



**Far North  
District Council**

*Te Kaunihera o Tai Tokerau Ki Te Raki*



## **Waste Management and Minimisation Plan 2017 – 2023**

**Adopted by Council 18 May 2017**

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## Contents

Mayor's message.....	2
Part A – Strategy.....	3
Executive Summary .....	3
1 Introduction .....	4
1.1 Purpose of the plan.....	4
1.2 Scope of the plan.....	5
1.3 Status of the current plan.....	5
1.4 When the plan is to be reviewed .....	5
2 Vision, goals, objectives and targets.....	6
2.1 Council's intended role.....	7
2.2 Public health protection.....	7
2.3 Guiding principles .....	8
3 Policies, plans and regulation .....	9
3.1 Legislation, plans and guiding policies .....	9
3.2 Considerations.....	10
4 The waste situation.....	11
4.1 Volume and composition of waste and diverted materials.....	11
4.2 Overview of existing waste management and minimisation infrastructure and services ..	15
4.3 Summary of District-specific issues.....	16
5 Proposed methods for achieving effective and efficient waste management and minimisation .	17
5.1 Summary of key waste/diverted material streams and how currently managed.....	17
5.2 Options for the future .....	18
5.3 Statement of options.....	18
6 Means of implementation and funding .....	19
6.1 Funding implementation of the plan .....	19
6.2 Waste minimisation levy funding expenditure.....	20
7 Monitoring and reporting progress .....	21
7.1 Reporting.....	21
8. Part B – Action Plan .....	22
8.1 Introduction.....	22
8.2 Supporting action: education/promotion.....	23
8.3 Actions.....	24
9. Part C – Appendix .....	29

## Figures

Figure A4.1-1	Historic distribution of waste and diverted materials .....	11
Figure A4.1-2	Combined waste composition of both Kaikohe Waste Station and Ahipara Landfill, 2009 Audit.....	12
Figure A4.1-3	Distribution of waste and diverted materials, May 2009 – April 2010 .....	13
Figure A4.1-4	Far North District projected waste to landfill.....	14
Figure B1-1	Waste Management and Minimisation Plan Relationship to the Waste Hierarchy	27

## Tables

Table A5.1-1	Current waste management and minimisation.....	17
Table A6.1-1	Funding of operation and maintenance projects .....	19
Table A7.1-1	Measurement of progress.....	21
Table B3-1	Actions .....	29

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## Mayor's message

Kia ora koutou

I am pleased to provide this welcome for the Far North District Council's Waste Management and Minimisation Plan 2017-23.

The Far North District Council committed, via its Long Term Plan 2015-25, to protecting the environment by reducing the use of landfills for waste disposal. We have also adopted a District vision, *He Whenua Rangatira*, which aims to make the Far North a district of sustainable prosperity and wellbeing. This Plan and the services outlined in it are designed to help achieve these outcomes.

Our goal is to reduce the quantity of waste we bury in landfills from 320 kg per person, the waste the District sent to landfill in 2015/16, to 200 kg per person by 2023. This is an ambitious goal, but a necessary one, if we are to become a more sustainable District. We cannot keep building new landfills; they are expensive to operate, and harmful to the environment as there is potential ground water contamination and methane release to the atmosphere. They are also a legacy our children and their children won't thank us for leaving them. We need to do better, and we *can* do better.

This plan sets out the ways and means the District will reduce waste and achieve our goal. It identifies the waste minimisation services and infrastructure Council provides, including an extensive network of refuse and recycling stations, and an awards scheme that recognises businesses that reduce waste. What the plan can't do is reduce the waste every one of us produces. It can't stop us from buying consumer products with packaging that can't be recycled, nor can it force us to reuse things as many times as possible before putting them in the rubbish. Many of us already recycle, but too many people are still putting in their rubbish bags waste that it is biodegradable and can be recycled. I strongly encourage you to reduce, reuse and recycle so that the Far North becomes a district of sustainable prosperity and well-being.

Noho ora mai



Hon John Carter QSO

Far North Mayor

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## Part A – Strategy

### Executive Summary

The Council's current Waste Management and Minimisation Plan, adopted in 2011, has been revised to reflect changing perspectives about waste both nationally and locally.

These changes are:

- in response to the requirements of the Waste Minimisation Act 2008, including a commitment to waste minimisation
- increased recycling opportunities for the community and visitors
- support and encouragement for industries to reduce waste.

This Plan includes:

- a vision for the District's waste management and minimisation to : *"Waste nothing of value or use while working towards zero waste"*
- regard for the goals of the New Zealand Waste Strategy for *"reducing the harmful effects of waste and improving the efficiency of resource use"*
- a summary of the District's waste assessment , and
- a number of actions to achieve the vision, goals and targets of the Plan.

Key elements of this Plan are:

- continued provision of a range of waste management and minimisation services
- expansion of services in response to increasing population and tourism demands
- recognition of the waste management and minimisation benefits and efficiencies provided by the private sector.

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# 1 Introduction

## 1.1 Purpose of the plan

The purpose of this Waste Management and Minimisation Plan (WMMP) is to:

- describe Council's vision for solid waste management and minimisation for the Far North District and how it will meet its long-term strategic goals for these
- identify objectives that will establish the strategies and policies to support the achievement of the goals as well as targets so that Council can measure how well it is progressing towards achieving its waste management and minimisation goals
- provide information on how Council intends to fund the activities of this WMMP over the next 6 years to 2023.

Council is required by section 50 of the Waste Minimisation Act 2008 (the WMA) to review its existing WMMP and develop and adopt a new one by the end of June 2017. Section 43 requires the WMMP to include a summary of the Council's waste management and minimisation objectives, policies and targets, and how these will be delivered and funded. The WMA (section 44) also sets out specific requirements when amending or revoking the current WMMP. These include:

- consideration of the waste hierarchy – reduction, reuse, recycling, recovery, treatment and disposal (in descending order of importance)
- ensuring that nuisance is not caused by the collection, transport and disposal of waste
- regard for the New Zealand Waste Strategy (NZWS)
- regard for the most recent Waste Assessment undertaken by Council as a requirement of section 51 of the Act
- completion of public consultation in accordance with section 83 of the Local Government Act 2002.

This WMMP has been developed following completion of a Waste Assessment (see Part C Appendix). The Waste Assessment considered current quantities and composition of waste and diverted materials in the district, existing waste services, predicted future demand for services, and practicable options available for meeting forecast demand.

The Council is looking for feedback on your preferred options. If you would like to have your say on the way in which Council provides waste management and minimisation services, please return the feedback form as found on Council's website by 18 April, 2017. The Council will hold hearings on 28 April, 2017, during which you can present your submission verbally to the Council if you wish. The Council will consider all feedback and submissions received and will deliberate on any amendments as a result of consultation on 11 May, 2017.

The Council intends to formally adopt the final WMMP by 1<sup>st</sup> June 2017.

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## 1.2 Scope of the plan

This WMMP considers waste and diverted materials in keeping with the order of priority stated in the Act:

- reduction
- reuse
- recycling
- recovery
- treatment
- disposal.

The scope also considers the degree of control or influence Council will need to exert over the waste stream, as this is critical to achieving the requirements and intent of the WMA and NZWS.

Like the Council's previous waste plan this WMMP will consider diversion of waste from landfill; particularly as the Waste Minimisation Act requires Council to give regard to the current New Zealand Waste Strategy. The Strategy's two goals of reducing the harmful effects of waste and improving the efficiency of resource use, provide direction to communities, businesses and local government on where to focus their efforts for delivering environmental, social and economic benefits.

For the purposes of this WMMP, waste is defined as 'waste to landfill' and the term 'diverted materials' refers to materials collected for recycling, composting or other recovered or treated materials that are diverted from landfill. The Plan generally considers solid waste. It also covers all aspects of waste management and minimisation, including treatment and disposal of waste.

This WMMP includes actions for the management and minimisation of waste and diverted materials for the following categories of activity:

- waste minimisation education and behaviour change
- data management
- refuse and recycling services
- refuse transfer stations
- illegal dumping
- treatment of hazardous waste
- disposal of residual waste to landfill and clean fill.

## 1.3 Status of the current plan

Council adopted its first Solid Waste Management Plan in July 2001. A review was completed in 2005. A review in 2011 developed the first Waste Management and Minimisation Plan under the WMA. The review of the 2011 plan that is currently underway complies with the WMA.

## 1.4 When the plan is to be reviewed

In line with the requirement of section 50 of the WMA, this Plan will be reviewed no longer than six years after its adoption. This WMMP will remain relevant from June 2017 to May 2023. It may be reviewed earlier if changes to legislation require it or if Council decides to. Any review of the Plan will be preceded by a Waste Assessment in accordance with section 51. Note that a review may not lead to changes in the WMMP.

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## 2 Vision, goals, objectives and targets

Far North District Council's vision for waste management and minimisation is to:

*"Waste nothing of value or use while working towards zero waste."*

The District's goals for waste management and minimisation are to:

- reduce the amount of waste entering the waste stream
- reduce the amount of recyclable waste sent to final disposal
- make the best use of recoverable waste as a renewable resource
- provide financial incentives to the public to reduce residual waste
- provide a network of collection methods that balance service levels to the public with cost effectiveness
- provide for the safe and efficient disposal of residual waste
- ensure that hazardous wastes do not enter the waste stream
- recover the cost of waste management from those who produce the residual waste
- minimise the cost of waste management to Council, to the public and to the ratepayer
- ensure compliance with the Waste Minimisation Act, Resource Management Act, Local Government Act and other legislative requirements
- encourage the community to take ownership/personal responsibility for waste
- encourage the community to view waste as a resource
- provide robust regular monitoring of the District's solid waste stream.

FNDC's 2015 - 2025 Long Term Plan (LTP) contains six strategic priorities for the District:

- catch up on core infrastructure
- address affordability
- maintain levels of service
- undertake new capital projects
- Council capacity and capability in becoming more customer-focused
- empowering communities.

FNDC has three objectives for refuse and recycling:

- Priority 1: We will work towards meeting long-term waste disposal needs by considering alternate private investment options to landfill, and explore resource recovery. Our aim is zero waste to landfill.
- Priority 2: Increase waste recycling services across the District through community recycling stations and street recycling bins.
- Priority 3: Encourage environmental awareness and waste minimisation through:
- Education programmes in schools, and
  - The Ecostar Award for businesses.

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A number of objectives have been set that will assist the District achieve its waste management and minimisation goals and waste reduction targets.

The principal and strategic objectives are:

- **Community affordability** – to ensure that communities have access to affordable waste management facilities and services, and that Council fulfils its waste management obligations at a level that balances needs with the communities' ability to pay
- **Protection of the environment and public health** – to ensure that public health and the environment are protected from hazards through compliance with waste management legislation
- **Transfer and collection network** – to ensure that Council oversees the provision of an efficient, integrated network that enables the safe transfer of refuse from source to final disposal.

Council has set preliminary waste reduction targets as follows:

- By 30 June 2017 waste to landfill will be 300 kg per head of population
- By 30 June 2020 waste to landfill will be 250 kg per head of population
- By 30 June 2023<sup>1</sup> waste to landfill will be 200 kg per head of population.

## 2.1 Council's intended role

Council's general role is to provide guidance to individuals and communities undertaking sustainable waste management and minimisation activities. Council will also foster relationships with businesses, neighbouring councils and waste industry companies operating in the District to improve Council and the District's ability to meet its goals for waste management and minimisation. Council will continue to play the role of direct service provider for the provision of domestic waste management and minimisation services at refuse transfer stations, and will continue to licence service providers of kerbside refuse and recycling collections.

Council will comply with all relevant legislative and regulatory requirements. It will continue to explore ways of forecasting demand for waste services in the District and develop and implement initiatives to ensure that this demand is met.

## 2.2 Public health protection

The range of waste services available to the Far North District, provided by the Council or private industry, will ensure that public health continues to be adequately protected. By 2020 it is anticipated that the Ahipara landfill will be full and closed. Under the present Northern area Waste contract, waste will then be disposed to the Puwera Landfill in Whangarei. Services for achieving waste minimisation will be improved on and alternatives to landfill disposal considered in the longer term.

There is adequate access to private hazardous waste disposal services. Litter and illegal dumping in public places is managed by Council with the Northland Regional Council managing any impact on waterways and the Department of Conservation managing the impact on the reserves they manage.

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<sup>1</sup> This represents a reduction of approximately 7,000 tonnes based on current landfill figures (2016) – source FNDC Waste Assessment – November 2016

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## 2.3 Guiding principles

The development of this WMMP is based on the following core principles:

### **Kaitiakitanga/ stewardship**

All members of society are responsible for looking after the environment, and for the impact of products and wastes they make, use and discard. The Māori concept of Kaitiakitanga expresses an integrated view of the environment and recognises the relationship between all things. Kaitiakitanga represents the obligation of current generations to maintain the life-sustaining capacity of the environment for present and future generations.

Stewardship is similar - acknowledging the role and responsibility we each have in managing the environment for the good of all. Fulfilling this obligation means managing all waste to lessen adverse environmental effects.

### **Minimising harm from waste**

Following on from the concept of Kaitiakitanga, the reduction of harm from waste, as outlined in the NZWS, recognises that waste can pose a significant threat to human health and the environment. Consequently, waste minimisation activities should focus on reducing the harmful effects of waste. This Plan considers the potential harm for all waste and the appropriate waste management and minimisation methodologies to respond accordingly to these.

### **Full-cost pricing**

The environmental effects of production, distribution, consumption and disposal of goods and services should be consistently costed and charged as closely as possible to the point they occur.

This principle encourages minimisation of environmental effects by ensuring full environmental costs are reflected in product and service prices, and paid as closely to their source as possible. This is most evident in the choice of funding systems and identifiable in a user-pays approach to waste management.

Subsidies and/or grants for the disposal of potentially harmful or important materials may be considered to promote their recovery.

Council supports container deposit legislation as a means of introducing user pays to recycling.

### **Efficient and effective waste management and minimisation**

Efficient waste management and minimisation is achieved when less waste is going to landfill, when resources are used wisely, and when the economic cost of waste is reduced. Council is therefore committed to providing effective, efficient and cost-effective waste minimisation and management services to residents and ratepayers within the Far North District.

### **Polluter-pays principle**

'Polluter-pays' services must be able to acknowledge, in some way, the amount of residual waste that is being collected from a customer. Council is committed to ensuring a fair and transparent charging system for waste collection and disposal where waste minimisation is acknowledged and the user pays a fair price for the waste they dispose.

### **Precautionary principle**

Where there is a threat of serious or irreversible damage, lack of full scientific certainty should not be a reason for postponing cost-effective measures to prevent environmental degradation or potential adverse health effects. Where decision-makers have limited information or understanding of the possible effects of an activity, and there are significant risks or uncertainties, a precautionary approach will be taken.

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## 3 Policies, plans and regulation

### 3.1 Legislation, plans and guiding policies

The following legislation, plans and guiding policies impact this WMMP:

#### The New Zealand Waste Strategy 2010

Waste management and minimisation in New Zealand is underpinned by the Government's core policy, the *New Zealand Waste Strategy – reducing harm, improving efficiency* (NZWS). The NZWS provides high-level direction to guide the use of the tools available to manage and minimise waste in New Zealand.

Tools available include:

- The Waste Minimisation Act 2008 (WMA)
- The Local Government Act 2002 (LGA)
- The Hazardous Substances and New Organisms Act 1996 (HSNO)
- The Resource Management Act 1991 (RMA)
- The Climate Change Response Act 2002 and the Climate Change (Emissions Trading) Amendment Act 2008
- International conventions
- Ministry for the Environment guidelines and codes of practice
- Voluntary initiatives.

To provide high-level direction, the Strategy has two goals:

- Reducing the harmful effects of waste
- Improving the efficiency of resource use.

The WMA ss44 requires that councils “have regard to” the NZWS, or other such policy that is subsequently developed, when preparing a WMMP. The Strategy's flexible approach provides for waste management and minimisation activities appropriate to local situations and desired community outcomes.

The following legislation impacts on this WMMP:

#### The Waste Minimisation Act 2008 (WMA)

The WMA emphasises and promotes waste minimisation. The purpose of this Act is to “encourage waste minimisation and decrease in waste disposal in order to protect the environment from harm; and to provide environmental, social, economic and cultural benefits”.

#### The Local Government Act 2002 (LGA)

The LGA has, until recently, required Council to assess collection, reduction, reuse, recycling, recovery, treatment and disposal of waste in the district and make provision for the effective implementation of its WMMP. These provisions have been repealed and are now largely embodied within the WMA. The LGA continues to require that the WMMP be reflected in Council's Long Term Plan (LTP), including summary information about the WMMP. The LGA also empowers councils to make waste management bylaws.

#### The Hazardous Substances and New Organisms Act 1996 (HSNO)

The HSNO addresses the management of substances that pose a significant risk to the environment and /or human health from their manufacture to their disposal. The HSNO requires councils to handle and dispose of hazardous substances such as used oil, asbestos, agrichemicals, LPG and batteries in a safe manner.

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### **The Resource Management Act 1991 (RMA) as amended**

The RMA provides guidelines and regulations for the sustainable management and protection of the natural and cultural environment. It also addresses the environmental effects of waste management and minimisation facilities through regional and local policies, plans and consent procedures. Under section 31 of the RMA, councils are responsible for controlling the effects of land-use activities that have the potential to adversely affect the natural and physical resources of the district. These include facilities used for the collection, recovery, treatment and disposal of waste.

### **The Climate Change (Emissions Trading) Amendment Act 2008**

The Climate Change Amendment Act 2008 requires landfill owners to purchase emission-trading units to cover methane emissions generated from landfill. The Government has enacted the Climate Change Response (Removal of Transitional Measure) Amendment Act 2016. The purpose of the amendment is to phase out the current one-for-two transitional measure from the Emissions Trading Scheme (ETS) from 1 January 2017. The new regime is to be phased in over three years. The present 50% liability will increase to 67% from 1 January, 2017, then increase again to 83% from 1 January, 2018, with the full market price (100%) in place from 1 January, 2019. This will apply to all sectors in the ETS.

### **The Health Act (1956)**

The Health Act allows for local authorities to provide for collection and disposal of refuse and other offensive matter, and for the licensing of offensive trades (as defined in Schedule 3). Cognisance should be given to the management of nuisances (section 29) arising from the management of waste.

### **The Litter Act (1979)**

This Act sets out the powers and duties of public authorities and others regarding littering, and allows territorial authorities to issue infringement notices for illegal dumping with an infringement fee not exceeding \$400.

## **3.2 Considerations**

In preparing this WMMP, Council has:

- given regard to the NZWS
- considered the waste hierarchy
- considered the requirements of the LGA in assessing and making decisions on the best and most practicable options for addressing the community's waste management needs
- given regard to the findings of its Waste Assessment when developing its action plan programme
- considered the effects on existing services, facilities and activities of using waste levies to fund its waste minimisation initiatives.

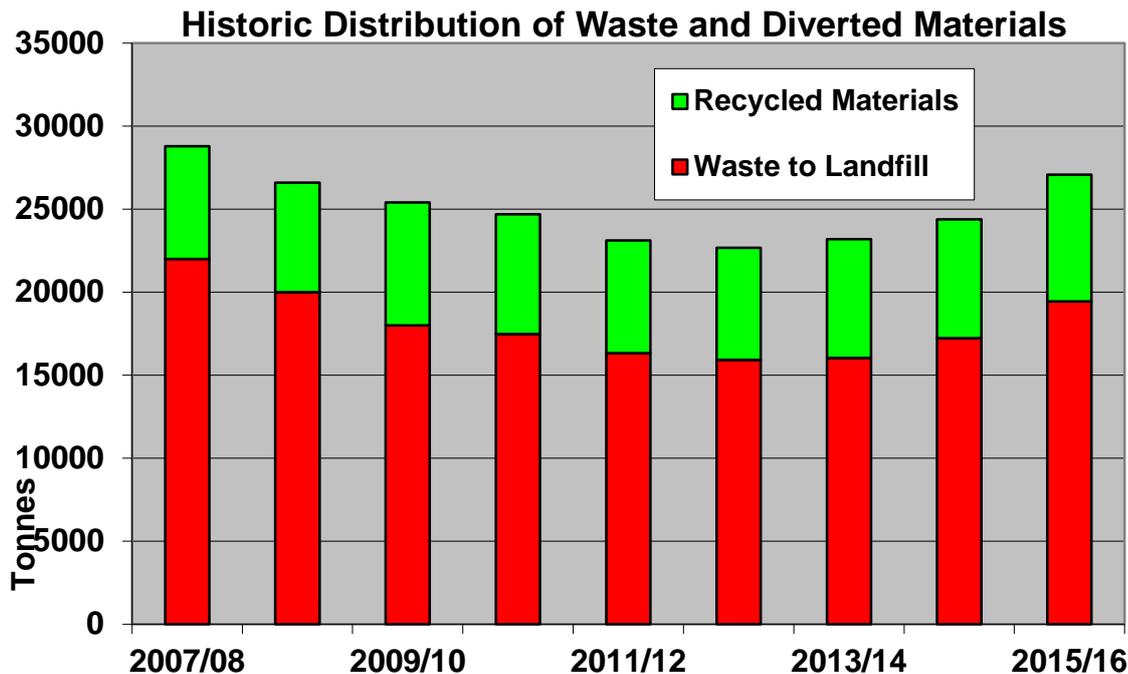
## 4 The waste situation

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

#### Total Waste

The following figure A4.1-1 depicts the historic waste to landfill and diverted material quantities for the Far North District.

Figure A4.1-1 Historic distribution of waste and diverted materials



This information was collated from data provided by licenced contractors operating collection services, and Council's refuse transfer stations.<sup>2</sup> "It is estimated that approximately 29,400 tonnes of waste went to landfill in 2001/02, at a time before user charges for solid waste were introduced to the District. Tonnages dropped in mid-2000 then peaked at 22,150 tonnes in 2007/08, after which the values dropped back to 15,932 tonnes in 2012/13. It is assumed the reduction in tonnes of waste to landfill reflects the lack of development taking place in the District because of the global economic recession. This trend was evident at many landfills around the country. There has been a steady increase over the last two years which reflects an increase in building and economic activity." This does not represent the diverted materials generated in the District, since an unknown portion of waste and diverted materials such as wood waste, green waste and scrap metal are currently re-used, recovered, recycled by private operators.

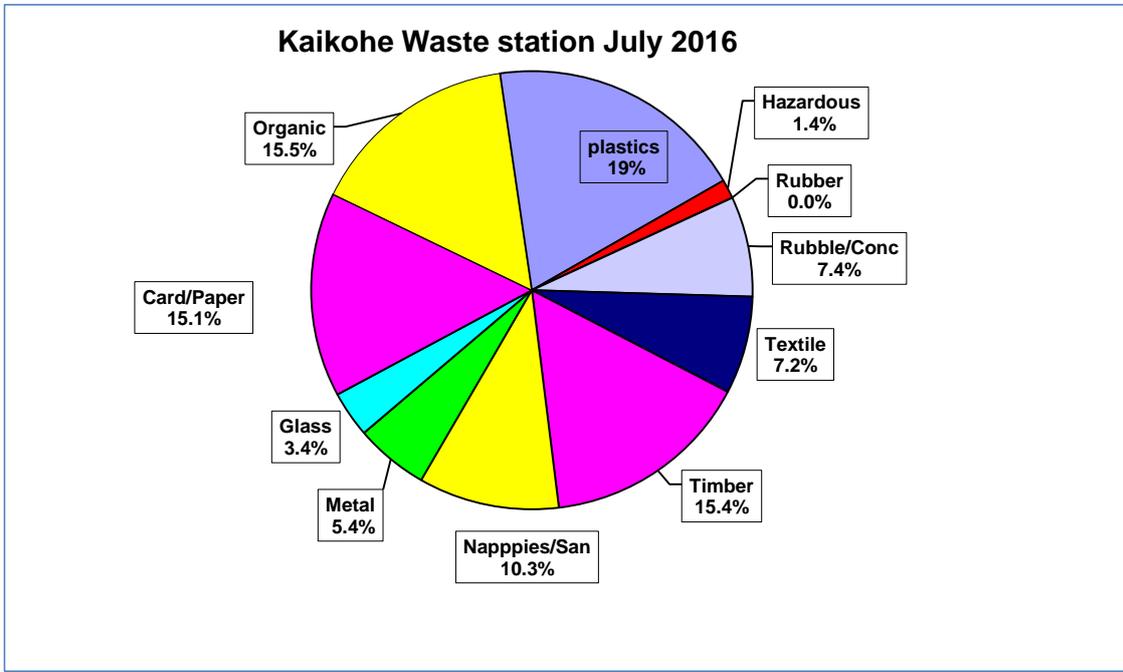
FNDC records of diverted materials, shown in figure A4.1-1 above, indicate that the amount of recycling taking place within the District has varied between 28% and 31% for the past five years. With the introduction of the Solid Waste Bylaw 2016, and the requirement to separate recyclables, we predict an initial growth of 2% per year in recycling. With growing awareness and education the target to reach over the next six years would be 50%.

<sup>2</sup> FNDC Waste Assessment – November 2016

## Waste composition

In July 2016, a waste audit was completed by Council at the Kaikohe Waste Station to measure the composition of the waste stream for consolidation to landfill. The source of this material was from refuse transfer stations, kerbside collections and commercial waste. Figure A4.1-2 illustrates this composition.

**Figure A4.1-2 Waste composition at Kaikohe Waste Station from all sources, 2016 Audit**



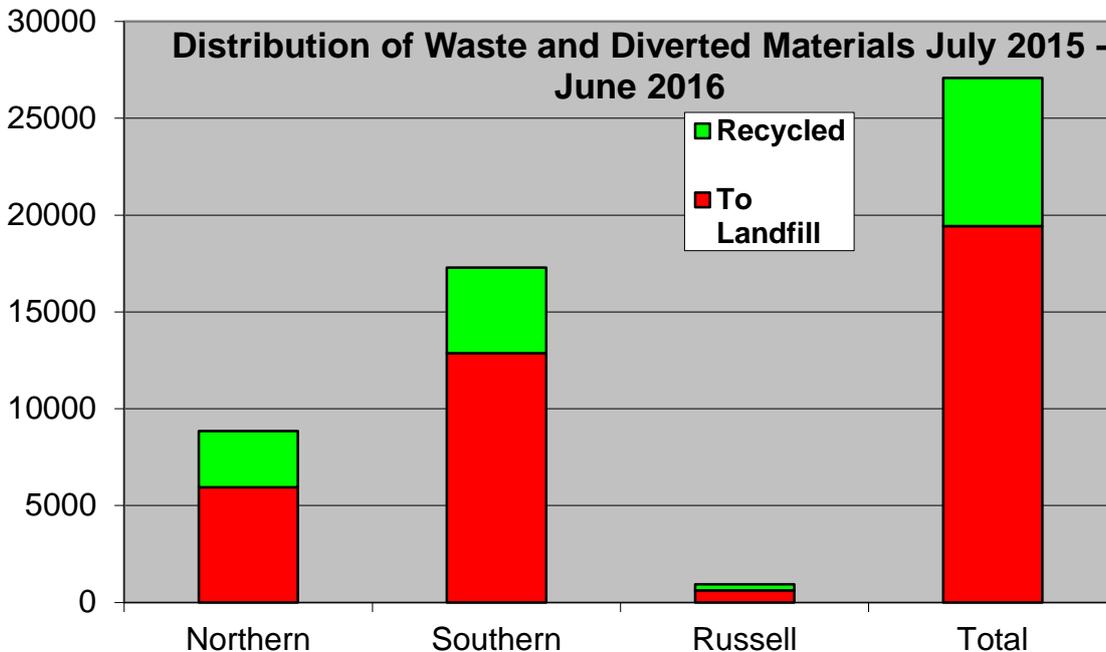
This audit indicates a potential to reduce the amount of waste going to landfill of the following waste streams:

- organic and timber
- plastic and paper/cardboard
- construction and demolition waste
- glass and metal.

## Diverted materials

Council records between July 2015 and June 2016 indicate that approximately 7,600 tonnes of waste was diverted from landfill through recycling. This is approximately 28% of the waste stream. Figure A4.1-3 shows the distribution of waste and diverted materials from each of the District's collection areas, Northern, Southern and Russell.

**Figure A4.1-3 Distribution of waste and diverted materials, July 2015 – June 2016**

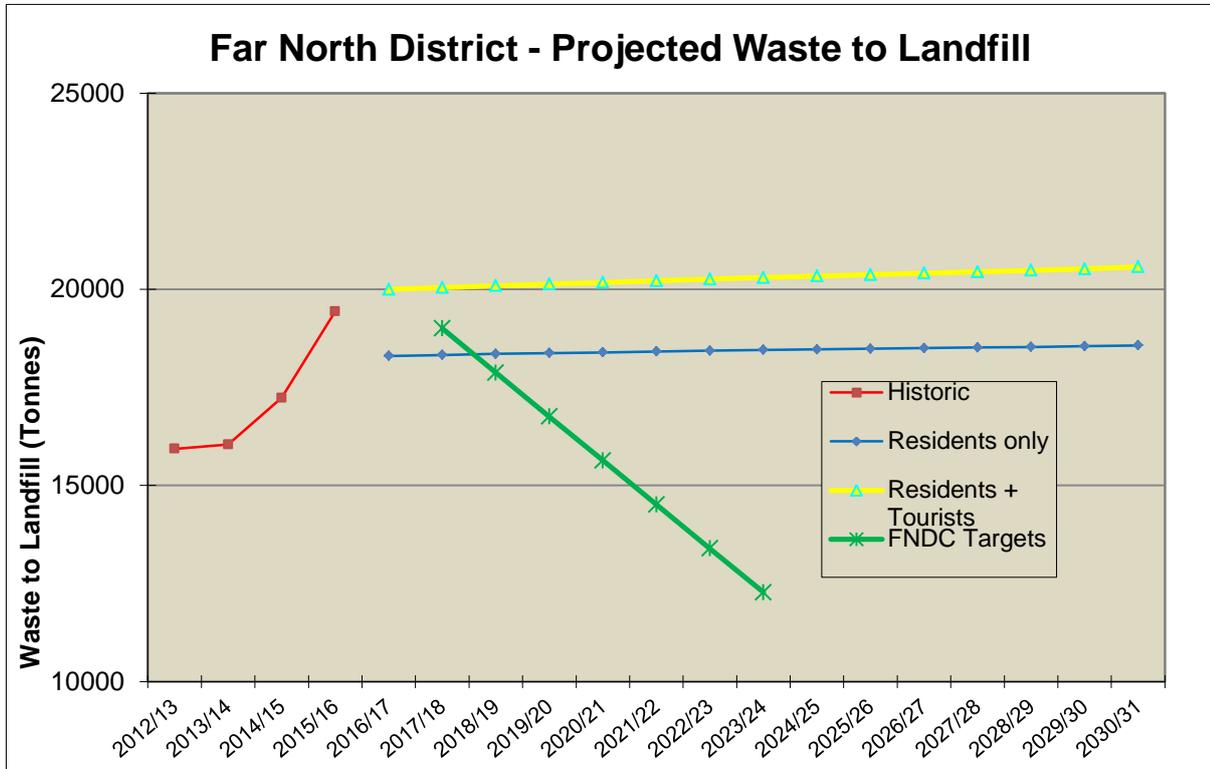


FNDC records indicate that from July 2012 through June 2013, 15,932 tonnes of municipal waste was sent to landfill, at a time when the District's population was estimated to be around 60,600 people. This is equivalent to approximately 0.263 tonnes of waste to landfill per person. In 2015/16 the waste to landfill per capita was 0.32 tonnes, based on an estimated population of 60,800. The lower value of waste to landfill per person indicated for 2012/13 appears to be due to the global economic recession which resulted in an economic slowdown, resulting in less development taking place, reduced household spending and therefore less production of waste. Because the economic down-turn "skewed" waste quantities, it is suggested that for the purpose of projecting future waste to landfill quantities, the 2015/16 value of 0.32 tonnes of waste per person be used. A second projection will be compared, based on enforcement of the Solid Waste Bylaw 2016 and set a goal of 200kgs per capita to landfill continuing from the current WMMP.

## Future waste projections

Future growth projections for the District indicate that waste to landfill will increase, driven by tourism, population growth and economic growth.<sup>3</sup> Figure A4.1-4 illustrates this.

**Figure A4.1-4 Far North District projected waste to landfill**



The following forecast projections are made, based on the following scenarios:

- resident population growth with no changed efforts in waste minimisation (blue line)
- tourist and resident population growth with no changed efforts in waste minimisation (yellow line)
- FNDC targets for waste to landfill achieved through various waste minimisation initiatives (green line).

While the yellow and blue projections are unlikely to occur due to waste minimisation efforts, the yellow line illustrates the extra demand seasonal residents and tourists place on waste management services and increase the importance of planning for future services. The green line scenario of achieving waste minimisation targets indicates a potential decrease of waste to landfill quantities by 36% over a six-year period. This scenario requires uptake and commitment to reduced waste to landfill and increased diversion brought about by the Solid Waste Bylaw.

<sup>3</sup> FNDC Waste Assessment – November 2016

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## 4.2 Overview of existing waste management and minimisation infrastructure and services

Existing waste management and minimisation services and facilities provided in and available to the District – both by Council and other providers include:

- waste minimisation and management education and communication
- collection of refuse and recyclables
- refuse transfer station operation for both domestic and commercial types of waste and diverted materials
- recycling drop off centres
- green waste and food waste collection and processing
- litter collection and removal of illegally dumped waste
- seasonal barge service for refuse and recyclables from boats in the Bay of Islands
- collection of recyclable farm plastics
- monitoring of closed landfills
- landfill operation and disposal of waste.

FNDC owns and operates 14 refuse transfer stations (RTSs) throughout the district, including the Kaitia Resource Recovery Centre (RRC). At Kaikohe the waste station is privately owned but contracted to Council to provide public access. In addition there are 13 community recycling centres located around the district providing free domestic recycling. Two of these are seasonal.

The operation and maintenance of these facilities is undertaken by contractors to Council. The Council-owned operational landfill at Ahipara accepts waste from the northern half of the district, while the Russell landfill accepts waste from the Russell peninsula only. In addition, waste is transported from the southern half of the district to the Puwera Landfill in Whangarei. Litter collection services are provided throughout the District in areas such as shopping centres, parks and beach reserves by a contractor who also picks up illegal dumping. Council does not provide any kerbside refuse, commercial refuse or trade waste collection services. Businesses can take limited types of trade waste to the refuse and recycling stations, or contract a suitable refuse collection operator.

No kerbside recycling services are provided by Council, however, free public recycling is provided at the refuse transfer stations and community recycling centres.

Community waste minimisation and management education for schools, community and business is provided under contract to the Council.

Para Kore run a national program that works with marae to increase the reuse, recycling and composting of materials, helping to reduce the extraction of natural resources and raw materials from Papatūānuku.

Private waste operators are a key provider of refuse and recycling collection services for both residential and commercial customers.

Green waste collection and processing is provided by private operators in both the northern and southern areas. Any green waste collected at RTSs is handled by the site operator and transported to Keri Green for processing.

Far North Holdings Ltd provide one wharf bin, and at the Opuā marina they provide 24 x 240 litre bins for the marina berth holders.

The Northland Regional Council provides a rubbish barge collection service for visiting boats and island campers in the Bay of Islands in January each year.

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Nationwide plastic recovery programmes run by Plasback and Agrecovery are available to farmers and horticulturists.

There are eighteen known closed landfills in the District, of which three are monitored by the Northland Regional Council for water quality.

Hazardous waste for the householder is dealt with through transfer stations, while the Northland Regional Council will deal with certain agrichemical legacy waste. Commercial hazardous waste is collected by companies such as Waste Management Technical Services and Agrecovery for farmers.

### **4.3 Summary of District-specific issues**

There are a number of issues and challenges facing the District that will drive future waste management and minimisation service provision. These include:

- a need to provide Far North communities with additional recycling facilities
- a need to account for the changes to the market value of recyclables in planning future recycling services
- the impact of increasing numbers of second home owners and tourists with significant and increasing demands on the District's services and infrastructure
- a need to provide waste minimisation facilities able to recover recyclables and other materials associated with seasonal increased waste quantities
- a need to preserve existing landfill space in the District or secure landfill space elsewhere
- consideration of the implications of the ETS on landfill disposal
- waste quantities are likely to increase with growth e.g. construction and demolition waste
- a need to reduce the quantities of green waste and putrescibles being disposed of to landfill to reduce harm and improve resource use
- how Council can continue to provide acceptable levels of solid waste management services in the future
- the need for Council to be able to gather data on waste management activities to measure its performance against waste reduction targets and plan future waste management and minimisation services
- a need to prevent or reduce illegal dumping and therefore reduce the adverse effects on the environment and society and avoid cultural offense
- public litter bins are being used for dumping domestic waste (as opposed to litter)
- a need to investigate the opportunities for regional approaches to illegal dumping management.
- A need to pursue and support Local Government NZ's request for the Government to declare beverage containers a priority product under the Waste Minimisation Act 2008.

## 5 Proposed methods for achieving effective and efficient waste management and minimisation

### 5.1 Summary of key waste/diverted material streams and how currently managed

The key residual waste and diverted material waste streams in the District have been identified through waste audits completed by Council in July 2016.

The current processes in the District for managing waste and diverted materials streams are summarised in Table A5.1-1.

**Table A5.1-1 Current waste management and minimisation**

Waste stream/service	How these are currently managed
Household recycling	RTSs and CRC drop-off for recyclables, Kaitaia RRC on-site store, private kerbside collection services (bags and crates)
Commercial recycling	Private collection services, Kaitaia RRC on-site store
Greenwaste and putrescible waste	RTS drop-off(some) – private services – garden maintenance contractors for greenwaste, mulching, composting facility (Waipapa), putrescible waste collection (by pig farmers)
Household refuse	RTS drop-off for refuse , private kerbside collection services (bags, bins), landfills
Commercial refuse	Limited types of waste accepted at RTSs, private collection services, landfills
Litter and illegal dumping	Litter bin servicing and removal of illegally dumped waste
Hazardous waste	RTS drop-off for domestic quantities, Northland Regional Council collection of agrichemical legacy waste, commercial collection and disposal by Waste Management Technical Services and Agrecovery for farmers
Farm Waste	Private collection services, Plasback and Agrecovery for plastic recycling
Cleanfill	Landfills, cleanfills, private disposal
Waste minimisation education and promotion	Community and business education on waste minimisation and management, school education programmes, school waste audits, Ecostar award for business, support at public events. Support for Parakore

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## 5.2 Options for the future

Council will implement a number of actions for the future provision of waste and waste minimisation infrastructure and services. These are detailed in Part B – Action Plan of this WMMP and outlined fully in the Waste Assessment (refer Part C Appendices – FNDC Waste Assessment – November 2016).

These actions have been assessed by taking into consideration the following things:

- the benefits and costs of each action in relation to the present and future social, economic, environmental and cultural well-being of the District
- operational considerations
- the effects of using waste levy funds for waste minimisation on any existing waste minimisation services, facilities or activities, either provided by Council or others
- how the action will contribute to the NZWS and the Council's waste management and minimisation goals, objectives and targets
- Council's role in implementing the action
- Council's role in promoting effective and efficient waste management and minimisation.

## 5.3 Statement of options

It is considered that the implementation of additional services and infrastructure, combined with the current services and infrastructure, already provided by Council and private operators, will meet forecast future demand for services for the next 20 years as well as support Council's goals for solid waste management and minimisation.

The proposed actions will ensure that public health is adequately protected and promote effective and efficient waste management and minimisation for the District for those waste streams where the Council has knowledge of requirements and/or provides services.

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## 6 Means of implementation and funding

Section 43 of the WMA requires that the Council include information about how implementation of this Plan will be funded, including information regarding any grants made and the expenditure of levy funds.

### 6.1 Funding implementation of the plan

Funding considerations take into account a number of factors including:

- prioritising harmful waste
- waste minimisation and reduction of residual waste to landfill
- full-cost pricing - 'user pays'
- the environmental effects of production, distribution, consumption and disposal of goods and services. These are consistently costed and charged at the point they occur to ensure that price incentives cover all costs
- protection of public health
- affordability
- cost effectiveness.

The Far North District Council will use a range of funding options to assist in the delivery of effective and efficient waste minimisation and management in the District including:

- **Uniform Annual General Charge (AGC)** - a charge that is paid by all ratepayers
- **User pays** where the user determines the value of payment – variable pricing
- **Waste levy** - funds received from the Government are distributed on a population basis from money collected nationally from a levy on waste disposed to landfill. Waste levy funds also include any funds received from a successful application to the Waste Minimisation Fund.

Funding options for individual programmes, services or initiatives are outlined in Part B - Action Plan.

Council sets the fees that apply at the District's refuse transfer stations, Russell and Ahipara Landfills.

There are no grants or sponsorships for waste management or minimisation received from other parties.

The operation and maintenance costs for the District's key solid waste management contracts are shown in Table A6.1-1.

**Table A6.1-1 Funding of operation and maintenance projects**

Project	Explanation	Cost per annum	Year	Funding Source
Northern refuse transfer stations and Kaitaia resource recovery centre operation and maintenance	Waste management and minimisation services contract North	\$1.3 million	2015	Rates and user charges
Southern refuse transfer stations operation and maintenance	Waste management and minimisation services contract South	\$1.5 million	2015	Rates and user charges
Litter collection and town	Community Services and	\$70,000	2015	Rates

Project	Explanation	Cost per annum	Year	Funding Source
maintenance	Maintenance contract	(collection) \$300,000 (disposal)		
Russell landfill and recycling facility operation and maintenance	Operation of Russell landfill and recycling facility contract	\$172,000	2015	Rates and user charges
Ahipara landfill operation	Operation of Ahipara landfill contract	\$230,000	2015	User charges

## 6.2 Waste minimisation levy funding expenditure

The WMA requires that all waste levy funding received by the Council be spent on the promotion of waste minimisation and in accordance with this waste management and minimisation plan.

Waste levy funds can be spent on existing waste minimisation services, new services or a combination of both. The funding can also be used to provide grants, to support contract costs or as infrastructure capital.

The District receives its share of national waste levy funds from the Ministry for the Environment. The amount awarded is based on population. It is estimated that Council's share of waste levy funding will be approximately \$220,000 a year for the term of this Plan. In addition, Council may apply for contestable waste levy funds from the Waste Minimisation Fund, either separately or in collaboration with another council or party.

The Council intends to use its share of the levy money on for the following initiatives:

- waste minimisation education in schools and the community and the business Ecostar award
- operating existing and future community based recycling centres to service communities and increased seasonal visitors
- continued support for the network of electronic recovery services throughout the District
- developing a social marketing behaviour change programme through web media
- investigating opportunities for further use of construction and demolition waste as levy funds rise
- augmenting public litter bins with public recycling bins when levy increases
- supporting the Para Kore programme with any increases in levy funding.

More details of this can be found in Part B – Action Plan.

## 7 Monitoring and reporting progress

Council intends to measure and report progress against its waste management and minimisation objectives as depicted in Table A7.1-1

**Table A6.2-1 Measurement of progress**

Outcome	Objective	Measurement	Progress reported
Level of service	<ul style="list-style-type: none"> <li>- To ensure efficient and cost effective solid waste management in the Far North District to an appropriate level of service.</li> <li>- To ensure efficient and effective residual waste services are provided to all communities in the Far North District.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contract Key Performance Indicators(KPIs), licensing reports etc)</li> <li>- Solid Waste Analysis Protocol audits (SWAPs)</li> <li>- Measurement of quantity of waste and diverted materials</li> </ul>	Annual report
Compliance	<ul style="list-style-type: none"> <li>- To ensure residual waste collection services are operated in an efficient and effective manner and meet environmental standards.</li> </ul>	<ul style="list-style-type: none"> <li>- Legislative compliance achieved</li> <li>- Licensing through bylaw</li> </ul>	Council records
Reduction	<ul style="list-style-type: none"> <li>- To facilitate, procure and provide services that encourage avoidance and minimise the creation of waste and its eventual disposal to landfills.</li> <li>- To encourage waste avoidance and reduction at source.</li> <li>- To encourage efficiency in resource use.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contract KPIs etc)</li> <li>- SWAPs</li> <li>- Waste licensing</li> <li>- Measurement of quantity of waste and diverted materials, including hazardous waste and illegal dumping</li> </ul>	Annual report
Re-use	<ul style="list-style-type: none"> <li>- To facilitate, procure and provide services that encourage the re-use of materials destined for disposal at landfill .</li> <li>- To maximise the diversion of material for reuse before it reaches the waste stream, using education and financial incentives.</li> <li>- To encourage waste separation at source, particularly at residential and commercial properties.</li> <li>- To promote and support community-based or business initiatives with a purpose is to increase reuse and/or recycling of materials.</li> <li>- To ensure infrastructure is provided or managed appropriately to allow reuse facilities to operate and encourage the re-use of materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contracts KPIs etc)</li> <li>- SWAPs</li> <li>- Waste licensing</li> <li>- Measurement of quantity of waste and diverted materials</li> </ul>	Annual report
Recycling	<ul style="list-style-type: none"> <li>- To facilitate, procure and provide services that encourage recycling of materials that without intervention would otherwise be destined for landfill.</li> <li>- To maximise the diversion and value of material through recycling before it reaches the waste stream.</li> <li>- To encourage waste separation at source, particularly at residential and commercial properties.</li> <li>- To promote and support community-based and business initiatives designed to increase the recycling of materials.</li> <li>- To ensure infrastructure is provided to allow recycling facilities to operate, and to encourage the recycling of materials.</li> <li>- To ensure continuation of the public place recycling scheme.</li> <li>- To support in-house recycling initiatives for Council facilities.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contracts KPIs etc)</li> <li>- SWAPs</li> <li>- Waste licensing</li> <li>- Measurement of quantity of waste and diverted materials</li> </ul>	Annual report
Recovery	<ul style="list-style-type: none"> <li>- To facilitate, procure and provide services that maximise the recovery of materials, value or resources (including energy) from waste.</li> <li>- To promote and support community-based and business initiatives that increases the recovery of materials.</li> <li>- To ensure infrastructure is provided to allow recovery facilities to operate and to encourage the recovery of materials.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contracts KPIs etc)</li> <li>- SWAPs</li> <li>- Waste licensing</li> <li>- Measurement of quantity of waste and diverted materials</li> </ul>	Annual report
Treatment	<ul style="list-style-type: none"> <li>- To ensure that opportunities and services exist within the District to minimise the harm from waste by providing, regulating, promoting or facilitating treatment opportunities for waste.</li> <li>- To reduce the potential for environmental harm caused by hazardous waste.</li> <li>- To reduce the potential for harm to health or safety caused by hazardous waste.</li> <li>- To comply with legislative requirements and relevant resource consents.</li> </ul>	<ul style="list-style-type: none"> <li>- Hazardous waste facilities present at Council owned or operated sites.</li> <li>- Residents and ratepayers informed of other facilities that are available</li> </ul>	Annual report
Disposal	<ul style="list-style-type: none"> <li>- To ensure that the facilities and infrastructure are available to receive residual waste that cannot be reduced, re-used, recycled, or recovered. <i>Note: It is recognised that while current disposal of waste to landfill is not Council's preferred choice, it is still necessary.</i></li> <li>- To ensure that all waste to landfill is monitored and reported appropriately, and that harm from waste is minimised. To monitor currently known Council -owned and/or operated closed landfills.</li> </ul>	<ul style="list-style-type: none"> <li>- Community satisfaction surveys</li> <li>- Council records (contract KPIs etc)</li> <li>- SWAPs</li> <li>- Waste licensing</li> <li>- Measurement of quantity of waste and diverted materials</li> </ul>	Annual report

### 7.1 Reporting

The Council will report progress of the WMMP implementation through:

- annual reports
- Council publications
- Council's website
- media releases.

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## 8. Part B – Action Plan

### 8.1 Introduction

This action plan outlines Council's programme of action for achieving the vision, goals, objectives and targets of this WMMP. Actions are provided here for services and initiatives that Council either already provides or intends providing.

Fundamental to the successful delivery of efficient and effective waste management and minimisation within the Far North District is Council's ownership, control or influence over the waste infrastructure (refuse transfer stations, resource recovery centres, community recycling centres, landfills) required to fulfil the requirements and intent of the WMA and the NZWS. This enables Council to have access to and influence the waste value chain to enable separation and resource recovery of materials prior to disposal of waste to landfill.

In addition, Council has access to waste data from its facilities, which is critical to measuring and monitoring progress towards achievements of waste reduction targets. Council intends to continue its ownership and operation of the infrastructure that it currently owns and may consider (following appropriate community consultation) future partnership arrangements with the private sector for the provision of infrastructure where a partnership is likely to deliver better value for money to ratepayers.

For the six-year term of its WMMP, Council proposes continuing the provision of the following waste services in the District:

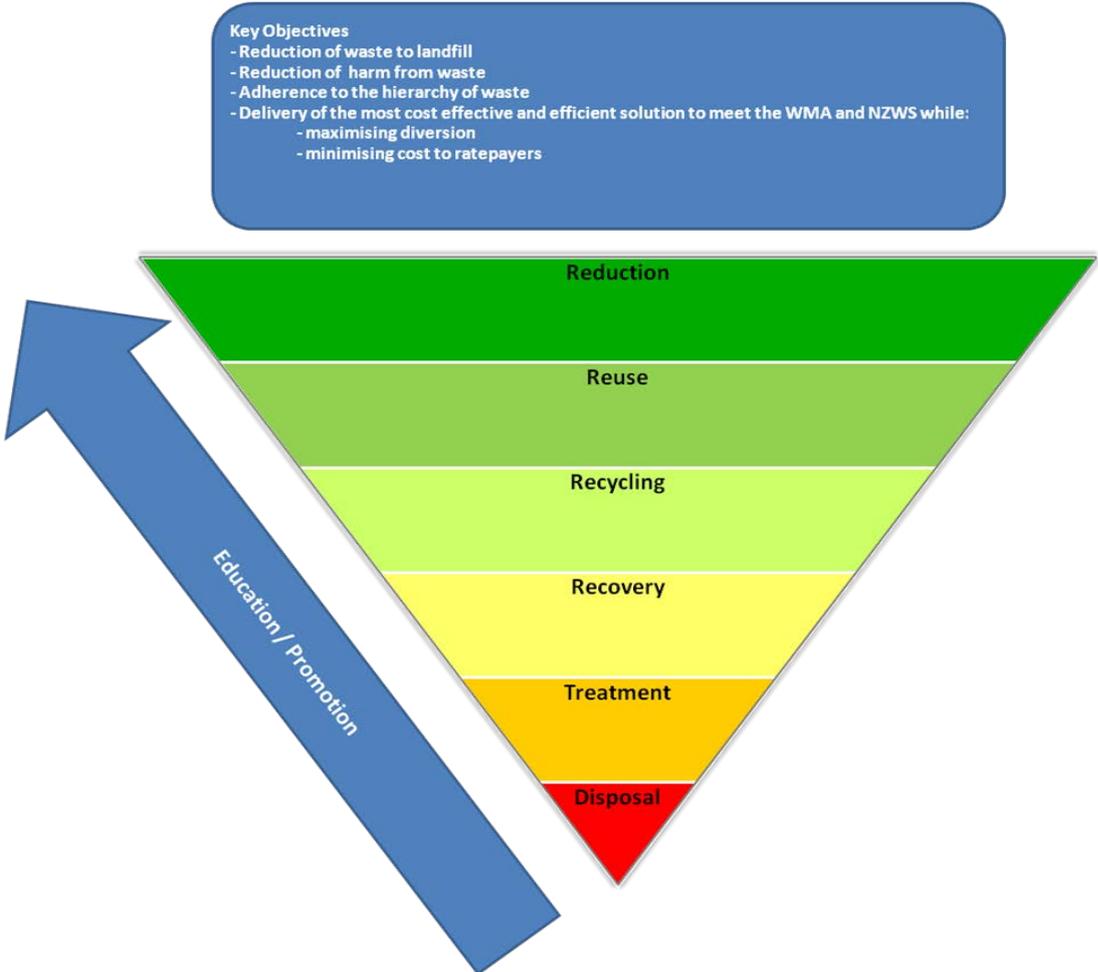
- Maintenance and operation of refuse transfer stations, resource recovery centres, community recycling facilities and landfills – subject to review
- Litter collection and town maintenance services
- Closed landfill monitoring
- Delivery of education/promotion about waste management and minimisation.

It is assumed that the following service delivery provided by private operators will continue throughout the term of the WMMP:

- Kerbside recycling collection
- Kaikohe Waste Station – dependent on future contracts
- Green waste collection and processing
- Commercial residual waste and recycling collections
- Kerbside residual waste collection
- Hazardous waste collection
- Transportation of waste for disposal to landfill (both within and outside the District).

Figure B1-1 depicts the waste hierarchy and its relationship to this WMMP.

Figure B1-1 Waste Management and Minimisation Plan relationship to the waste hierarchy



### 8.2 Supporting action: education/promotion

Education and promotion play a fundamental supporting role in all areas of the waste action plan and all aspects of the waste hierarchy. These are paramount in the reduction of waste to landfill and play a role in supporting many of the operational elements of the WMMP including:

- promoting positive changes in attitude and behaviour by assisting individuals to make conscious decisions to avoid waste. Intrinsic links exist between an informed and motivated community and the success of waste management initiatives at every level.
- cornerstone to building the communities' knowledge, understanding, and skills in waste minimisation and recycling
- providing people with the knowledge and skills to take steps to avoid or reduce waste
- consistently acting according to the waste hierarchy
- encouraging and supporting people to take personal responsibility for their waste
- encouraging and supporting efficient use of resources to minimise environmental harm from waste
- increasing diversion of waste from landfill
- supporting Council in the delivery of its waste services and operations

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### 8.3 Actions

The following table B3-1 outlines the actions Council will take to ensure it delivers efficient and effective waste management and minimisation in the District.

Section 44 of the WMA requires Council to consider the following methods of waste management and minimisation (which are listed in descending order of importance and colour coded as follows):

(i)	Reduction	Dark Green
(ii)	Re-use	Light Green
(iii)	Recycling	Bright Green
(iv)	Recovery	Yellow
(v)	Treatment	Orange
(vi)	Disposal	Red

As a result, the actions that Council intends taking are displayed according to their position on the waste hierarchy in the Table B3-1 below.

## What we will do

**Table B3-1 Actions**

Action	New/ existing action	Implementation timeframe - Yr	Contribution to the NZWS Goals /Waste Hierarchy	Funding Source/1 0 Year Plan Provision
Campaign for the introduction of a refundable container deposit levy, mandatory produce stewardship and increasing Central Government's waste levy.	New	2017 - 2023	<b>Reduction, Reuse, Recycling, Recovery Improving efficiency of resource use Reducing harmful effects of waste</b>	Rates/ Waste levy
Continue to carry out waste audits through the Ecostar award programme to encourage all businesses including tourism to reduce, reuse, recycle and recover. Draw on industry leaders examples to support smaller businesses.	Existing	On-going	<b>Reduction, reuse, recycling, recovery Improving efficiency of resource use Reducing harmful effects of waste</b>	Waste levy/rates
Continue to fund the education contract for waste management and minimisation and support the Paper 4 Trees programme.	Existing	On-going	<b>Reduction Improving efficiency of resource use</b>	Waste levy/rates
Support Farmers industry to find solutions.	New	2017-2023	<b>Reduction Improving efficiency of resource use</b>	Rates/ user charges
Increase education to the public using web media develop a social marketing/behaviour change programme to find the best means to motivate people to reduce, reuse, recycle and compost. Promote the bylaw which sets maximum levels of recyclables and organic waste that can be put in rubbish.	Existing	On-going	<b>Reduction, reuse, recycling, recovery Improving efficiency of resource use</b>	Waste levy/rates
Continue to support the Para Kore programme to build relationships with Maori and encourage and engender more community commitment for waste minimisation.	Existing	On-going	<b>Reduction, reuse, recycling, recovery Improving efficiency of resource use Reducing harmful effects of waste</b>	Waste levy/rates
Liaise regularly with Community by holding annual waste minimisation meetings in each ward	New	2017-2023	<b>Reduction, reuse, recycling, recovery Improving efficiency of resource use Reducing harmful effects of waste</b>	Rates / Waste levy
Continue to provide access to the Kaitia Resource Recovery Centre reuse shop	Existing	On-going	<b>Reuse Improving efficiency of resource use</b>	Rates/ user charges
Continue to provide residents with access to recycling and green waste disposal through the District's RTS's and 'free' recycling at community recycling centres using contracted services	Existing	On-going	<b>Recycling Improving efficiency of resource use</b>	Rates/ Waste levy

Action	New/ existing action	Implementation timeframe - Yr	Contribution to the NZWS Goals /Waste Hierarchy	Funding Source/1 0 Year Plan Provision
Provide additional community recycling drop off points with on site sorting, with aim of the majority of the population being within 15 minutes of a drop off point. Priority 1: Waima, Waitangi, Oruaiti, Mangamuka - Priority 2: Pampuria, Waiharara, Matawaia, Te Tii	New	2017 - 2023	<b>Recycling Improving efficiency of resource use</b>	Waste levy
Provide additional recycling drop-off facilities to meet seasonal demands. Three possible further sites have been identified. Matauri Bay, Taupo Bay and Tauranga Bay.	New	2017 - 2023	<b>Recycling Improving efficiency of resource use</b>	Waste levy
Continue relationships with recyclers so that trust develops and information flows more freely	Existing	On-going	<b>Recycling Improving efficiency of resource use</b>	Rates
Control strategic outcomes through licensing of recycling collectors as well as contracts for the operation of RTSs, RRCs and Landfills	Existing	On-going	<b>Recycling Improving efficiency of resource use</b>	Rates/ licensing fees
Continue to reduce the quantity of rubbish-only litter bins and replace with dual recycling bins within the District to increase the amount of recycling.	Existing	On-going	<b>Recycling Improving efficiency of resource use</b>	Rates/ Waste levy
Continue with ewaste recovery and review types of materials collected and accepted at the RTSs and expand when markets open up.	Existing	On-going	<b>Recycling Improving efficiency of resource use</b>	Waste levy/user charges
Utilise saving from reducing opening hours at level 1 RTS's and fund extra Community recycling centres. Recommended closing at 4pm weekdays would net approx. \$66,000.	New	2017	<b>Recycling Improving efficiency of resource use</b>	Rates
Investigate opportunities for further use of recovered Construction & Demolition waste.	New	2017 Ongoing	<b>Recovery Improving efficiency of resource use</b>	Waste levy
Endorse home composting, worm farms and Bokashi through education and subsidy. Apply for additional waste levy funding. \$25 - \$30,000	New	2018 - 2023	<b>Recovery Improving efficiency of resource use</b>	Waste levy
Look at joint development of suitable solutions with the private sector for Resource recovery centre in Waipapa/Kerikeri area. Investigate developing as a waste levy funded project. Estimate \$600 - 800K.	New	2018 - 2020	<b>Recovery Improving efficiency of resource use</b>	Waste levy/ Loan

Action	New/ existing action	Implementation timeframe - Yr	Contribution to the NZWS Goals /Waste Hierarchy	Funding Source/1 0 Year Plan Provision
Investigate options for developing the Russell landfill into a Resource recovery centre. Apply for waste levy funding. Estimate \$160,000	New	2017 - 2019	<b>Recovery</b> <i>Improving efficiency of resource use</i>	Waste levy/ Loan
Provide drop-off facilities for domestic hazardous waste at the RTSs.	Existing	On-going	<b>Treatment</b> <i>Reducing the harmful effects of waste</i>	Rates
Continue to provide refuse disposal through the District's RTSs using contracted services.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	User charges Rates
Continue to maintain and operate the current landfills in the District until their closure. Consolidate at Kaitaia post closure Ahipara for transport to Puwera.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	User charges
Continue to provide public place refuse collection facilities to meet seasonal demand.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates/ user charges
Monitor closed landfills	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates
Investigate long-term disposal arrangement with an out-of-district service provider.	New	2020 – 2022	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates
Support the WasteMINZ National Waste Data Framework proposal for a waste data monitoring tool.	New	2018 – 2023	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates
Review options for retaining a Council-owned RTS in Kaikohe. Consider re-establishing the Carey Rd site and develop further with covered area, \$10K or purchase Station Rd site.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates/ Loan
Continue to maintain network infrastructure through renewal funding.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates/ Loan
Ensure that all illegal dumping activities are recorded and, where possible, dumped refuse is gone through for infringement notices to be issued or fines levied.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates/ Fines
Highlight the cost of dealing with illegal dumping to the public.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates
Support community group litter clean-ups.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates
Develop a regional forum (include Regional council and D.O.C) to enable shared knowledge on illegal dumping and co-operative clean ups. Expand monitoring cameras to areas where there is consistent illegal dumping.	New	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates

Action	New/ existing action	Implementation timeframe - Yr	Contribution to the NZWS Goals /Waste Hierarchy	Funding Source/1 0 Year Plan Provision
Control strategic outcomes through licensing of refuse collectors as well as contracts for the operation of RTSs and Landfills. Ensure OSH requirements met.	Existing	On-going	<b>Disposal</b> <i>Reducing the harmful effects of waste</i>	Rates/ licensing fees

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## **9. Part C – Appendix**

Far North District Council Waste Assessment – November 2016