 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 Long Term Plan to continue to 2025.

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 and sticker sales) cover the full costs of providing the service.

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.

### 2.2.4 Waste data - issues and constraints

While there is some information available about the quantity and composition of waste generated in the Whangarei 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 coverage, set out rate or participation rates for kerbside collection.
- The data on the quantity of waste collected or processed is not complete. For example, the following waste streams have not been quantified:
  - The quantity of 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.

There is a by-law in place (refer Section 3) that provides for collection of data including quantities of material collected, destination for disposal or processing and coverage, set out and participation rates. Implementation of the by-law in close consultation with collection and processing companies operating in the Whangarei 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 and by the joint venture (ReSort). Reporting on activity as part of contract obligations should include appropriately detailed reporting on waste source, quantity and destination.

### 2.2.5 Waste infrastructure - issues identified

In collating and considering information about the delivery of waste services in the Whangarei 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.
- Although there is a comprehensive rural transfer station network, it is costly to operate on a per resident and per tonne basis.
- Rural residents are offered a full roadside collection service (refuse and recycling) that is costly to operate on a per resident and per tonne basis.
- There is limited evidence of diversion activity focussed on commercial and construction waste streams which are a large proportion of material disposed of to landfill from the Whangarei District.
- Use of litter bins for general rubbish (including the Whananaki South Molok) by holiday makers.

### 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 Whangarei District. These are summarised in Table 3 with further detail provided in the 2017 Waste Assessment (Appendix A).

**Table 3 Selected relevant policy for waste in Whangarei District**

Whangarei District	Northland Region	National
Whangarei Long Term Plan 2015-2025	Northland Regional Policy Statement	Waste Minimisation Act 2008
Whangarei Solid Waste Asset Management Plan	Northland Regional Air Quality Plan	Health Act 1956
Whangarei Solid Waste Management Bylaw 2013	Northland Regional Coastal Plan	Hazardous Substances and New Organisms Act 1996
Whangarei District Plan	Northland Regional Water and Soil Plan	Resource Management Act 1991
		Local Government Act 2002
		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 the 2017 Waste Assessment included a review of the Vision - Goals Objectives framework set out in the previous 2011 Waste Minimisation and Management Plan. The relationship between Vision, Goals and Objectives is illustrated in Figure 5<sup>7</sup> and defined in Table 4<sup>7</sup>.

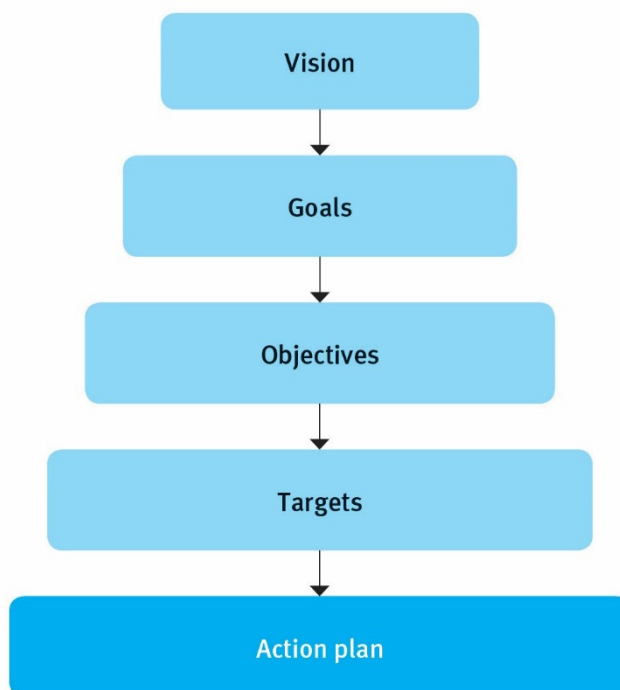


Figure 5: Vision, goals, objectives and targets

Table 4 provides definitions for vision, goals, objectives and targets.

**Table 4 Definitions for vision, goals, objectives and targets (adapted from MfE 2015)**

<b>Vision</b>	Whangarei's aspirational outcome - providing an overall direction and focus.
<b>Goal</b>	What a Whangarei 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.
<b>Objective</b>	The specific strategies and policies to support the achievement of the goals. Objectives are 'SMART' (specific, measurable, achievable, relevant and timely).
<b>Target</b>	A clear and measurable way to determine how well the council is achieving its goals. Targets should also be SMART.

<sup>7</sup> 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 Whangarei District is<sup>8</sup>:

*To deliver community benefits and work towards zero waste to landfill. Whangarei businesses and households 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 Whangarei 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 - treat waste as a resource, employment, multi-use facilities, cost effective services.*

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

- 1 *To avoid creating waste*
- 2 *To make it easy to recycle*
- 3 *To ensure households and businesses have access to safe disposal of residual waste*
- 4 *To create opportunities for Whangarei District - 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 Whangarei District.*
- 7 *To have a wealthier, healthier District through waste reduction initiatives and behavioural change.*

Table 5 provides a summary of the vision, goals and objectives presented above and associated targets for waste minimisation and management in the Whangarei District.

---

<sup>8</sup> This vision has been developed in workshops with Whangarei District Council Councillors and staff.

**Table 5 Vision - Goals - Objectives - Targets**

<b>Vision: To deliver community benefits and work towards zero waste to landfill. Whangarei businesses and households will be provided with efficient and effective waste minimisation and management services that recognise waste as a resource.</b>		
<b>Objective</b>	<b>Relevant Goal(s)</b>	<b>Target(s)</b>
1. <i>To avoid creating waste</i>	1. Avoid and reduce waste where we can. 3. Maximise community benefits - employment, multi-use facilities, reuse of materials for economic benefit, cost effective services.	1.1 To maintain or reduce the total quantity of waste disposed of to landfill in Whangarei (refuse collected at kerbside, through transfer stations and direct to landfill) on a per capita basis. The current figure is <i>570 kg per person</i> . <b>Waste disposal &lt; 500 kg per person each year by 2020</b>
2. <i>To make it easy to recycle</i>	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.	2.1 <i>Increase in the proportion of material captured for recycling at kerbside and transfer stations. The current figures are 25 % and 44 % respectively.</i> <b>Kerbside recycling &gt; 35 % by 2020</b> <b>Recycling, composting and reuse at Refuse Transfer stations &gt; 50 % by 2020</b> 2.2 <i>95 % of people are satisfied with their recycling service. 2015/16 (Currently 95 % satisfaction vs Annual Plan Target 85 %).</i> <b>Residents satisfaction &gt; 85 %</b>
3. <i>To ensure households and businesses have access to safe disposal of residual waste</i>	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.	3.1 <i>Satisfaction with kerbside refuse and transfer station services. Currently 95 % satisfaction vs Annual Plan Target 85 %.</i> <b>Residents satisfaction &gt; 85 %</b>
4. <i>To create opportunities for Whangarei District - jobs, new products, more efficient businesses</i>	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.	4.1 To publish a summary of available data on waste generation and management with each annual report. <b>Summary data published in Annual Report</b> <b>To create a grant scheme to support new initiatives to reduce waste</b>

<b>Vision: To deliver community benefits and work towards zero waste to landfill. Whangarei businesses and households will be provided with efficient and effective waste minimisation and management services that recognise waste as a resource.</b>		
<b>Objective</b>	<b>Relevant Goal(s)</b>	<b>Target(s)</b>
5. <i>To reduce illegal dumping</i>	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 Whangarei District. <b>Quantity of illegally dumped waste &lt; 2015/16 figure</b> <b>The number of illegal dumping incidents is &lt; 2015/16 figure.</b> 5.2 Residents satisfaction with litter and illegal dumping. Currently 87 % satisfaction vs Annual Plan Target 75 %. <b>Residents satisfaction &gt; 75 %</b>
6. <i>To improve community understanding of issues and opportunities for waste management in the Whangarei District.</i>	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.	6.1 Schools programmes delivered by Council Five new school adopt Waste Wise Schools programme each year. 6.2 Council (or contractors) promote waste minimisation at events in the District. <b>Council promotes waste minimisation at &gt; five events in the District each year.</b>

### 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 historic 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 rural transfer station network and Whangarei infrastructure (Puwera and ReSort) through the Northland Regional Landfill Limited Partnership.

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 including Northland Regional Council and the Waste Management Institute WasteMINZ Behaviour Change Sector Group.

Council recognises that many local waste management issues are more effectively managed through coordinated activity at a national level. Council will collaborate with central government, local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on resource efficiency and waste management issues. This may include advocating for product stewardship schemes for challenging waste streams (e-waste, tyres, packaging, rural waste), highlighting the role of other national policy including application of the waste levy and regulation of waste management activity.

### 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<sup>9</sup> that may spread waste or associated contaminants.

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

---

<sup>9</sup> 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 2. The Detailed evaluation is set out in the Waste Assessment with preferred options incorporated into this WMMP as methods and featured in the Action Plan.

For the Whangarei 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 30 % 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 Whangarei. A useful way to consider options is the model set out in Figure 6.

Effective waste minimisation and management relies on a combination of infrastructure (including collection), education/information and regulation or policy, with the right data informing strategic and operational decision making.

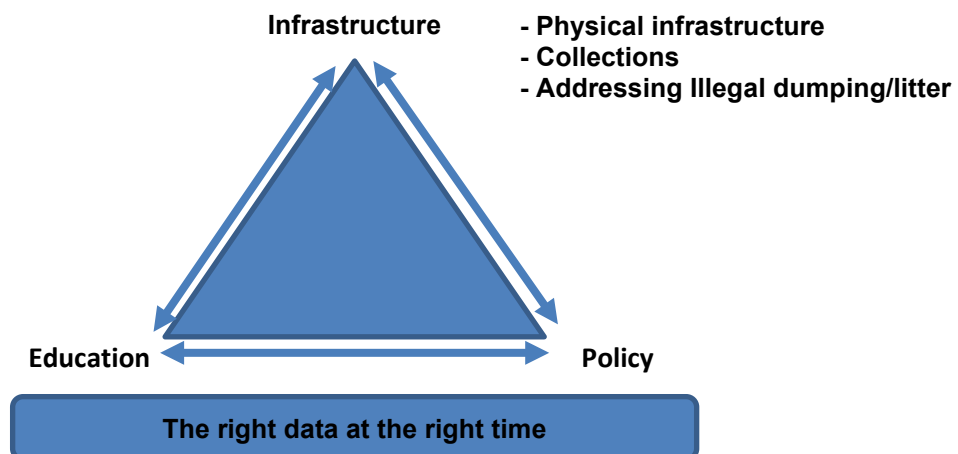


Figure 6: Effective Waste Minimisation and Management

For this Waste Minimisation and Management Plan options have been identified by considering key challenges for waste minimisation and management in the Whangarei 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<sup>10</sup>. 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, hazardous waste, closed landfills

### Education

- Changing behaviour - **education** programmes targeting schools, businesses and/or households;
- Information for households and businesses to ensure that the value of materials collected for recovery is maximised;
- Contributing to national education/information programmes

### Policy

- Implementation of licensing provisions in the existing by-law (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;
- Collaborating with central government, local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy<sup>11</sup>.

These options focus on the priority waste streams identified through the review of the current situation in Section 2 and summarised in Table 6.

**Table 6 Priority wastes and waste sources**

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

<sup>10</sup> Key materials include paper/card, plastics, glass, organic waste, metals, glass and timber

<sup>11</sup> Including health and safety policy and guidance relating to kerbside collections.

### 5.3 Options for the future

A range of options have been considered. These include:

- **Collections** - a range of kerbside recycling services, bag and wheelie bin based refuse collection, kerbside collection of organic waste.
- **Transfer stations** - optimising rural transfer station network, sorting of commercial and construction waste.
- **Education** - continuing with the schools education and promoting existing services and waste reduction via Council communications channels (website, media releases).
- **Policy** - implementation of licensing under the existing waste by-law, providing for grant funding of waste minimisation activities, regular reporting on waste minimisation and management.

Based on the analysis and discussion presented in the Waste Assessment the following actions are proposed.

#### 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. An 80 L wheelie bin based service may be considered in the future.
- Progress procurement for a new recycling collection contract with a focus on quality of materials collected, convenience and safety of collections staff and the general public. Separate glass collection and options for difficult collections will be considered as part of the procurement process.
- Progress procurement for a new rural transfer station operations contract with a focus on increasing the recovery of materials and maintaining a high level of service for rural communities.
- 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<sup>12</sup> of optimising services for bulky household waste including the role of ReSort, the rural transfer station network and potential bulky waste collections.
- Complete detailed analysis of sorting of C&I and/or C&D waste prior to disposal of residual material.
- Work with the community on options for litter bins with a focus on holiday areas where issues are currently occurring.
- 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 waste and recycling collection and drop off services in the Whangarei District.
- Implement clear information and education to promote the effective use of recycling services.
- Disseminate information to all residents (including holiday makers/temporary residents)
- Maintaining school education programme
- Support Northland Regional Council environmental education activities for schools, homes and businesses.

---

<sup>12</sup> Consider cost of service, diversion of materials, fairness/equity, safety and environmental protection (illegal dumping).

- 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.
- Develop an implementation plan for the existing Solid Waste Management Bylaw 2013. This will focus on implementing licensing (Part 9) including reporting arrangements. With a relatively small number of collection providers operating in the District, Council is in a position to develop pragmatic but effective reporting requirements. This will require consultation with the collection providers prior to formally notifying the license regime. Council should target implementation of a licencing regime in 2017.
- Continue to report on progress against the targets in the WMMP in Annual Reports.
- Collaborate with central government, local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy<sup>13</sup>.
- Continue to actively address illegal dumping activity including where possible identifying perpetrators and if required undertaking clean-up activity.

---

<sup>13</sup> Including health and safety policy and guidance relating to kerbside collections.



## 6 Funding the plan

### 6.1 Plan implementation funding

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

**User charges** will fund kerbside refuse collection 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** direct to Council will fund waste education and kerbside recycling (in part) i.e. activities that promote or achieve the Goals and Objectives of this Plan. Council may also elect to apply to the Waste Minimisation Fund to fund specific projects.

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.

### 6.2 Grants and advances of monies

As part of the implementation of the WMMP, Council will develop criteria for making grants available from its allocation of Waste Levy funds. The amount of money available for grants will be determined as part of the Annual Plan process.

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. Consideration will also be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.

### 6.3 Waste minimisation levy expenditure

Waste minimisation levy funds returned to Council fully fund current waste education activity and contribute to the costs of the roadside recycling service.

## 7 Monitoring, evaluating and reporting progress

This WMMP will only have an impact in the Whangarei District if appropriate action is taken to achieve the Vision - Goals - Objectives. The Targets (Section 4.2, Table 5) provide the mechanism for a high level measure of progress. Monitoring will focus on gathering data to evaluate and report on progress against these targets.

### 7.1 Monitoring and evaluation

The assessment of the current situation has highlighted gaps in waste generation, collection, processing and management information for the Whangarei District. In some area information exists but is not available to Council<sup>14</sup>, while in others, data is not currently available<sup>15</sup>.

Progress in achieving the Vision - Goals - Objectives of this Plan will be monitored by reviewing the data outlined in Table 7.

**Table 7 Data source and description**

Data Source	Information	Comment
Council contractors	Illegal dumping, Litter (bins, clean-up) Roadside refuse Roadside recycling Transfer station refuse Transfer station recycling/recover	Contract reporting
Northland Regional Landfill Limited Partnership	ReSort refuse ReSort recycling and recovery	Partnership 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 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 7. For example introducing 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, Table 5. 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.

<sup>14</sup> For example regarding private sector collection services.

<sup>15</sup> For example regarding the number of households participating in the kerbside recycling collection service.

## 7.2 Reporting

Progress on implementing this Plan will be reporting in the Council's Annual Report. Reporting will note current performance against the targets based on available information. In the early stages implementation of the Plan it is likely that there will be significant gaps in the available data limited 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 WMMP, as described in Part A – Strategy (Section 4). Some Section from Part A are repeated here to allow the Action Plan to stand alone if required.

This Action Plan covers the full life (six years) of the WMMP however it provides more detail for years one and two. The Action plan sets out actions with operational and financial implications for 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 Long Term Plan and Annual Plan<sup>16</sup>. This means the WMMP 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

---

<sup>16</sup> Currently 2015-2025 Long Term Plan and 2016/17 Annual Plan

## 9 Funding structure [see also Part A, section 6]

### 9.1 Plan implementation funding

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

**User charges** will fund kerbside refuse collection 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** direct to Council will fund waste education and kerbside recycling (in part) i.e. activities that promote or achieve the Goals and Objectives of this Plan. Council may also elect to apply to the Waste Minimisation Fund to fund specific projects.

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 WMMP, Council will develop criteria for making grants available from its allocation of Waste Levy funds. The amount of money available for grants will be determined as part of the Annual Plan process.

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. Consideration will also be given to ensuring that funding supports new or expanded activities rather than supporting the status quo.

### 9.3 Waste minimisation levy expenditure

Waste minimisation levy funds returned to Council fully fund current waste education activity and contribute to the costs of the roadside recycling service.

## 10 Targets and measurement

The Targets set out in Section 4.2, Table 5 of Part A of this Plan provide the mechanism for a high level measure of progress. Monitoring will focus on gathering data to evaluate and report on progress against these targets, inform refinement of existing actions and development of future actions.

Progress in achieving the Vision - Goals - Objectives of this Plan will be monitored by reviewing the data outlined in Table 8 (repeating Table 7 from Section 7).

**Table 8 Data source and description**

Data Source	Information	Comment
Council contractors	Illegal dumping Litter (bins, clean-up) Roadside refuse Roadside recycling Transfer station refuse Transfer station recycling/recovery	Contract reporting
Northland Regional Landfill Limited Partnership	ReSort refuse ReSort recycling and recovery	Partnership 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 surveys (participation, set out rates) Recycling contamination survey	Contract requirement or targeted survey

Some of the activities in this Action Plan are focussed on securing the information noted in Table 8. For example introducing 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 9 links Targets to measures noted in Table 8. Table 10 provides definitions for key measures.

**Table 9 Measuring progress against targets**

Target	Measure
1.1 To reduce the total quantity of waste disposed of landfill (refuse collected at kerbside, through transfer stations and direct to landfill) on a per capita basis	Tonnes of waste disposed to landfill per capita
2.1 Increase in the proportion of material captured for recycling at kerbside and transfer stations	Tonnes of waste recycled per year / tonnes of waste and recycling collected
2.2 Satisfaction with kerbside and transfer station recycling services	Residents satisfaction survey results
3.1 Satisfaction with kerbside and transfer station refuse services	Residents satisfaction survey results
4.1 To publish a summary of available data on waste generation and management with each annual report	Summary reporting on WMMP in Annual Report
5.1 Reduction in illegal dumping incidents and quantity of material illegally dumped in the Whangarei District	Number of incidents and quantity of illegally dumped material
5.2 Satisfaction with litter and illegal dumping service	Residents satisfaction survey results
6.1 5 new schools adopt Waste Wise Schools each year	Waste education contract reporting
6.2 WDC promote waste minimisation at events within the District	Waste education contract reporting

**Table 10: Measure definitions**

Measure	Definition
Tonnes of waste disposed of to landfill per capita	Total quantity of waste disposed of to landfill (from contract and by-law reporting) divided by Whangarei's usually Resident Population (Statistics New Zealand)
Tonnes of waste recycled per year	Total quantity of waste recycled or recovered (from contract and by-law reporting) divided by Whangarei's usually Resident Population
Residents satisfaction	Measure as defined in LTP 2015-2025
Tonnes of illegal dumped material	Total quantity of illegally dumped material collected by Whangarei District contractors per year.



## 11 Action plan

The Action Plan, as set out in the following pages, has been developed to assist the Council and community to work towards achieving the Vision - Goals - Objectives set out in the WMMP. Where actions have operational or financial implications they need to be confirmed in the Council's core planning documents - the Long Term Plan and Annual Plan.

The WA recommended the following options be included in an Action Plan:

### Infrastructure actions

- Progress procurement for a new refuse collection contract as a continuation of the existing service (user pays refuse bags). An 80L wheelie bin based service may be considered in the future.
- Progress procurement for a new recycling collection contract with a focus on quality of materials collected, convenience and safety of collections staff and the general public. Separate glass collection and options for difficult collections will be considered as part of the procurement process.
- Progress procurement for a new rural transfer station operations contract with a focus on increasing the recovery of materials and maintaining a high level of service for rural communities.
- 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<sup>17</sup> of optimising services for bulky household waste including the role of ReSort, the rural transfer station network and potential bulky waste collections.
- Complete detailed analysis of sorting of C&I and/or C&D waste prior to disposal of residual material.
- Work with the community on options for litter bins with a focus on holiday areas where issues are currently occurring.
- 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 waste and recycling collection and drop off services in the Whangarei District.
- Implement clear information and education to promote the effective use of 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 Northland Regional Council 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).

---

<sup>17</sup> Consider cost of service, diversion of materials, fairness/equity, safety and protection of the environment (illegal dumping).

### 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.
- Develop an implementation plan for the existing Solid Waste Management Bylaw 2013. This will focus on implementing licensing (Part 9) including reporting arrangements. With a relatively small number of collection providers operating in the District, Council is in a position to develop pragmatic but effective reporting requirements. This will require consultation with the collection providers prior to formally notifying the license regime. Council should target implementation of a licencing regime in 2017.
- Continue to report on progress against the targets in the WMMP in Annual Reports.
- Collaborate with central government, local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy<sup>18</sup>.
- Continue to actively address illegal dumping activity including where possible identifying perpetrators and if required undertaking clean-up activity.

---

<sup>18</sup> Including health and safety policy and guidance relating to kerbside collections.

## 11.1 Action planning tables

**Table 11 Infrastructure Actions**

Action	Timeline	Funding	Objective(s)	Target(s)
a. Procure a roadside refuse collection contract based on the current contract (user pays refuse bag collection).	December 2017	User charges (existing)	3	3.1
b. Procure a roadside recycling collection contract with a focus on increasing capacity, materials quality and health and safety performance.	December 2017	Targeted rate (existing)	2, 4	2.1, 2.2, 4.1
c. Progress procurement for a new rural transfer station operations contract with a focus on increasing the recovery of materials and maintaining a high level of service for rural communities.	December 2017	User charges (existing) Targeted rate (existing)	2, 3, 4, 5	2.1, 3.1, 5.1, 5.2
d. Promote existing organic waste reduction and diversion services: Green waste composting (Keri Green, ReSort, Transfer Stations, Avoco, Greenfingers) Food waste (Food Rescue)	Ongoing	Rates (existing)	2, 4	1.1, 2.1
e. Promote waste reduction Reusable packaging Food waste reduction (Love Food, Hate Waste)	Ongoing	Rates (existing)	1, 4	1.1
f. 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.	July 2019	Rates (new)	2	2.1
g. Complete detailed analysis of optimising services for bulky household waste including the role of ReSort, the rural transfer station network and potential bulky waste collections.	July 2018	Rates (new)	3, 5	3.1, 5.1
h. Complete detailed analysis of sorting of C&I and/or C&D waste prior to disposal of residual material.	July 2020	Rates (new)	2, 4	2.1, 4.1
i. Work with the community on options for litter bins with a focus on holiday areas where issues are currently occurring.	July 2018	Rates (new)	3, 5	3.1, 5.1, 5.2
j. 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.	Ongoing	Rates (new)	2, 3, 5, 6	2.1, 3.1, 5.1

**Table 12 Education Actions**

Action	Timeline	Funding	Objective(s)	Target(s)
k. Continue to update and maintain information on waste and recycling collection and drop off services in the Whangarei District.	Ongoing	Rates (existing)	1, 2, 3, 6	4.1
l. Implement clear information and education to promote the effective use of commercial and Council run recycling services.	As part of new contract roll-out and then ongoing	Rates (existing)	2	2.1, 2.2
m. Disseminate information to all residents (including holiday makers/temporary residents) on waste minimisation and management including available services.	December 2017 and ongoing	Rates (existing)	1, 2, 3, 5, 6	
n. Maintaining school education programme, support Northland Regional Council environmental education activities for schools, homes and businesses.	Ongoing	Rates (existing)	6	6.1, 6.2
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).	Ongoing	Rates (existing)	5, 6.1	5.1, 5.2

**Table 13 Policy Actions**

Action	Timeline	Funding	Objective(s)	Target(s)
p. 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.	July 2018	Rates or Waste Levy funds (new)	1, 2, 4	1.1, 2.1
q. Develop an implementation plan for the existing solid waste provisions in the District Bylaw (Part 4). This will focus on implementing licensing (Part 4, Section 419) including reporting arrangements. With a small number of collection providers operating in the District Council is in a position to develop pragmatic but effective reporting requirements. This will require consultation with the collection providers prior to formally notifying the license regime. The target implementation for the licencing regime is by July 2018.	July 2018	Rates (new)	3, 4, 5	4.1

Action	Timeline	Funding	Objective(s)	Target(s)
r. Continue to report on progress against the targets in the WMMP in Annual Reports.	Annually	Rates (existing)	4, 6	4.1
s. Collaborate with central government, local government organisations, non government organisations (NGO) and other key stakeholders to progress national activity on waste minimisation and management policy.	Ongoing	Rates (existing)	1, 2, 3, 6	1.1
t. 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

**Table 14 TimeLine**

2017/2018	2018/19	2019/20	2020/21	2021/22	2022/23
<b>Infrastructure Services</b> Contracts Refuse Collection Kerbside Recycling Rural Transfer Stations <i>Potential new services:</i>  <b>Investigations</b>   Consider options for managing visitor (holiday areas) waste	Refuse Collection Kerbside Recycling Rural Transfer Stations  <i>Household hazardous waste.</i> <i>Collaborate with product owners on problem products e.g. e-waste</i>  Complete study on organic waste collection.	Refuse Collection Kerbside Recycling Rural Transfer Stations   Complete study on bulky waste options Complete study on C&D and C&I waste sorting.	Refuse Collection Kerbside Recycling Rural Transfer Stations  <i>LTP Proposal for organic waste</i>  LTP Proposal for bulky waste LTP proposal on waste sorting	Refuse Collection Kerbside Recycling Rural Transfer Stations  <i>Organic waste service</i> <i>Bulky waste service</i>	Refuse Collection Kerbside Recycling Rural Transfer Stations  <i>Organic waste service</i> <i>Bulky waste service</i> <i>C&amp;D / C&amp;I waste service</i>
<b>Education / Information</b> Green waste and food waste services Council services For holidaymakers Schools	Green waste and food waste services Council services For holidaymakers Schools	Green waste and food waste services Council services For holidaymakers Schools	Green waste and food waste services Council services For holidaymakers Schools	Green waste and food waste services Council services For holidaymakers Schools	Green waste and food waste services Council services For holidaymakers Schools

2017/2018	2018/19	2019/20	2020/21	2021/22	2022/23
Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping	Illegal dumping
<b>Policy</b> Develop grant funding criteria Detailed by-law implementation plan Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity	Grant funding round By-law licensing, data compilation /reporting Report on progress in 2016/17 Annual Report. Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity	Grant funding round By-law licensing, data compilation /reporting Report on progress in 2017/18 Annual Report. Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity	Grant funding round By-law licensing, data compilation /reporting Report on progress in 2018/19 Annual Report. Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity	Grant funding round By-law licensing, data compilation /reporting Report on progress in 2019/20 Annual Report. Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity	Grant funding round By-law licensing, data compilation /reporting Report on progress in 2020/21 Annual Report. Collaborate with others national activity and policy. Illegal dumping investigation and enforcement activity

## 12 **Applicability**

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

Tonkin & Taylor Ltd

Report prepared by:

Authorised for Tonkin & Taylor Ltd by:

.....  
Chris Purchas  
Senior Consultant

.....  
Simonne Eldridge  
Project Director

CHP  
p:\86151\workingmaterial\wmmp\whangarei wmmp final.docx





**Appendix A: Whangarei Waste Assessment (2017)**