Kaipara District Council

Waste Minimisation Strategic Activity Management Plan 2021-2031

June 2021

Status: Final

Kaipara te Oranganui

KAIPARA DISTRICT

Two Oceans Two Harbours

This document has been prepared by Kaipara District Council.

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REVISION SCHEDULE

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			Prepared by	Checked by	Reviewed by	Approved by
A	April 2020	1st Draft for review	D Powell			
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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The purpose of this Waste and Minimisation activity management plan is to ensure that assets are operated and maintained, so that they provide the required level of service for present and future customers.

This AMP is a key planning tool is directly related to the Waste Minimisation and Management Plan 2020 (WMMP), other documents that may also influence the Waste Minimisation activity and assets include KDC's Long Term Plan, Annual Plan, General Bylaws, District Plan, Waste Minimisation contracts and Closed Landfill Management Plans.

1.2 LEVELS OF SERVICE

Levels of service are driven by customer expectations, compliance with statutory requirements and Council policies.

KDC's Waste Minimisation vision is "***To reduce waste and increase recycling and resource recovery for the protection of the environment and human health.***". In order to align to this vision KDC aims to provide affordable, hygienic, refuse collection and disposal that is environmentally sustainable, meets statutory requirements and the needs of Kaipara's communities. The Waste Minimisation assets and services provided by KDC support the community outcome of ''Minimising the volume and impact of waste on the environment'.

1.3 FUTURE GROWTH AND DEMAND

This section outlines the existing demand, demand forecasts, growth and expectations. Increase in demand place additional wear on assets and services which may reduce the remaining life of assets and require the development of new capacity.

The future demand in the region for waste management and minimisation services will be driven by a number of primary drivers including:

- Demographic change (e.g. population and/or household changes)
- Change in commercial and industrial activity and economic conditions
- National policy, legislation and regulation
- Impact of waste minimisation programmes, services and future initiatives
- Community expectations.

1.4 LIFE CYCLE MANAGEMENT

Due to the limited number of Waste Minimisation assets owned by KDC, the asset groups covered by this Waste Minimisation AMP are: Transfer Stations; Closed Landfills; Collection Cages; Public Litterbins. When managing these assets KDC must ensure the interests and expectations of stakeholders are met alongside regulatory compliance requirements. This Waste Minimisation Activity Management Plan (AMP) documents this approach by outlining the asset management processes and practices used to develop optimised lifecycle management strategies. The AMP is therefore a vital component of KDC's planning process and demonstrates how we address multivariate requirements by integrating management, financial and technical practices to deliver the strategies and initiatives planned. This AMP demonstrates how KDC intends to meet key goals and

objectives for the Waste Minimisation assets, looking ahead 10 years whilst acknowledging that, in practice, asset management planning tends to consider much longer timeframes.

1.5 RISK MANAGEMENT

The main risks associated with the Waste Minimisation activity include Illegal substances being deposited without Council knowledge, leachate contamination, legislative and regulatory changes that have the potential to impact on operations, adjacent landowner issues, environmental contamination occurring through events beyond the control of Council and a potential risk also exists where operators may fail to meet contractual obligations. Monitoring and management of 14 closed landfills is a significant aspect of the Waste Minimisation activity and KDC is working closely with the Northland Regional Council (NRC) on this as well as related consent requirements.

1.6 FINANCIAL PROJECTIONS

Currently KDCs solid waste collection and disposal service is based on a user pays system for the collection and disposal of kerbside solid waste and recyclables, however currently alternatives are being investigated and consulted on with expected implementation in year 1-2 of the upcoming LTP period, this may see a mixture of user pay and targeted rates for services, with waste minimisation being a much larger priority it is expected there will be significant investment in Waste Minimisation initiatives (see proposed improvements)

Capital works projects will see the above mentioned projects completed, engineering assessments will also be completed on the Closed landfills, priority given to the closed landfills in coastal and flood inundation zones so provisional funds can be established for protection works. It is expected that the capital project for leachate improvements at the Hakaru Closed landfill will be completed prior to this AMP period, there will only be an operational cost to factor in here.

Refer to Figure 13 for a summary forecast of expenditure over the next 10 years.

1.7 IMPROVEMENT PLAN

It is important for KDC to ensure that asset management practice is aligned with best practice and is always forward-looking when it comes to improvement in practices and standards. As such, a Waste Minimisation Asset Management Improvement Plan is being implemented to address gaps identified and a summary of this is outlined below. Further detail can be found in Section 8:

- Assets registered in Asset finder, includes Closed Landfills and litterbins and locations
- Consider partnership options with local businesses
- Investigate sources of funding
- Investigate alternative options for recycling and viability of first stage process for major commodities (plastic, timber, polystyrene etc) to make more viable for markets
- Investigate options for expanding re-sort/processing centres to include composting of green waste and food waste
- Investigate and implement improved recycling collection services, i.e. some sort of bin utilised rather than the current yellow bag system and
- Develop Litterbin Strategy and Policy.

Implement new Refuse and Recycling contract – Propose to split the contract – e.g. Contract for kerbside general waste and recycling collection and disposal and transfer station management:

- Contract or partnership with private business for recycling processing
- Installation of compaction bins (Mangawhai – Insley Street shops, Dargaville waterfront)
- Installation of weigh bridges at the Dargaville Transfer Station
- Provision of Waste Minimisation, sustainable and circular economy education to communities and business, through Council website/publicity and external groups funded by Council
- Implement licensing of all refuse operators, this will include monthly or quarterly reporting of refuse and recycling collected
- Set up trailer for community recycling at community events
- Implement changes set by Central Government, these could include Container deposit Schemes, kerbside collection standardisation of refuse and recycling, both products collected and how we collect them
- Climate Change readiness of Closed Landfills
- Reutilisation of some key Closed Landfill Sites, i.e. develop dog park at Kaiwaka site.

2 INTRODUCTION

2.1 PURPOSE OF THIS ACTIVITY MANAGEMENT PLAN

The specific purpose of this plan is to:

- Demonstrate responsible stewardship of the Waste Minimisation assets including transfer stations and closed landfill sites.
- Provide the basis for compliance with the local Government Act (LGA) tracking changes in service potential and determining optimal long-term financial strategies for Waste Minimisation assets.
- Provide a basis for customer consultation on levels of service and price/quality trade-offs.
- Manage the environment, social and financial risks associated with Waste Minimisation assets.
- Assess the demand and key performance indicators for Waste Minimisation assets.

This AMP provides discussion of the key elements affecting management of Council's Waste Minimisation asset, including the legislative framework, links to community outcomes, policies and strategy, the proposed levels of service, performance measures and demand, environmental and service management. This AMP period being 2021 – 2031

Asset condition and location are examined, and a financial summary is presented to define the investment planned to address issues, enable consent compliance and to ensure that an uninterrupted service is available and facilities provided to meet customers' needs now and into the future.

All financial forecasts have been prepared from Council's historical budget allocations. The information contained within the AMP is substantially complete and up-to-date. With the document being used on a day-to-day basis the information will change to meet the district's changing needs.

2.2 KEY BUSINESS ACTIVITIES, GOALS AND OBJECTIVES

Waste Minimisation assets and services form an infrastructure network which is critical to the health and quality of life of Kaipara District's residents, primarily supporting the community outcomes of 'Safety and a Good Quality of Life' and 'Special Character and Healthy Environment'. Kaipara District Council's (KDC) Waste Minimisation vision is "To reduce waste and increase recycling and resource recovery for the protection of the environment and human health".

There are currently no operational landfills in the Kaipara District. Instead, two transfer stations are provided in Dargaville (Awakino) and Mangawhai (Hakaru) for the handling of non-hazardous solid wastes. Provisions are available for the disposal of some hazardous waste at both transfer stations which are then dealt as per requirements e.g. paints, televisions.

The Waste Minimisation assets owned by Council are limited to land and minor site facilities. Most assets used in the delivery of the Waste Minimisation services to Kaipara are owned by appointed Contractors. This means that Council does not directly carry the capital costs of asset ownership, including finance charges, depreciation, and renewal costs. Overall, the Council manages approximately $355,000 (excluding land) of Waste Minimisation infrastructure assets on behalf of the community. The Waste Minimisation asset operates as a user pays system with those using the system paying either at the point of collection or disposal. There are also 14 closed landfills that KDC monitors in accordance with resource consent conditions.

KDC aims to provide affordable, hygienic, refuse collection and disposal that is environmentally sustainable, meets our statutory requirements and meets the needs of our communities. The community expectation is that KDC will provide Waste Minimisation services and levels of service that meet the needs and affordable expectations of the community. We are aiming to continue to deliver the current levels of service within this activity, with improvements identified pending LTP 2021-2031 approval, this could see a targeted rate introduced with extended kerbside recycling collections and the provision of crates.

2.3 DRIVERS FOR ASSET MANAGEMENT

This plan has been written to provide information required for good asset management planning as set out in:

- LGA 2002 Schedule 10 and amendments
- Office of the Auditor General criteria for AMPs 2006
- International Infrastructure Management Manual 5th edition (IIMM) 2015, published by New Zealand Asset Management Support (NAMS)
- Key achievements from previous AMP 2017 – 2021
- Dargaville Closed landfill's consent has been renewed
- Dargaville closed landfill capping has been completed and now meets consent requirements
- Design and Consent completed for Hakaru Leachate upgrades, associated physical works will be completed in the 2020/21 financial year
- Bickerstaffe illegal landfill consented closed and capped
- Litterbin's location and conditions have been entered in Assetfinder
- Love Kaipara has through a contract for service provided education to schools and community groups around waste minimisation and reducing waste to landfill.

2.4 RELATIONSHIP WITH OTHER PLANS AND STRATEGIES

Activity management plans are a key component of the Council planning process, linking with the following plans and documents:

- Infrastructure Strategy (IS) – outlines a 30 year timeframe that provides the long term strategic direction of Council's infrastructure investment
- Long Term Plan (LTP) – Required by Local Government Act 2002 to cover a period of at least 10 years, contains key information about Council's activities, assets, level of service (LoS) and cost of providing services
- Annual Plan (AP) - Detailed action plan on Council's projects and finances for each particular year
- Waste Management and Minimisation Plan – carried out under the Waste Minimisaton Act 2008 and follows a waste assessment and is reviewed every six years, this plan sets out how Council will progress efficient and effective waste management and minimisation.

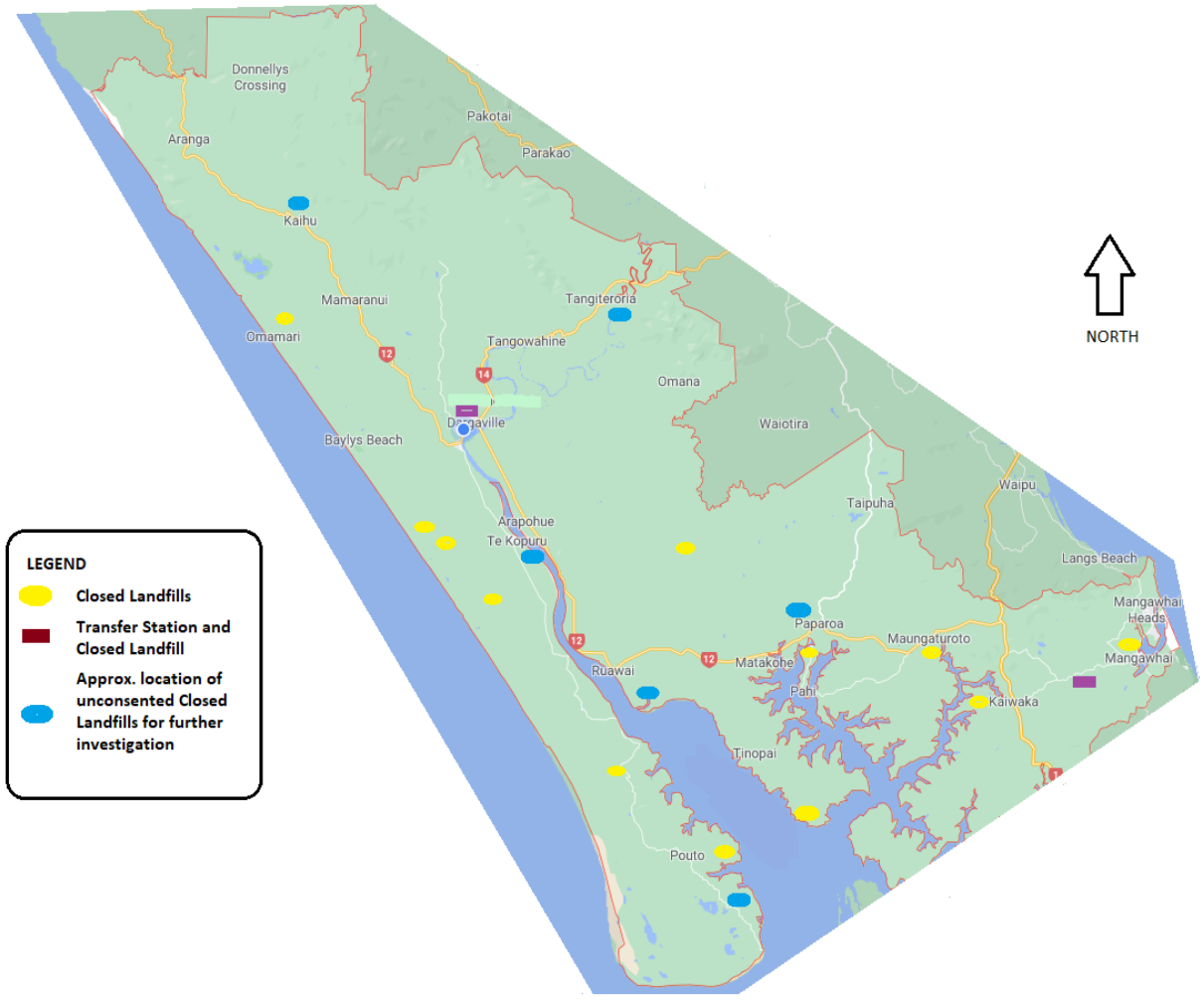
2.5 SCOPE OF ASSETS AND SERVICES

The Waste Minimisation assets can be grouped as Transfer Stations, Closed Landfills, Public Litterbins and Collection Cages owned by KDC. These are limited to land and minor site facilities. These are:

- Freehold title (with a 'gift back' clause) to the land on which the Hakaru landfill is situated
- Freehold title to 3 of the 14 closed landfill sites (excluding Hakaru)
- Seven Closed Landfills on Road Reserve

- Leachate detention ponds, treatment facilities and landfill capping at some closed landfill sites
- Leachate monitoring boreholes (Te Maire, Mangawhai, Parawanui, Hakaru and Glinks)
- Minor infrastructure assets at closed landfills (fencing, accesses, stormwater, landscaping, and planting)
- Shed/garage located at Dargaville Transfer Station and used as office/storage by Contractor, Bottle collection Bay and Recycling Container
- 95 public litterbins
- All assets associated with the Hakaru Transfer Station are privately owned by the respective contractors, other than the land and a few minor assets
- (Pump station, leachate detention pond and telemetry) that are owned by Council. At the Dargaville site, assets include a wetland and office/storage shed and the recently added recycling storage areas
- Potential for further ownership of 6 x largely unknown historic landfill sites, this will be identified as part of improvement plan listed in Section 8
- Overall, the Council manages $372,000 (excluding land) of Waste Minimisation infrastructure assets on behalf of the community. The land values are revalued regularly (a copy of the latest valuation is presented in Appendix A of this document). The Council-owned minor site facilities and infrastructure are not currently valued by Council for formal depreciation and renewal purposes. Asset value is relatively minor, and most assets are owned by the Contractors nevertheless, annual budget provisions are made for the replacement of minor site assets as required.

Figure 1: Location of Council Closed Landfill sites and Transfer Stations



The majority of Waste Minimisation infrastructure assets have lifecycles far greater than 10 years however, to facilitate and demonstrate alignment with the Long Term Plan 2021/2031, the content in this AMP focuses upon the next 10 years. In practice, asset management planning tends to consider much longer timeframes.

The main Waste Minimisation services provided to the Kaipara District include:

- Transfer Stations (Dargaville and Hakaru)
- Weekly (kerbside) General Waste Collection
- Weekly (kerbside) Recycling Collection
- Public Litterbin Servicing
- Closed Landfill Management
- Abandoned Vehicle Removal
- Illegally Dumped Rubbish Removal and investigation

More information can be found in the Waste Management and Minimisaton Plan 2017-2022 which is available on the KDC Website.

The above Waste Minimisation services are currently managed through the following:

- In-house management and overview of Waste Minimisation Contracts, Illegal litter pickup and disposal and abandoned vehicle removals, as reported through Council's Helpdesk system.
- Contract for Eastern and Western Waste and Recyclables Collection, Disposal and Dargaville Transfer Station Operation
- Contract for operation and management of Council's Transfer Station (Hakaru).
- In house management of Closed landfill monitoring and compliance in partnership with NRC and Resource Consent conditions.
- In house management of Leachate removal (Hakaru Closed Landfill site) – pending construction of onsite treatment facility 2020/21 construction season

Note: Council is currently preparing a business and procurement plan for the 2021 renewal of Contract 706, it is being proposed that this is split with one contract responsible for Recycling activities and the other for general refuse activities.

2.6 RATIONALE FOR SERVICE

To promote and facilitate waste reduction, to collect refuse and recyclables from households, to dispose of waste and hazardous substances safely, and to continue with the rehabilitations and management of closed landfills.

In response to the asset management drivers outlined in Section 1.3, the Council aims to provide affordable, hygienic solid waste collection and disposal that is environmentally sustainable, meets Council's statutory requirements and meets the needs of its communities, at the current levels of service.

The key legislative rationale for continued Council involvement in the activity and ownership of assets is contained in:

- The Health Act 1956, which requires the Council to provide 'sanitary works', the definition of which includes works for the collection and disposal of solid waste

- The Local Government Act 2002 (section 130) precludes the Council from transferring ownership or control of a strategic asset, or construct, replace or abandon a strategic asset, unless it has first consulted with the community and included the proposal in the LTP
- The Waste Minimisation Act 2008, the purpose of which is to encourage waste minimisation and a decrease in waste disposal
- The Resource Management Act.

Contribution to Community Outcomes

The table below sets out the Community Outcomes in Council's Long Term Plan 2018/2028. The Waste Minimisation service will contribute to the achievement of the outcomes as follows:

Table 1: Contributions to Community Outcomes

Refuse contributes to the following Community Outcomes	How this activity or service contributes
Protect and promote our natural ecosystems	Pollution from leachate from landfills requires management to protect environmental quality
Minimise volume and impact of waste on the environment	Introducing waste management and recycling options that are sustainable

2.7 EFFECTS OF WASTE MINIMISATION ACTIVITY

Historically, solid waste (refuse) disposal has been provided free to communities. Landfill sites across the Kaipara District provided easy access for the public to dispose of unwanted household and commercial waste with limited controls on what was being deposited. Through legislation, public awareness and changing community expectations regarding waste disposal, recycling and environmental concerns, waste management has changed significantly.

Recognition of the potential effects (both positive and negative) has grown overtime. The main effects of the Waste Minimisation asset can be described under the categories of: Environmental, Social and Economic.

Table 2: Potential Significant Negative Effects.

Activity	Effect	Mitigation
Solid Waste Activity	**Kerbside Collections**: Loose kerbside recycling materials and broken solid waste bags may become windblown litter and odorous if not collected promptly.	This is managed through contract specification with regards to kerbside collection and also bylaws around when refuse and recycling should be placed out for collection.
	Transfer Station and Recyclable Facilities: Excessive recyclable and general refuse materials may become windblown litter.	This is managed through contract specification and regular inspections by Council staff to ensure sites are tidy. Additional storage and fencing will be considered if this becomes an issue.

Activity	Effect	Mitigation
	Closed Landfills: Closed landfills can be targets for illegal dumping (fly tipping) which can become odorous and untidy. Also potential for odour issues arising from landfill gases escaping into the atmosphere.	Closed landfills are inspected quarterly for fly tipping and gas odours.
	Public Litterbins: Capacity problems can cause bins to become over full (in holiday seasons) and overflowing litter is blown around the area	Council regularly reviews bin capacity and suitability with contractors – this is largely managed by contractors; additional collections are completed over the seasonal periods where required.
Discharges of pollutants to water and land. **(Environmental effects)**	**Transfer Stations:** There is a possibility of stormwater contamination on site if materials are not managed well.	This is managed via separation of leachate and stormwater management systems and regular inspections of the separate systems.
	Closed Landfills: If closed landfills are not capped off and vegetated correctly, they may release additional solid waste or leachate to the environment.	Closed landfills are Consented under the Northland Regional Council there are strict monitoring conditions on leachate discharge.
Discharge or migration of landfill gas (environmental and economic effects)	**Closed Landfills**: Potentially explosive/flammable landfill gases may have a noxious odour and could damage soil health and vegetation, there is also concerns around the emissions of greenhouse gases.	Council monitors closed landfills as per resource consent conditions which includes monitoring for evidence of landfill gas, Northland Regional Council also monitor.
Disruption of service (social and economic effects)	**Kerbside and Litterbin Collections**: Disruption to kerbside solid waste services can cause a public health effect if wastes are not collected in a timely manner.	This is managed by the contractor – Council can utilise a sub-contractor if refuse contractor does not meet contract conditions.
	Transfer Stations: Failure to open these sites can prevent businesses operating and create public health risks with the storage of waste on properties.	Waste can be stored at residences or business for short periods of time. In the event of a long-term closure waste, both kerbside and general waste can be transported directly to Puwera Landfill south of Whangarei.

Activity	Effect	Mitigation
Unaffordable or uneconomic cost of services (social and economic effects)	**Recycling:** The loss of viable markets for recovered materials can have a negative effect on the economic viability of recycling	This is managed by Council contractors. Council provides drop off locations for recycling through the two Transfer Stations and a recycling kerbside collection in the main urban areas, the contractor is responsible for all marketing. This is a user pays service with no rate payer funding.
	Self-Haul Waste: Disposal costs are governed by conditions outside of council control. Gate and other disposal charges are influenced by these.	All refuse disposal is user pays and managed by the refuse contractors, any rise in costs by contractor has to be justified and approved by Council.
	Kerbside Collection: This is also influenced by conditions outside of Council control.	As for above disposal is user pays and managed by refuse contractors.
	Transfer Stations: Gate charges are directly influenced by the cost of disposal at landfill.	Transfer station disposal costs are user pays, and any increases in gate charges need to be approved by Council. Transfer Station disposal activities are user pay basis, Council provides a small budget for property and asset maintenance.
	Public Litter bin Collections: Issues caused by illegal dumping of household rubbish and capacity issues over seasonal periods	This is managed by Council contractors and a free service to the public. Capacity is increase over seasonal periods and bins monitored.
	Closed Landfills: Central government legislation governs how we manage closed landfills, any changes could result in additional cost.	This is beyond Council control and any changes need to be managed and prioritised. Regular inspections are completed to ensure closed landfills are up to the current standards.
Illegal dumping: (environmental, economic and social effects)	Any reports of dumping are dealt with promptly and if offenders identified they are prosecuted.	When dumping is reported Council manages the clean up as soon as practicably possible, offenders are prosecuted where evidence is found.

Table 3: Potential Significant Positive Effects

Positive Effect	Description
Public Health Benefits	Council offers kerbside collection services and provides Transfer Stations in two locations across the district. This provides safe and sanitary disposal to a significant majority of residents.
Economic Benefits	Access to waste disposal and recycling services at reasonable cost supports economic activity.
Environmental Benefits	Provision of recycling services, and other waste minimisation activities reduces the refuse going to landfill and reduces potential negative effect of these activities.

2.8 KEY ISSUES AND ASSUMPTIONS FOR THE FUTURE

The key issues relating to the future provision of Waste Minimisation services in the Kaipara District have been identified as follows:

- **Ability to meet community expectations around the district - Although** the latest NZCPM Survey indicated a slight drop in satisfaction from the previous quarter, Council considers that there is still a high percentage of satisfaction with the level of service being provided.
- It is expected that the demographics of the district will change especially at the Eastern end of the district, expectations for services currently not provided may increase, this will directly impact on the volume being collected and disposed of through the transfer station gates.
- **Increasing Disposal costs at Landfills –** Disposal costs at Landfills are governed by ETS, Waste Levy, Environmental Protection Costs and other general operational expenses, these are outside of Council control and are expected to significantly rise in the coming year, with Central Government investigating options to rise the Waste Levy from the current $10 per tonne to $60 per tonne over the next three years.
- **Sustainable pricing for District-wide kerbside solid waste and recycling bag collection -** For the service to continue to be sustainable, it requires the Contractor to price at a level that maintains its viability, encourages use, and grows usage of the service, however some of the costs associated with this activity especially disposal costs are often outside of the Contractors control. The Contractors currently rely on the sale of refuse bags to ensure a sustainable collection and disposal service, options are being explored by both Council and Central Government with regards to both general refuse and recycling collections that would see improvements to the current service provided but will likely see an increase in costs to both Council and users. The current recycling collection is not sustainable and needs changes in both collection services provided and processing activities.
- **Waste Diversion –** current recycling conditions are making it very hard to keep diversion rates down, this is largely due to lack of markets for recycled products (New Zealand wide issue) and the high transportation costs to get the product to market, Council is going to look at future options of providing the first step of processing of products to allow for a much better quality product to be sold at markets. Central Government are also looking at introducing changes to help in this area such as Compulsory Product Stewardship, Container Deposit Schemes, Standardisation of Kerbside collections, these are expected to come into play over the next 1–2 years and will affect costs for the provision of this service.

- **Increase in illegal dumping (fly tipping) including abandoned vehicles** - This may occur as a result of changes made nationally that can influence disposal costs i.e. the cost of carbon credits and Waste Levy raises effect the cost to dispose to landfill, however the introduction of product stewardship and container deposit schemes may see a reduction in roadside dumping in particular around items such as whiteware and drink containers.
- **Availability of Waste data** – There are several waste streams that are known to exist but are difficult to quantify, this means that both waste disposed to landfill, and waste diverted/recovered are likely to be underestimated. The 2008 Bylaw is currently under review, this will see a requirement of all waste contractors/collectors to provide data (type and amount collected and where it is being disposed of), this will allow for a more accurate picture of waste generated in the Kaipara District.
- **Whangarei District Council Disposal Facility** – Kaipara District Council will continue to use this Facility.
- **Leachate and capping conditions of Closed Landfills -** this is managed by way of regular inspections as per consent conditions, with maintenance needs identified and carried out as budgets allow.
- **Increasing statutory requirements on existing and closed landfills -** The potential for additional (unforeseen) costs, which have not been forecast, may apply to Council on its closed landfill sites requiring additional resource and/or expenditure to meet requirements e.g. there is a potential risk that any renewed consents will have more stringent conditions than previously, there is also risk that due to climate change coastal closed landfills will require upgrading.
- **Financial operational costs associated with closed landfill site management -** Closed landfill sites require on-going management throughout their resource consent lifespan and following on from that term. The minimum requirement being regular annual inspections of the site, reporting and possible maintenance work as a result, data information updating and Resource Consent renewals. These are all ongoing costs which have to be allocated and budgeted for.
- **Climate change –** Council is planning to carry out investigations with regards to informal Closed Landfills in particular those in coastal areas, also consented closed landfills that are in Coastal areas, a forward works plan will be developed to have these landfills brought up to a standard that protects them into the future.
- **Organic Waste** – Council will investigate potential opportunities to work/partner with private investors to introduce organic waste collections.
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3 LEVELS OF SERVICE

3.1 INTRODUCTION

Transfer station facilities are currently provided at Dargaville and Hakaru. User-pays charges apply to solid waste and some recycling deposited at the transfer stations. These are operated as a self-funding enterprise by the appointed Contractor.

The table below shows a summary of services provided, note that Council is currently reviewing the methodology of the Waste Minimisation Contracts and it is likely that with the renewal of contracts there will be changes to services provided, this will be completed alongside the upcoming LTP 2021-2031 review which will include public consultation of three options of service delivery.

Table 4: Disposal Services provided

Activity	Status	Comment
Kerbside General Waste Collection	Collected weekly under contract 706 expires 30 June 2022	User pays bagged collection in Urban and some Rural, also collection points for Rural without Kerbside
Kerbside Recycling Collection	Collected weekly under contract 706 expires 30 June 2022	User pays bagged collection in Urban and some Rural. Recycling option investigations in year 1 of the LTP. Implementation of solutions in year 2.
Litterbin Servicing	2 to 3 times per week under contract 706 expires 30 June 2022	
Dargaville Transfer Station Operation (Western Transfer Station)	Managed under contract 706 expires 30 June 2022	Open Tuesday to Saturday weekly for refuse and recycling disposal, gate charges cover disposal costs – refuse transported to Puwera Landfill. Introduction of Weighbridge to improve level of service in Dargaville.
Hakaru Transfer Station Operation (Eastern Transfer Station)	Currently under Contract 484 expires 30 June 2022	Open 7 days for refuse and recycling disposal, gate charges cover disposal costs– refuse transported to Puwera Landfill
Illegal Refuse retrieval	Managed inhouse by Council Staff	Contractors used as required
Abandoned Car removal	Managed inhouse by Council Staff	Contractors used as required
Closed Landfill Management	Managed inhouse by Council Staff	Contractors used as required

Proposed Levels of Service

The minimum level of service proposed for use in the development of the Council's next Long Term Plan 2021-2031 set for activity is:

- Receptacles in public places comply with Litter Act 1979
- All residents have access to rubbish collection or Transfer Station drop off service at cost
- All residents have access to recycling collection or Transfer Station drop off service at cost
- Legal compliance for closed landfills.

KDC recognises that a key asset management function is to understand who our stakeholders are, what they value and why. Stakeholders are defined as groups or individuals with either a direct or indirect interest in KDC's Waste Minimisation asset management policies and practices. Key stakeholders are listed in the KDC Activity Management Overview.

3.2 COMPLIANCE AND STRATEGY

Waste Minimisation is governed by many statutes, regulations, standards and Codes of Practice. KDC aims to achieve material compliance with all relevant legislation, regulations, standards and codes of practice that relate to solid waste management, including any relevant environmental legislation.

Compliance Requirements

Legislation provides the minimum requirements for levels of service. The main legislation driving Waste Minimisation activities are:

- Local Government Act 2002
- Waste Minimisation Act 2008
- Resource Management Act 1991
- Hazardous Substances and New Organisms Act 1996
- Litter Act 1979
- Health Act 1956
- Climate Change Response Act 2002

The Resource Management Act 1991

The RMA provides guidelines and regulations for the sustainable management of natural and physical resources. Although it does not specifically define "Waste", the Act addresses waste management and minimisation activities and facilities through national, regional and local policy, standards, plans and consent procedures. In this role, the RMA exercises considerable influence over facilities for waste disposal, recycling, recovery, treatment and others in terms of the potential impacts of these facilities on the environment.

Under Section 31 of the RMA, regional councils are responsible for controlling the discharge of contaminants into or onto land, air or water.

Under the RMA, Territorial Authority responsibility includes controlling the effects of land-use activities that have the potential to create adverse effects on the natural and physical resources of their district. Facilities involved in the disposal, treatment or use of waste or recoverable materials may carry this potential. Permitted, controlled, discretionary, non-complying and prohibited activities and their controls are specified within district planning documents, thereby defining further land-use related resource consent requirements for waste related activities.

Local Government Act 2002

The LGA sets out the requirements of Council to deliver services and the responsibility of the Council to make assessment of services provided. This Waste Minimisation Activity Management Plan constitutes the process by which this assessment is carried out by Council and reported to the public through the LTP.

The LGA places an obligation on Council to strive towards sustainable development for the district. The social, economic, environmental and cultural wellbeing of the community must be considered when objectives are developed for the Waste Minimisation activity.

Waste Minimisation Act 2008 (WMA)

The WMA encourages a reduction in the amount of waste generated and disposed of in New Zealand aims to lessen the environmental harm from waste and aims to benefit the New Zealand economy by encouraging improved use of materials throughout their life. The WMA sets out to achieve this through the following:

- Places a levy on waste disposal to landfills;
- Funds waste minimisation grants;
- Allows regulations to be made to make it mandatory for territorial authorities and the waste sector to report on waste to improve waste minimisation;
- Manages producer responsibility programmes;
- Directs territorial authorities with respect to waste minimisation responsibilities;

Set up a Waste Advisory Board to provide independent advice to the Minister for the Environment with respect to waste minimisation. Part 4 of the WMA is fully dedicated to the responsibilities of TAs which "must promote effective and efficient waste management and minimisation within their districts" (s42). Kaipara District Council has a statutory responsibility to promote effective and efficient waste minimisation and, for this purpose to adopt a waste management and minimisation plan. This legislation requires the completion of a Waste Assessment prior to the review of the WMMP. Council is currently undergoing this process with a Waste Assessment completed in 2016 and the 2017 Waste Management and Minimisation Plan out for Public Consultation, it is expected this will be adopted in Sept 2017. Kaipara District Council has a statutory responsibility to promote effective and efficient waste minimisation and, for this purpose to adopt a waste management and minimisation plan.

Climate Change Response Act 2008

The CCRA provides the basis for the New Zealand Greenhouse Gas Emission Trading Scheme. This Act requires landfill owners to purchase emission trading units to cover methane emissions generated from the landfill.

Other Legislation

- The following is a summary of other legislation that must be considered with respect to waste management
- The Hazardous Substances and New Organisms Act 1996 controls the handling and disposal of hazardous substances
- The Health Act 1956 aims to prevent nuisance and promote public health
- LGA (Rating) Act 2002 allows Council to determine a rate or charge for any activity Council chooses to get involved in
- The Health and Safety at Work Act 2015
- The Litter Act 1979 – is enforced by territorial authorities, who have a responsibility to monitor litter dumping, act on complaints, and deal with those responsible for litter dumping.

Along with the above national legislation there is also Northland and Local Legislative Requirements.

Regional and Local Policies, Regulations and Strategies

- Northland Regional Policy Statement
- Northland Regional Air Quality Plan
- Northland Regional Coastal Plan
- Northland Regional Water and Soil Plan
- KDC Long Term Plans and Annual Plans
- KDC Waste Minimisation Asset Management Plan
- KDC Consolidated General Bylaws 2020 Part 9
- Waste Management and Minimisation Plan 2017 – 2022 (currently under review)

Industry Guidelines and Standards

In addition to legislation and policy there are also a number of industry guidelines and standards specific to waste, some of the more relevant standards and guidelines are listed below:

- NZS 7603:1979 Specification for refuse bags for local authority collection
- SNZ HB 4360:2000 Risk Management for Local Government
- AS/NZS ISO 31000:2009 Risk Management Principles and Guidelines
- NZS 3910:2013 Conditions of contract for building and civil engineering construction
- NZS 4454:2005 Composts, soil conditioners and mulches
- MFE – A Guide for the Management of Closing and Closed Landfills in New Zealand.

3.3 STRATEGIC GOALS

The Acts and regulations outlined in the previous section state the minimum requirements for some Levels of Service and objectives. Further to this, Council states the following five goals that drive the focus for Waste Minimisation services provided:

Table 5: Waste Minimisation Goals

Goal	How the waste minimisation asset contributes
Increased Promotion and achievement of waste diversion from landfill	The 2017 Waste Minimisation and Management Plan sets out how Council will support this goal.
To increase recycling services and participation that is economical to Kaipara residents	
To provide general waste disposal that is economical and prevents pollution to the environment	Council provides an affordable user pays system and transfer station facilities located in areas of the district which is financially sustainable.
To reduce illegal dumping and associated negative environmental impact.	
To get in place effective Refuse and Recycling contracts that met procurement objectives and support local employment	To utilise an effective business case and procurement plan to plan for the renewal of contracts

Goal	How the waste minimisation asset contributes
To improve disposal data collection for the whole of Kaipara including private operators	To implement licensing in accordance with the current (2016) bylaw no later than 2021.
To achieve Resource Consent compliance of all Closed landfills	Council consults and works with other local authorities/councils

3.4 COMMUNITY EXPECTATIONS

The types of services provided by KDC is largely driven by community expectations. Understanding community/stakeholder expectations is therefore an important part of the process for setting levels of service and managing Waste Minimisation assets to meet these. The main tools used by KDC to seek feedback from the community is through the Customer Service Request system, Face book Surveys and an Annual survey conducted by Key Research Ltd.

Customer Service Requests

Figure 2: Comparison between total SR's and Waste MinimisationSR's

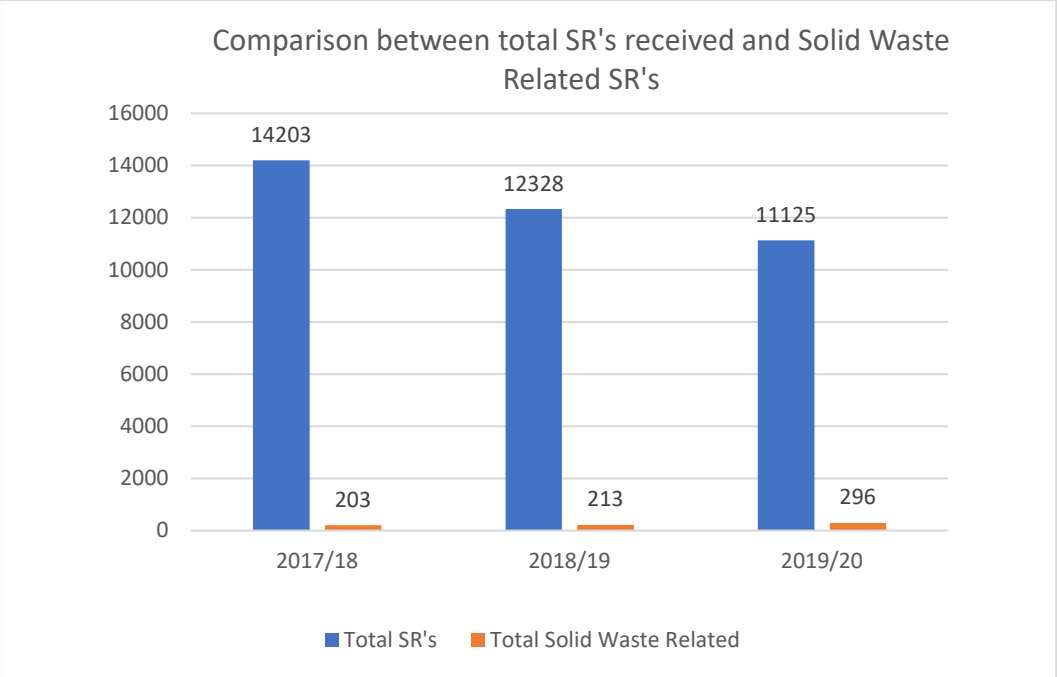
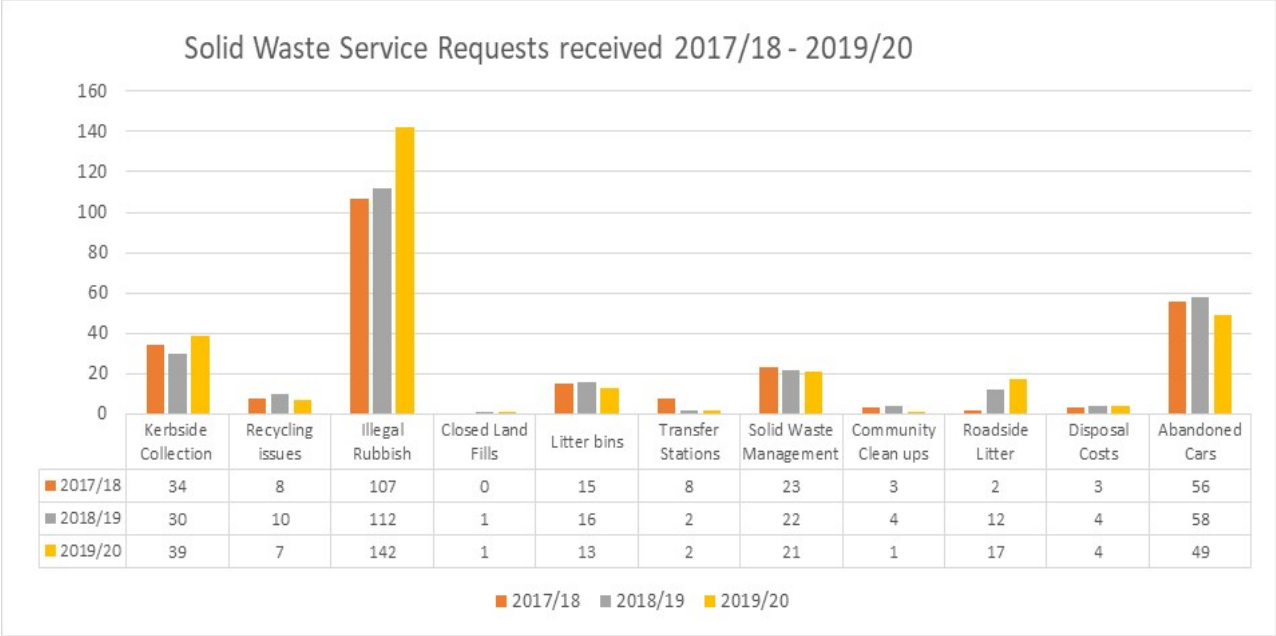


Figure 2 shows a comparison of Waste Minimisation Service Requests with all Service Requests received by Council.

While there was an increase in Solid Waste related service requests there was a decrease in overall service requests more than likely due to the COVID pandemic that forced New Zealand to closed down for a five week period, during this time the refuse activity only completed kerbside collections of general refuse and some litterbin servicing, all transfer stations were closed and no recycling collections were completed, this would also have attributed to the larger numbers for illegal dumping.

The percentage of Waste Minimisation related service requests ranges from 1.72% in 2017/18 to 2.66% in 2019/20 – this percentage increase can be attributed to an increase in illegal rubbish reporting and kerbside collection inquiries.

Figure 3: Breakdown by type of Waste Minimisation Service Request



	Kerbside Collection	Recycling issues	Illegal Rubbish	Closed Land Fills	Litter bins	Transfer Stations	Solid Waste Management	Community Clean ups	Roadside Litter	Disposal Costs	Abandoned Cars
2017/18	34	8	107	0	15	8	23	3	2	3	56
2018/19	30	10	112	1	16	2	22	4	12	4	58
2019/20	39	7	142	1	13	2	21	1	17	4	49

Figure 3 demonstrates a breakdown in service request types, illegal rubbish continues to be the main source of complaints. Illegal rubbish is mostly made up of the roadside dumping of general household rubbish, there is also a small component of illegal bags used at collection points, as expected with the low scrape metal prices abandoned cars although reduced are still an issue.

Survey Results

Figure 4: Shows a comparison of survey results from 2016 – 2019

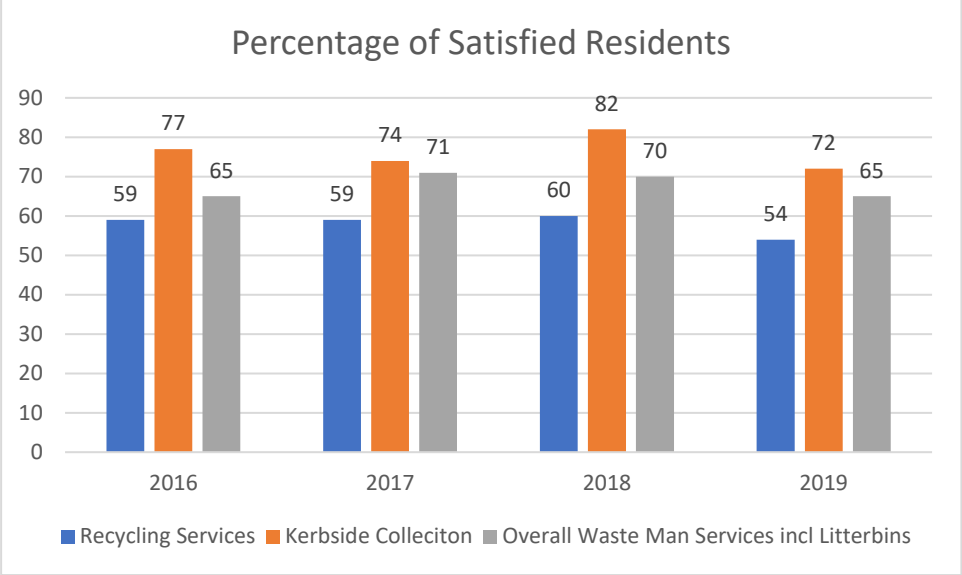


Figure 4 demonstrates that indications from the Annual survey conducted by Key Research Ltd 2016 are that Recycling and Kerbside Collection services are improving overall there is a decline in satisfaction with litter bin services being provided across the district, capacity seems to be the main issue, this is an issue due to freedom campers and household rubbish being dumped in litterbins. A review of litter bin capacity, frequency of clearing and locations forms part of the Waste Minimisation improvement plan, Section 7 IP 3. This is scheduled for 2017/18 financial year.

Table 6: Performance Levels and Targets

	LTP Year 1 Target 2021/2022	LTP Year 2 Target 2022/2023	LTP Year 3 Target 2023/2024	LTP Years 4-10 Target 2024/2031
Percentage of residents who are very satisfied or satisfied with waste management.	70%	70%	75%	75%
Average amount of general refuse collected and disposed of per property within the Kaipara District	Set benchmark	Less than previous	Less than previous	Less than previous
Average amount of recycling collected and deposited per property within the Kaipara District	Set benchmark	Greater than previous	Greater than previous	Greater than previous
Closed landfill activities meet legislative compliance. No resource consent abatement notices, infringement notices, enforcement orders or convictions.	NIL	NIL	NIL	NIL

3.5 CURRENT FEES AND CHARGES

Solid Waste Collection

Only one Council bagged (kerbside) collection contract is operational in the District. The current contract uses a user pays bag system and the charges are as follows:

General Refuse Bagged (kerbside) collection $3.10 per bag

Recycling Bagged (Kerbside) collection $1.50 per bag

The charges are subject to change from time to time, after proof of justification by Council's appointed Contractor. The charge per bag is not dissimilar from a variety of other councils in New Zealand as shown in the table below.

Table 7: Cost Comparison for Rubbish Charges: Other Councils (2020)

Name	Pop	Cost of bags general waste kerbside	Cost and method of recycling collection	Cost per m³ or tonne - general refuse at transfer station	Cost per m³ or tonne - green waste at transfer station	Targeted or general rate charged
Kaipara District Council	25,200	$3.10 per 60l bag	$1.50 per 30l bag	$53m³ Dargaville $68m³ Hakaru	$25	General rate for litterbin servicing, illegal refuse collection and closed landfill management
Tararua District Council	18,500	$6 (per bag at transfer station)	Free – crate system	$45 per m³ or $258 per tonne	$17	Targeted Rural $53.12 Urban $180.12 Comm $152.72

Name	Pop	Cost of bags general waste kerbside	Cost and method of recycling collection	Cost per m³ or tonne - general refuse at transfer station	Cost per m³ or tonne - green waste at transfer station	Targeted or general rate charged
Hauraki District Council	18,550	$2.80 (subsidised by rates)		$63	$40	

Solid Waste Disposal

The rates for disposing of solid waste at the Hakaru Transfer Station and the Dargaville Transfer Station are as follows:

Hakaru Transfer Station	$68.00 per m^3
Dargaville Transfer Station	$53.00 per m^3

Both charges are subject to change based on Consumer price index by Council's appointed Contractor, any price rise requests have to be approved by a full Council meeting prior to being implemented.

Recycling

The total volume of material recycled in 2019/2020 was 1,844 tonnes this equated to 25% of all waste taken to transfer stations. Council is aiming to increase this figure by a minimum of 1% each year.

District-wide in approved areas	$1.50 per bag
Transfer station charge – Dargaville	from $2 per car
Transfer station charge – Hakaru	from $3.50

Note: for a comprehensive list of fees and charges refer to the Council Website.

4 FUTURE GROWTH AND DEMAND - INTRODUCTION

The KDC Activity Management Plan presents the growth and demand factors that impact on the Council's Waste Minimisation management infrastructure and this plan describes how we plan to respond to growth and demand for Waste Minimisation management services in the future.

Important drivers for future growth and demand are:

- Population
- Dwelling Growth
- Economic development
- Central government and waste minimisation initiatives (need to improve recycling facilities and options – these are not limited to the Kaipara District but are New Zealand-wide), proposed government initiatives that relate to kerbside Collection of general waste and recycling could see a shift in user pays to a targeted or general rate funded activity, this will see an increase in services provided in particular to the Rural sector.
- Changing Customer needs and expectations

4.1 CENTRAL GOVERNMENT AND WASTE MINIMISATION

Notwithstanding the above, there are several drivers for waste minimisation in the Kaipara district:

User Pays

The user pays nature of the KDC refuse collection service encourages waste minimisation. Recycling in the district is also aimed at reducing current landfill levels. Based on earlier estimates this transferral could reach as high as 35% (through the life of this AMP). Recycling is an initiative that currently has no ratepayer funding. Instead, KDC currently supports recycling by distributing the Waste Minimisation Levy that is returned from central government. However, only limited recycling services are offered by the service providers undertaking both the kerbside collection and Transfer Station operations for KDC.

Increasing awareness of waste minimisation opportunities will tend to slow the rate of increase in waste quantities. On this basis, the waste stream from existing waste sources is expected to increase at a slow rate over the next ten years. The increase generated by population growth can be expected to be offset initially by the effects of increased waste minimisation efforts.

4.2 GENERAL REFUSE

The tables below show that Kaipara district residents only create approx. half of the waste per year per capita than those in the rest of New Zealand, Kaipara's total measured waste disposal is equivalent to only 0.2% of New Zealand's overall annual waste disposal, this could be attributed to more relaxed rules in Kaipara that allow open fires, incinerators etc, farm dumps and waste that is taken outside of the district.

There is insufficient reliable historical data available to analyse long term trends in waste generation in the Kaipara district. However, the trend towards greater recycling and waste minimisation is likely to characterise waste volumes generated over the next decades.

General Refuse Disposal Comparison with the rest of New Zealand

Table 8: Kaipara district disposal quantities Class 1 landfills

Year	Total waste tonnes/year	No of households	Average kg/waste per household	Population	Average kg/waste per capita per day	Average kg/waste per capita per year
2017	4,776	9,380	509	22,935	0.57	208
2018	*4470	9,689	461	23,565	0.52	189.69
2019	*4406	9,962	442	24,100	0.50	183
2020	4572	10,098	452	25,200	0.50	181

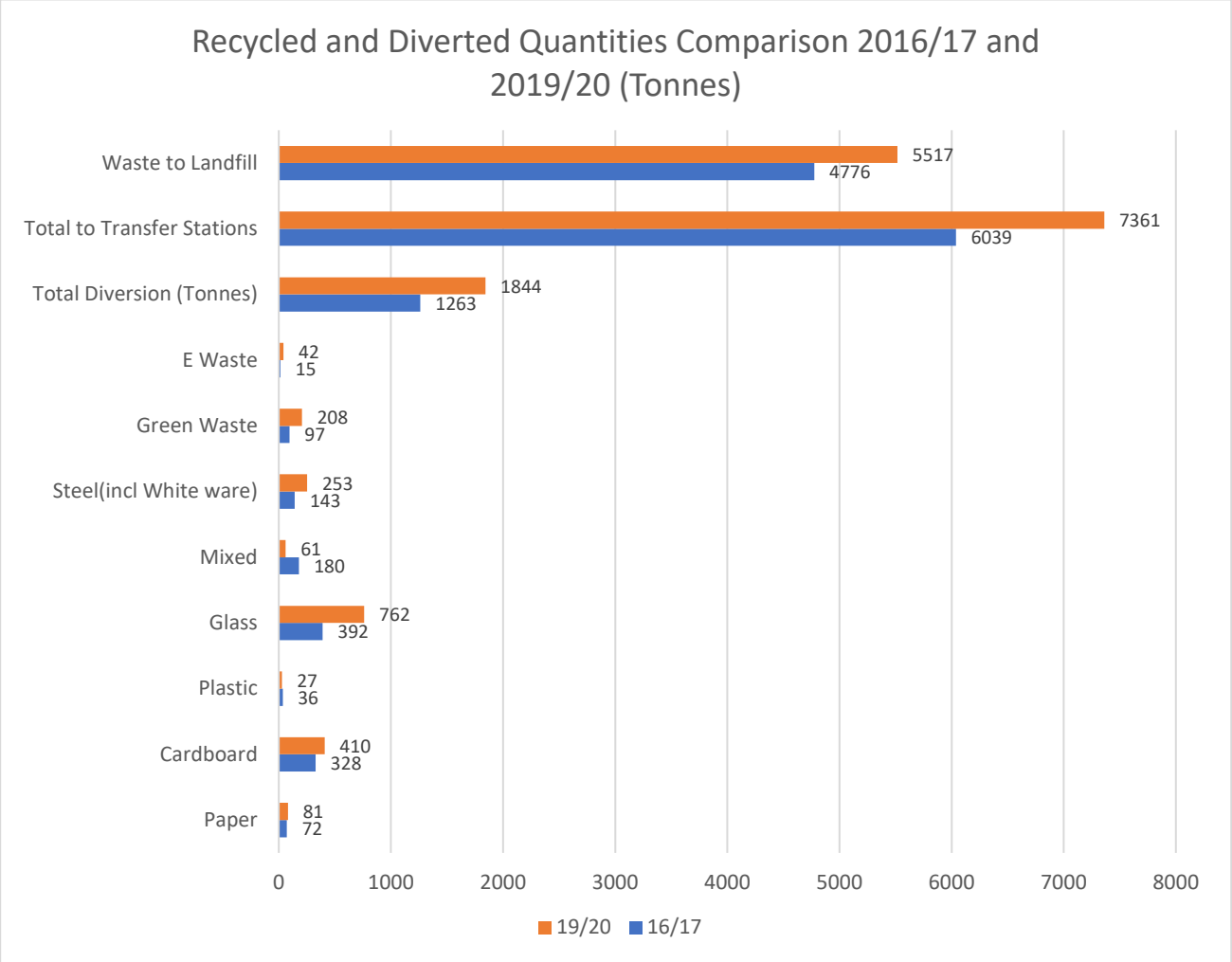
Table 9: New Zealand disposal quantities Class 1 landfills

Year	Total waste tonnes/year	No of households	Average kg/waste per household	Population	Average kg/waste per capita per day	Average kg/waste per capita per year
2020	3,382,496	1,919,800	1,762	5,100,400	0.66kgs	242
2019	3,499,912	1,855,962	1,886	4,699,755	0.74kgs	271
2015	3,220,889	1,792,500	1,797	4,596,700	0.70 kgs	256
2010	2,532,481	1,638,200	1,546	4,350,700	0.58kgs	212.46

4.3 RECYCLING

Recycling data continues to become more accurate, although Council don't have a lot of data what we do have tells us that we are well on the way to achieving a significant diversion from Landfill, for the 2016/17 year we are at 21.41% diversion, with another quarter still to report on Council expects to achieve 23% for this year. This is up on the 12.77% for the whole of 2015/16. This can be attributed to better reporting, i.e. Council now gets data from Hakaru Transfer Station operations and because some private providers are no longer operating the majority of recycling is coming to either Councils Dargaville or Hakaru Transfer Station.

Figure 5: Recycled and Diverted Quantities



Organic Waste

Green Waste disposal is becoming more popular and is contributing significantly to waste diversion data, in the future Council would like to look at options to process and re use green waste and potentially food waste which currently accounts for approx. 38% of waste taken to landfill.

Waste Minimisation and Management Plan

KDC's Waste Minimisation and Management Plan (2017) contains strategies for the management of waste streams, minimisation of waste generation and disposal for the Kaipara district over the next ten years. The current WMMP in due for review in the 2021/22 year. Details of Council's waste strategies will occur through the Long Term Plan 2021/2031.

4.4 FUTURE WASTE STREAM OPTIONS

Transfer Stations – Hakaru and Dargaville

Waste from the eastern area is taken to the Hakaru Transfer Station. The estimated volume is approximately 266 tonnes per month. This waste includes the eastern kerbside collection and self-hauled refuse.

Waste from the western area is taken to the Dargaville Transfer Station. The estimated waste volume is approximately 193 tonnes per month. This is made up of kerbside collection, self-hauled refuse, illegal dumping and litterbins (does not include recycling)

All the general waste collected at the above transfer stations is transported, moderately compacted, in hook bins loaded on to trucks to Puwera Landfill South of Whangarei. Recycling collected at both transfer stations is managed by the appropriate contractor.

The user pays nature of the KDC refuse collection service also encourages waste minimisation. The advent of recycling in the district is also thought to help reduce current transfer station tonnages.

As there are no operating landfills in the Kaipara area, Puwera is the most economical option for refuse disposal.

Kaipara district commercial or industrial waste

Some waste from commercial and industrial undertakings in Kaipara district is currently collected from commercial operators and disposed of outside the district. For example, Countdown in Dargaville operates a waste management system where some material is recovered and recycled (paper and cardboard), organic material (food waste) is diverted to animal feed, and the residual waste is disposed of at Whangarei district Council's Puwera Landfill. The volume of waste available from this source is not known and could only be established by a detailed and extensive survey of businesses in the district. To redirect elements of this waste stream to either Kaipara owned Transfer Stations would involve a significant price incentive or subsidy, this is not an option being considered with our current user pays policy.

5 LIFECYCLE MANAGEMENT

5.1 INTRODUCTION

Both transfer stations (Hakaru and Dargaville) sites have been able to meet the current demand. An expected population increase in Eastern and Central areas, high transportation costs and the need to better manage recycling and other forms of waste diversion into the future has led to the need to construct a purpose built resort centre in Central Kaipara, see section 8 improvements. This is likely to contain a plastic shredding and wash plant, sorting platforms, composting facility, and an incineration/waste to energy plant. It will be a modern day facility that will enable maximum diversion from landfills and high quality recycling opportunities with more economical transportation costs to markets.

The assets most likely to require renewal or refurbishment over the next ten year planning period, wetlands for leachate treatment, improvements to refuse sorting and recycling facilities, and upgrades to litterbins.

Closed landfill monitoring will continue to ensure compliance with Resource Consent conditions, investigations and assessments will be completed on coastal closed landfills and others that may be in flood inundation zones, there are a number of largely unknown historic landfills that required further investigation and identification, some may require future consenting & climate change protection.

The following section outlines what KDC does to manage and operate these assets.

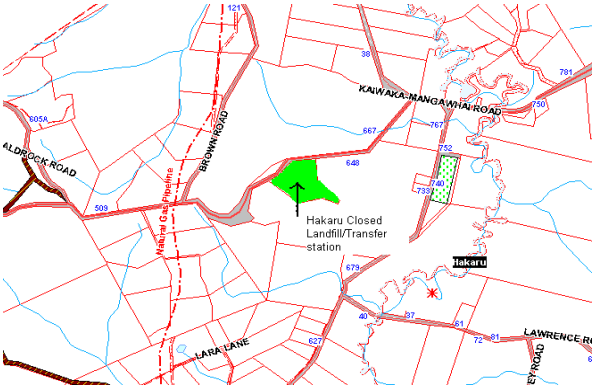
5.2 TRANSFER STATIONS

5.2.5 Hakaru Transfer Station

Figure 6: Hakaru Transfer Station Site

Aerial Map

Location Map



Asset description

This facility caters for the south eastern area of the District which includes the communities of Mangawhai, Kawaka, Maungaturoto and their surrounds and is located approximately six kilometres east of Kaiwaka on the Kaiwaka-Mangawhai Road. The location of the site is shown in Figure 6. The surrounding countryside is rolling pastureland with scattered dwellings and ancillary farm buildings.

While the site now operates as a transfer station, it was initially developed as a landfill in 1997 and operated as such until 2005. In 2007 operation of the transfer station commenced at the site and the landfill was closed. KDC has an obligation to restore the site to a levelled high quality pasture and gift the land back to the original owner or benefactors no later than 30 years from settlement, which is 2027.

The land at this site, which covers an area of approximately 4.4 hectares, is owned by the KDC however all major infrastructure and processing assets in relation to the transfer station operation on the site are owned and operated by the Contractor.

Operation and Maintenance

Operations and maintenance of the transfer station are completed by the Council contractor – currently under Contract 484 which is due to expire June 2022.

Renewals and Improvements

All infrastructure associated with the operation of the site as a Transfer Station facility (e.g. buildings, collection bins, machinery) are owned and managed by the Contractor. Over the last three year period there have been some improvements made to the site by the contractor, these include the installation of a weighbridge and improvements to recycling facilities.

5.2.6 Dargaville (Awakino Road) Transfer Station

Asset Description

This facility caters for the north western area of the District which includes the communities of Dargaville, Te Kopuru, Baylys and the surrounding communities and is located on the outskirts of Dargaville in a semi-rural location. The location of the site is shown in Figure 7. The surrounding land is rolling to flat predominately grazing and cropping. The surrounding catchment empties into the nearby Awakino River.

While the site now operates as a transfer station, it was initially developed as a landfill with disposal operations commencing in about 1922. In 2011/2012 an investigation on possible locations and options for a new transfer station and possible recycling facility was carried out. The current site at Awakino Road proved to be the best option for the foreseeable future. In 2000/2001 the landfill was closed and the transfer station commissioned.

Figure 7: Dargaville Transfer Station Site

Operation and Maintenance

Stormwater **-** Stormwater is diverted around the site along a stormwater bypass which feeds into the treatment area. The treatment area consists of an artificial pond/wetland planted to filter and polish the stormwater before entering the surrounding drainage system. In 2009 two sumps were excavated to capture stormwater runoff from the solid waste transfer area, in 2019 due to capacity and maintenance issues these sumps were removed and one much larger sump put in, this has allowed for better access to clean and has prevented overflows.

Resource Consent Requirements

There is no resource consent for the Transfer station activity this is a permitted activity.

Renewals and Improvements

No renewal works are planned at the site. Council owned infrastructure associated with the operation of the site as a transfer station facility consists of buildings used as office, staff facilities, hazardous waste store, general storage and a second hand shop. Council also owns the bottle bay, 2 x recycling collection and storage containers, all property fences and gates and the general refuse disposal pit, all other infrastructure e.g. collection bins and machinery, are owned and managed by the Contractor. There is also plans to install sound proof fencing at this site.

5.3 CLOSED LANDFILLS

There are 20 known closed landfills of which 14 are Consented in the Kaipara District. A further 6 sites were locations identified where informal or illegal dumping has occurred in the past.

The closed landfills require ongoing maintenance, monitoring, periodic renewal of assets, possible creation of new assets to keep the closed landfills in compliance with NRC requirements and identified Community Outcomes under the LGA 2002. The 14 Consented Closed landfills are as follows:

Pahi Road (Paparoa)	Dargaville Borough (Awakino Road closed landfill, now operates as a transfer station)
Glinks Gully	Hakaru (Mangawhai/Kaiwaka Road, now operates as a transfer station)
Kaiwaka (Oneriri Road)	Parawanui Road
Mangawhai	Te Maire
Tinopai	Mosquito Gully
Access Road (Ruawai)	Kellys Bay
Omamari	Bickerstaffe Road

There are a further six informal or illegal tips (that Council is aware of) that are no longer in operation:

Pouto Point – illegal	Te Kowhai Road - illegal
Tangiteroria – illegal	Te Kopuru, Clean Street - illegal
Kaihu - illegal	Franklin Road - previously consented, no longer required.

At present, maintenance is undertaken on an ‘as required’ basis, as most of the closed landfills require only reactive maintenance and occasional vegetation control as they are now under pastoral grazing or other passive usage. Historic records and information for these sites is incomplete. While Council records and information on some of the landfill sites is very good, much of the information on many of the sites is limited

due to their age and by the information provided at the time of Council amalgamation from the previous Dargaville Borough Council and Hobson and Otamatea County Councils. Most of the sites were developed before resource consenting was required. Over the 3 year period of this AMP Council will investigate the 6 informal sites with the intention of identifying future requirements for consents and Climate change protection. Council's information and records are improving as information from inspections and monitoring continues and as consents are renewed. Further information is also contained in Appendix B

5.4 OPERATION AND MAINTENANCE OF CLOSED LANDFILLS

5.4.5 Dargaville (Awakino) Closed Landfill

Operational Period	Approx. 1922 - 1996
Consent Period	2052
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	199 Awakino Road Dargaville

Figure 8: Location Dargaville Closed Landfill

A small area of this site now operates as the Dargaville transfer station, it was initially developed as a landfill with disposal operations commencing in about 1922. The landfilling extended over an area of approximately 30,000m^2 .

The site was operated as an open tip with few controls and few records were kept of volumes received at the site. However, it is estimated that 300,000 to 350,000m^3 of solid waste was landfilled at the site during its 74 years of operation.

Currently the bulk of the old landfill site is being grazed informally as the lease has expired, assets associated with the old landfill site are minimal and consist of a stormwater diversion system and artificial pond/wetland area.

Resource Consent Requirements

A renewed consent was issued in September 2017 this is valid until Sept 2052 – all conditions are currently being met. The site will continue to be monitored in accordance with Resource consent conditions with maintenance planned around monitoring results.

Capping

In 2018/19 the final capping was completed as per consent conditions. This site no longer operates as a clean fill dumping facility.

Disposal/Closure Plan

While there is currently no defined plan for post-closure use of this site, the intention is likely to be for Council to retain the site and surrounds and incorporate it into the land Council owns surrounding the site into pasture and graze under a lease arrangement.

5.4.6 Hakaru Closed Landfill

Operation Period:	1997-2005
Consent Period:	30 November 2053
Ownership:	Kaipara District Council
Management:	Kaipara District Council
Location:	Lot 1 DP 181761 (Kaiwaka – Mangawhai Road, Hakaru)

Figure 9: Hakaru Closed Landfill

In 2007, operation of a transfer station commenced at the site and the landfill was closed. Council therefore has no long term asset liabilities, but does have a liability for any eventual closure of the landfill site. KDC has an obligation to restore the site to a levelled high quality pasture and gift the land back to the original owner or benefactors no later than 30 years from settlement, this would be 2027.

Resource Consent Requirements

A new consent was granted in 2019 (expiry in Nov 2053) allowing for the construction of a new leachate treatment facility and discharge to land. This work is expected to be completed in the 2020/21 construction season. The site is monitored as per consent conditions and maintenance work is planned around the monitoring results.

Leachate

Until a suitable onsite treatment facility is developed, leachate will continue to be transported off-site by tanker for disposal. The present leachate treatment system provides for the collection of leachate from the base of the landfill in a pump chamber. From this chamber, leachate is then pumped to an elevated holding pond located on the north eastern side of the site outside of the filling area. Leachate is collected as required by a local effluent disposal contractor and disposed of at a facility operated by that firm in Wellsford.

Once the above leachate treatment facility is constructed in 2020/21 leachate will be discharged via the treatment system and wetland to tributaries flowing to the Hakaru river. This will see a huge reduction is costs to dispose of leachate.

5.4.7 Pahi Road Closed Landfill

Operational Period	<1985 - 1993
Consent Period	2035
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Co-ordinates 1710645E 6002982N

Figure 10: Pahi Road Closed Landfill

The landfill opened prior to 1985 and was operated until 2003 when it was capped and closed. Records show that Water Rights were issued for the landfill by the Northland Catchment Commission as early as 1987 and possibly before. In the earlier stages of its life the landfill was well protected from salt and

freshwater intrusion by significant bunds. During this time the extent of the landfill was restricted to the unused portion of the road reserve adjacent to the mangrove swamp beside the Paparoa Stream and part of the site is within the former Paparoa Stream Bed. Records show that toward the end of the landfills life it was significantly overfilled and had started encroaching on to the neighbouring mangroves.

It is expected that further investigations will take place here in the future with regard to climate change protection.

5.4.8 Kaiwaka Closed Landfill

Operational Period	<1974 – 1996
Consent Period	2035
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Part Allot 141 Block III Otamatea SD Co Ordinates 1729503E 5997028N

Figure 11: Kaiwaka Closed Landfill

Kaiwaka Landfill operated as a landfill prior to 1974 and closed in 1996 when it was used as a transfer facility until the Hakaru Landfill was commissioned. The final consent for land filling activity on the site was granted in 1993 and included provisions for the closure of the landfill by March 1995.

During operation the site was used similarly to many landfills. Solid Waste was tipped at the site and progressively buried by subsequent loads of solid waste. In the latter years of the landfills operation solid waste was regularly covered, leachate ponds were established to detain leachate and contaminated stormwater runoff from the tip area.

It is expected that further investigations will take place here in the future with regard to climate change protection.

5.4.9 Mangawhai Closed Landfill

Operational Period	<1985 - 1993
Consent Period	04 August 2015 – 01 August 2050
Ownership	Private Ownership Bruce Ogilvy
Management	Kaipara District Council
Location	Co-Ordinates 1710645E 6002982N

Figure 12: Location Mangawhai Closed Landfill

This site was a 'formal' tip, on privately owned land. Has been closed, capped and consented.

5.4.10 Tinopai Closed Landfill

Operational Period	Unknown
Consent Period	2005 – July 2035
Ownership	Privately Owned – Li Liang Ren
Management	Kaipara District Council
Location	Lot 27 DP16979 Block XI Hukatere SD

Figure 13: Location Tinopai Closed Landfill

History

Was a 'formal' tip, on privately owned land. Has been closed, capped and consented.

5.4.11 Ruawai Closed Landfill (Access Road)

Operational Period	1990 - 2001
Consent Period	2035
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Lot 1 DP 138215 Blk XIII Tokatoka SD Map Ref: P08:085-673

Figure 14: Ruawai Closed Landfill (Access Rd)

History

Access Road Landfill operated as a landfill from 1990 to 2001. Consent for landfilling activity on the site was granted in 1994. During operation the site was used similarly to many landfills. Solid Waste was tipped at the site and progressively buried by subsequent loads of solid waste. There have been some minor exceedances with consent conditions that may need further investigation and remediation in the future, these exceedances revolve around heavy metal contamination such as copper and lead.

5.4.12 Omamari Closed Landfill

Operational Period	Closed 1997
Consent Period	07 November 2014 – 07 November 2049
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Omamari West Road – Block V Kaihu SD Map Ref P07:707:936.

Figure 15: Omamari Closed Landfill

Omamari Landfill operated up until 1997 and was capped in 2000.

5.4.13 Glinks Gully Closed Landfill

Operational Period	1960's – 1992
Consent Period	2035
Ownership	Department of Conservation
Management	Kaipara District Council
Location	Kopuru Beach Domain Blk V Kopuru SD at Map Reference P08:881-689

Figure 16: Location Glinks Gully Closed Landfill

History

The Glinks Gully landfill opened sometime during the 1960's and operated until 1992 when it was capped and closed.

There have been some minor exceedances with consent conditions that may need further investigation and remediation in the future, these revolve around heavy metal contamination such as copper and lead and arsenic. This is more of an issue due to the close proximity of the secondary water supply for the Glinks Gully community, this supply has been decommissioned and it is likely that a variation to the resource consent will be applied for.

5.4.14 Parawanui Closed Landfill

Operational Period	1950 - 1997
Consent Period	2005 – July 2035
Ownership	Department of Conservation
Management	Kaipara District Council
Location	Lot 1 DP 130476 Blk IV Kopuru SD – Co-Ordinates 1676193E 6009798N

Figure 17: Location Parawanui Closed Landfill

History

Parawanui landfill operated from 1950 through until its closure in 1997. It has since been capped and consented. This site is very overgrown and an historic slip has made access to bottom of pit sampling points all but impossible. This is not currently an issue but may need some attention in the future.

5.4.15 Cole Road (Te Maire) Closed Landfill

Operational Period	Closed 1994
Consent Period	1992 - 1996
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Cole Road - Block IX Tokatoka SD Map Ref: P08:923-665

Figure 18: Location Cole Road (Te Maire) Closed Landfill

History

Was a 'formal' tip. Following the closure of the landfill in 1994, final capping and stabilisation of the site was carried out. This consent expired in 1996 and to date there has been no response or indication from NRC re the need to review or renew this consent.

5.4.16 Mosquito Gully Closed Landfill

Operational Period	Unknown
Consent Period	2005 - 2035
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Road Reserve – Co-Ordinates 1693529E, 5990847N

Figure 19: Location Mosquito Gully Closed Landfill

This site is located on Council Road Reserve, it is not expected to require anything other than minor maintenance such as noxious week spraying and consent

monitoring required by the NRC over the coming years.

Council Roading contractors have established a clean fill dump site at this location.

5.4.17 Kellys Bay Closed Landfill

Operational Period	Unknown - 1997
Consent Period	2005 – 2035
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Co-Ordinates 1698636E, 5987060N

Figure 20: Location Kellys Bay Closed Landfill

This site is located on Council Road Reserve, it is not expected to require anything other than minor maintenance such as noxious week spraying and consent monitoring required by the NRC over the coming years.

5.4.18 Bickerstaffe Road Closed Landfill

Operation Period	Unknown
Consent Period	December 2016 - 2051
Ownership	Kaipara District Council
Management	Kaipara District Council
Location	Bickerstaffe RoadMaungaturoto – Co-Ordinates 1723101E 6001970N

Figure 21: Location Bickerstaffe Road Closed Landfill

History

The site was used illegally for a number of years for the “fly-tipping” of refuse. KDC has no records which indicate the duration of waste disposal or the nature of the waste deposited at the site. The landfill covers an area approximately 0.68ha and extends for approximately 175m along the shoreline.

Capping of the landfill footprint was completed in 2019. To date the local community has maintained the grassed area which has included the planting of natives.

Sampling of the marine area is undertaken annually with results reported to Northland Regional Council, it is expected that over time there will be a decrease in heavy metals within the estuary due to the capping and reduction in leachate. It is expected that further investigations will take place here in the future with regard to climate change protection.

5.5 ILLEGAL DISPOSAL AREAS

Pouto Point – was an illegal unconsented tip. Area is filled, covered and forms part of an open space recreational area.

Tangiteroria - as an informal (illegal) tip and has not been consented.

Kaihu - was an informal (illegal) tip and has not been consented.

Te Kowhai Road - site has been covered with fill, fenced off and partly planted with native plant species.

Te Kopuru (Clean Street) – site has been covered with fill, fenced and is currently grazed..

Franklin Road - previously consented, no longer required.

5.6 LITTERBINS

Litterbins are provided in the urban areas of Dargaville, Ruawai, Paparoa, Maungaturoto, Paparoa, Kaiwaka, Mangawhai Heads and Mangawhai Village and the holiday areas of Omamari, Baylys, Glinks Gully, Pouto, Kellys Bay, Tinopai and Pahi.

In total, there are approximately 95 litterbins located throughout the Kaipara District. Most are between 5 and 13 years old and in reasonable condition.

The frequency of litterbin collection depends on seasonal demand, but is at least three times per week. This increases to daily between December and March.

Over the next 10 years it is expected that approximately $20,000 will be spent on litterbins, based on the current spend of approximately $2,000 per year. This is mainly a result of replacement of damaged litterbins or to undertake maintenance of existing bins to enable continued operation.

Illegal Litter and Abandoned Vehicles

Illegal litter remains a concern for Council and the public. Levels of illegal litter dropping have remained static. Most service requests received through Council's Helpdesk system are associated with the same specific locations in the District. Council's involvement with abandoned vehicles removal has increased over time as the value of metal, vehicles and vehicle parts has decreased. There are limited opportunities within the Kaipara District to sell unwanted cars that have reached the end of their life and operators outside the area will charge for collection rather than pay. For both abandoned vehicles and illegal litter, costs are requested (where possible) from the perpetrator and infringements are issued where a perpetrator is identified.

Abandoned vehicles and illegal litter are removed as a health and safety and aesthetic service. This service is carried out on an as required basis when Council is notified.

5.7 COLLECTION CAGES

In the past Council has provided some collection cages at points where some rural roads intersect, but over the past two years Council has been replacing these with collection extensions and collection points (smaller catchment of properties). Collection cages were notorious for attracting illegal dumping and the pest animals that come with illegal dumping. All of the collection cages have now been removed and collections extended, there is no intention of re-establishing collection cages.

5.8 RESOURCE CONSENTS

Kaipara District Council is responsible for a number of consents associated with solid waste management. Council has a database of Solid Waste related consents which it monitors and updates as required. Renewal of resource consents can be costly and resource hungry. This is potentially a big issue and area of risk to Council.

The key issues are:

- Tracking of expiry dates, and ensuring that renewal of the consents is undertaken in good time
- Monitoring of sampling and leachate composition, and reporting trends to NRC as appropriate
- Monitoring of general consent conditions relating to stormwater, public health safety etcetera.
- Installation of additional leachate facilities may be required in the future, as a result of any consent monitoring.

KDC is committed to working with NRC to ensure better communication on consenting and renewal of consents. Currently there is only one expired consent with no others due to expire until 2025 .

Refer to the in Appendix 2 for individual Closed Landfill requirements.

5.9 CONDITION ASSESSMENTS AND PLANNED RENEWALS

The asset base for the operational transfer stations and closed landfills are minimal with respect to KDCs obligations to plan for asset renewals. The undertaking of formal condition assessments is therefore not considered to be a high priority exercise at present, as the costs will outweigh the risks. However, the monitoring of assets that are directly relevant to the resource consents is an area that carries moderate risk and Council will be undertaking annual visual inspections of closed landfill sites as per consent requirements and in association with NRC.

5.10 ASSET VALUATIONS

The Council-owned minor site facilities and infrastructure are not currently valued by Council for formal depreciation and renewal purposes. Nevertheless, annual budget provisions are made for the replacement of minor site assets as required. The valuation of Council's waste minimisation assets is currently limited to valuation of the land only, at closed and operational landfill sites. The current land values, where known, are provided in Appendix A and further information is in Section 7.

6 RISK MANAGEMENT

6.1 INTRODUCTION

The risk management framework, and management approach is outlined in the KDC Activity Management Overview. This plan focuses on the waste minimisation risks.

6.2 WASTE MINIMISATION RISKS

The main risks identified to date are outlined in Tables 10, 11 and 12 below.

Moderate-High Risks

At present, there are very few Waste Minimisation asset risks that are rated *high* or *extreme.* The Waste Minimisation asset risks have generally all been rated as *low* or *moderate*. A summary of risks as well as proposed risk management strategies are as follows:

Closed Landfills

Since closure, little is known of the specific contents of the 14 (legal) closed landfills. Whilst most of the solid waste deposited is most likely to have been domestic waste, there is also some possibility that over time pesticides, paint, oil and/or other potentially hazardous wastes were also deposited at some landfills. Ongoing monitoring of groundwater samples indicates that the risk of leachate contamination is fairly low, and over time is reducing.

Table 10: Closed Landfills – Risk Ratings

Risk Identified	Risk Rating	Risk Management Strategy
Illegal substances deposited without Council knowledge	High	Regular inspection of closed landfills
Leachate contamination from groundwater	Moderate	Ongoing monitoring programme
Adjacent landowner issues	Moderate	Early resolution if/when issues arise.
Not meeting Resource consents conditions	Moderate	Regular inspections and monitoring carried out with Northland Regional Council staff. Working closely with NRC on resource consent renewals processes.
Resource consent expiry	Low	Consent database created for forward planning of consent renewals
Unknown historic illegal landfills on Council land.	Moderate	Document known sites and develop/maintain relationships with NRC and or stakeholders to ensure minimal cost incurred.
Impact of Climate Change – Unknown cost to protect Closed landfills in coastal areas	High	Have engineering assessments completed on all coastal closed landfill sites including known illegal ones, plan upgrade works to protect

Operational Waste Minimisation Facilities

As with the closed landfills, the main risk issues with the operational waste minimisation facilities are concerned with potential environmental contamination, either as a result of negligence or through accidental of unintentional acts.

Table 11: Operational Waste Minimisation Facilities – Risk Ratings

Risk Identified	Risk Rating	Risk Management Strategy
Environmental contamination occurs through events beyond the control of Council.	High	Monitor Contractors' QA processes on a regular basis.
Operator fails to meet contractual obligations.	Moderate	Work with Operator to resolve issues in a 'partnering' environment.
Central government legislation drives up disposal costs - this relates to Waste Minimisation levy's	Moderate	Joint advocacy with industry organisations and other councils.
Illegal Dumping of Rubbish – due to decrease in service level (e.g. missed collections, costs of disposal, distance to travel)	Moderate	Signs disallowing dumping of rubbish Management of contracts Monitor complaints By law enforcement
Public and Contractor Health – Contractors and members of the public are not exposed to Health risks.	Moderate	Monthly Site Audits and Reporting Contract Management
Public and Contractor Safety - accidents causing injury and damage to Kaipara Residents, visitors or property.	Moderate	Monthly Site Audits and Reporting Contract Management

Other Business Risks

The main business risks are centred around potential loss of corporate knowledge relating to the waste minimisation asset, therefore to capture it all in the AMP has identified this risk and manages it accordingly.

Table 12:- Other Business Risks - Risk Ratings

Risk Identified	Risk Rating	Risk Management Strategy
KDC may have to implement Central Government initiatives that are currently being investigated, these will have an effect on costs to dispose and collect, and current services offered. these include but are not limited to: Increasing disposal Levy, Standardising Kerbside Refuse and Recycling both how we collect and what we collect, introduction of Container Deposit Schemes and Compulsory Product Stewardship of some products.	High	

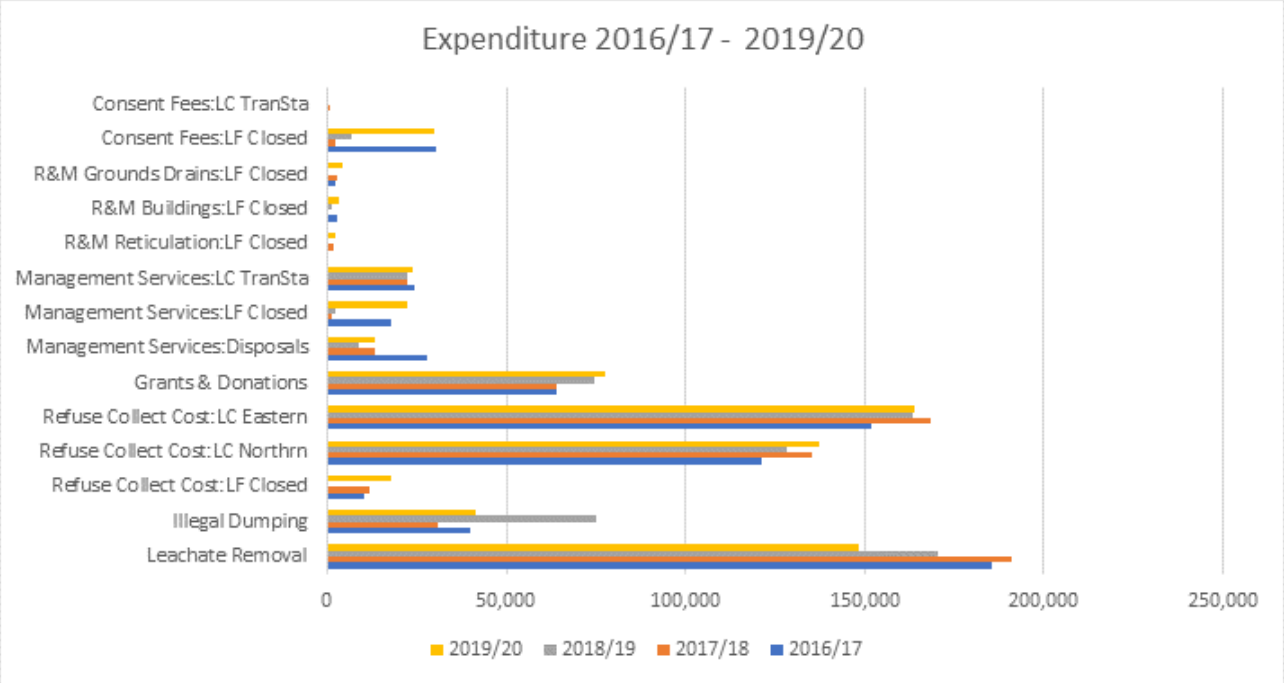
Risk Identified	Risk Rating	Risk Management Strategy
Environmental contamination occurs through events beyond the control of Council.		Monitor Contractors' QA processes on a regular basis
Inadequate condition/performance assessments – lack of reliable data for renewals/replacements and valuations	Moderate	Develop a process to ensure that knowledge is transferred, stored and accessible.
General Maintenance, Operation and Collection Contract Management – unsatisfactory resulting in unnecessary or excessive costs and/or insufficient output or quality. Poor Contractor performance	Moderate	Develop Contracts with clear delivery targets and performance measures. Contract Management with Quality Assurance Audits and updates where necessary.
Loss of information, caused by staff turnover or illness.	Moderate	Electronic Filing system utilised. Data bases kept update.

7 FINANCIAL PROJECTIONS

7.1 INTRODUCTION

Along with community outcomes and customer expectations, the issues, challenges, risks and works outlined in the previous sections all impact on expenditure. The following section outlines the budgeting process, summarises the main assumptions, describes the standards applied, outlines the different funding mechanisms and overall affordability and impacts in regards to rates.

Figure 22: Expenditure 2016/17 - 2019/20



Fees and charges are approved by Council for solid waste disposal are set out below. Both contracts for refuse disposal are $0 contracts, i.e. income to cover disposal is covered by user pays at the time of disposal, rates only fund litter bin emptying, illegal dumping retrieval and closed landfill consents and monitoring.

7.2 BUDGETING PROCESS

Consistent with the Local Government Act 2002 (LGA), KDC's budgeting process is iterative. Initial budgets are set with consultation between senior management and managers which then goes to Council meetings. At the end of the meetings, the Council has a budget it feels is in line with community expectations and is prepared to send out for public consultation via the Long Term Plan (LTP). Based on submissions received from members of the community, feedback is sent back to the Council for final ratification before being formally adopted by Kaipara District Council.

Future capital works include the Leachate control/disposal improvements at Hakaru Landfill with estimates of $800,000 and $1.2m respectively.

With respect to the Hakaru (closed landfill) site, the Council currently spends approx. $127,000 - $180,000 annually on the removal and disposal of leachate from the site. In 2019 Resource Consent was gained for the building of a leachate treatment facility and discharge to ground, the draft design has been completed and it is expected that the project will be completed during the 2020/21 financial year.

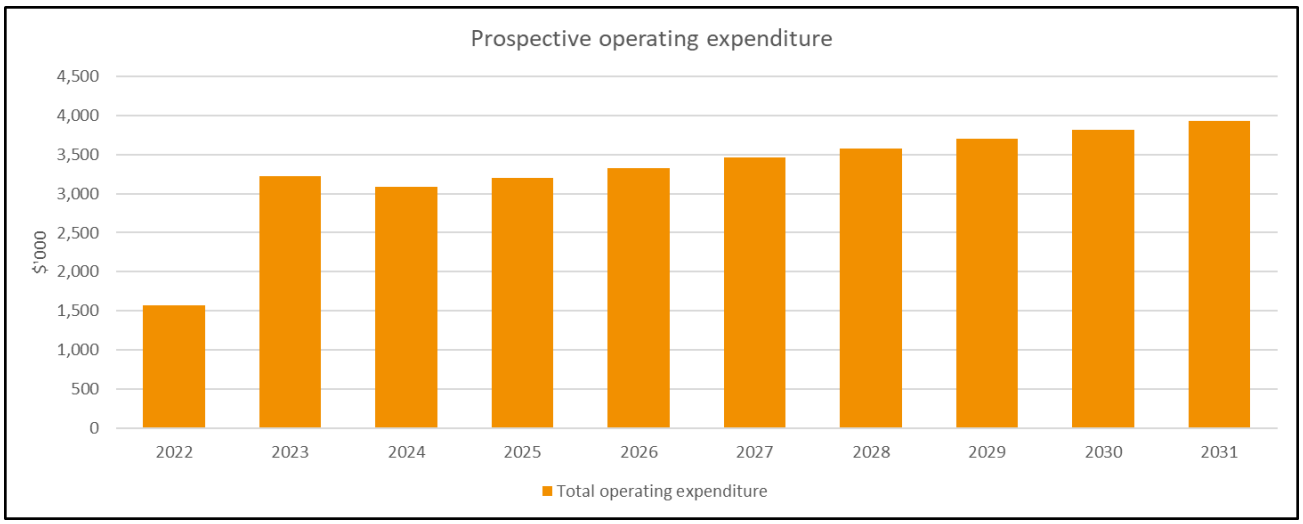
Other assets likely to require renewal or major refurbishment over the twenty year planning period are: leachate control devices, monitoring boreholes, capping, minor storm water and other site assets. Minor assets including litterbins are replaced as operational expenses, and are not capitalised.

Overall, the bulk of the costs likely to arise in the 10 year forecast horizon are related to operational costs. Minor maintenance work is identified and carried out as a result of quarterly consent monitoring. See the table below for a summary forecast of expenditure over the next 10 years.

Table 13: Summary CAPEX and OPEX expenditure

For the year ended:	Annual Plan	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
30 June	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	2029-2030	2030-2031
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Prospective Funding Impact Statement											
Activity selection: Solid Waste, All, All											
Operating funding											
Sources of operating funding											
General rates, uniform annual general charges, rate penalties	1,055	1,732	1,632	1,421	1,493	1,610	1,701	1,834	1,942	1,743	1,794
Targeted rates	0	0	1,699	1,777	1,835	1,894	1,965	2,016	2,077	2,154	2,218
Subsidies and grants for operating purposes	0	0	0	0	0	0	0	0	0	0	0
Fees and charges	79	195	202	208	214	221	228	234	241	249	256
Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0	0
Interest and dividends from investments	0	0	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other receipts	0	0	0	0	0	0	0	0	0	0	0
Total operating funding	**1,134**	**1,927**	**3,533**	**3,406**	**3,543**	**3,726**	**3,894**	**4,085**	**4,261**	**4,146**	**4,269**
Application of operating funding											
Payments to staff and suppliers	699	1,271	2,583	2,456	2,545	2,635	2,732	2,809	2,905	3,003	3,104
Finance costs	17	14	25	21	20	43	49	75	94	86	83
Internal charges and overheads recovered	129	286	619	616	637	650	683	694	702	732	742
Other operating funding applications	0	0	0	0	0	0	0	0	0	0	0
Total applications of operating funding	**845**	**1,570**	**3,227**	**3,092**	**3,202**	**3,328**	**3,465**	**3,578**	**3,701**	**3,820**	**3,928**
Surplus (deficit) of operating funding	**289**	**357**	**306**	**314**	**341**	**398**	**429**	**507**	**560**	**326**	**341**

Figure 23: Waste Minimisation prospective OPEX



7.3 FINANCIAL ASSUMPTIONS

The key assumptions of the Council were outlined in previously in Section 1 and are summarised again below.

- Service levels are generally assumed to remain the same
- Ability to meet community expectations around the district - should the demographics of the district change, expectations for services currently not provided may increase or decrease. This directly impacts on the volume being collected and disposed of through the transfer station gates

- Inflation is based on Council's knowledge of its business base and on Business and Economic Research Limited (BERL) predictors for the next 10 years
- Financial dollars are in today's dollar figures, as opposed to Net Present Value, meaning that long term projected rate of inflation has been included
- The south-eastern area is prone to population fluctuations with increasing demand for services over the summer holiday period
- Solid waste volumes will be affected by changing age demographics in the district (any demographic change, such as decrease in age groups below 60 and an increase in those over 60 will typically change the volume and types of waste compared to households with children. Potentially, should this happen, Kaipara may see a reduction in volume and type of collected and disposed of waste)
- The rating base will continue to remain reasonably static throughout the course of this SAMP
- Leachate disposal costs for the closed Hakaru Landfill site will continue to increase
- Leachate and Capping conditions of Dargaville closed Landfill will require capital expenditure
- Sustainable pricing for district-wide kerbside solid waste and recycling bag collection can be maintained
- Financial cost for maintaining Closed Landfills to consent compliance
- Whangarei District Council Disposal Facility remains financially viable

7.4 ASSET VALUATION

The Waste Minimisation infrastructure assets owned by Council can be summarised as:

- Freehold title with gift back clause to the land on which the closed Hakaru landfill is situated
- Freehold title to the land occupied by three of the closed landfill sites
- Freehold title to the land on which the Dargaville Transfer Station is situated (also the associated closed landfill)
- Leachate detention ponds at several closed landfill sites
- Leachate monitoring boreholes
- Capping
- Other minor stormwater drainage, accesses, fencing etcetera
- Resource Consents for the closed, current and future landfill sites
- Building located at the Awakino Road Dargaville Transfer Station and used by the Contractor as storage and office
- Recycling storage at Awakino Road Dargaville Transfer Station.

The valuation of Council's Waste Minimisation assets is currently limited to valuation of the land only, at closed and operational landfill sites. The current land values, where known, are provided in Appendix A.

The majority of Waste Minimisation infrastructure and plant assets are all owned by the contracted service providers, and are not subject to valuation from a Council point of view. The minor site assets such as leachate control devices, monitoring boreholes, stormwater pipes etcetera are not currently valued, and hence are not currently being depreciated by Council. This has been noted as an Improvement Plan item (IP 1) in Section 9.

7.5 DEPRECIATION

There is currently no depreciation charge for the minor waste minimisation assets employed. Although not likely to be a large sum, given the relatively modest size of the Waste Minimisation asset portfolio, it is a requirement of PBE IPS AS 17 Accounting Standards that all infrastructure assets are depreciated. PBE IPS AS 19 Accounting Standards also require that contingent liabilities be identified and brought into account. These are outlined further in the following sections.

7.6 FINANCIAL FORECASTS AND FORWARD WORKS PROGRAMME

The financial forecasts presented in this AMP are based upon the assumption/scenario that Council will implement strategies and policies over the next 10 years that will have the effect of significantly reducing solid waste volumes to landfill. The impact of such strategies and policies are likely to mean that unit costs of disposal to landfill will go up (if full cost recovery is to be achieved) and that recycling initiatives will become a more significant cost to Council.

Validation and Confidence Levels

With respect to capital expenditure Council has a standardised Project Information Sheet for proposed Capex expenditure projects. These will be used on Waste Minimisation projects that are undertaken directly by Council. Major capital projects will be undertaken through Council's normal contracting process, which has its own project information and reporting sheets.

Council is confident with the financial forecasts presented within this AMP with, Initial forecasts being set after consultation with senior management which then goes to Council, when Council feels it is in line with public expectations, this then is send out for public consultation via the LTP. Based on submissions received, feedback is sent back to the Council for final ratification before being adopted.

Consistent with the Local Government Act 2002 (LGA) the budgeting process is iterative.

Capex Expenditure Summary

Over the lifespan of this AMP Council will be undertaking the following capital works:

- Closed Landfills – Climate Change Upgrades – assessments to be completed in Year 2 2022/23 of the new LTP followed by stagger remediation works over a 10 year period.
- Construct Central Composting Facilities – if found to be viable versus promoting private composting construction to take place in 2022/23
- Construct Central Resort Facility – if after investigation this is found to be viable as above to be built 2023/24
- Upgrade Dargaville Composting Facility – this will likely see the purchase of a shredder so green waste can more easily and economically be transported to the central composting facility for processing
- Transfer Station Sound proofing – to be installed 2021/22
- Install Solar Powered compacting bins – to be installed in Coastal areas so as to allow a reduction in the need for coastal litterbin clearing or additional bins due to holiday periods 2021/22
- Negotiate buy back of Hakaru or remediation – to begin immediately with resolution in place by 2027

- Install weighbridge at Dargaville Transfer Station – to be constructed in 2021/22 this will enable more accurate charging of refuse disposal and data collection.

Table 14: Planned capital expenditure - next 10 years

For the year ended:	Annual Plan	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Budget
30 June	2020-2021 $'000	2021-2022 $'000	2022-2023 $'000	2023-2024 $'000	2024-2025 $'000	2025-2026 $'000	2026-2027 $'000	2027-2028 $'000	2028-2029 $'000	2029-2030 $'000	2030-2031 $'000
Prospective Funding Impact Statement											
Activity selection: Solid Waste, All, All											
Capital funding											
Sources of capital funding											
Subsidies and grants for capital expenditure	0	0	0	81	28	57	238	0	0	0	0
Development and financial contributions	0	0	0	0	0	0	0	0	0	0	0
Increase (decrease) in debt	-32	241	-46	137	743	305	969	529	-182	-193	1,030
Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0	0
Lump sum contributions	0	0	0	0	0	0	0	0	0	0	0
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0	0
Total sources of capital funding	**-32**	**241**	**-46**	**218**	**771**	**363**	**1,207**	**529**	**-182**	**-193**	**1,030**
Applications of capital funding											
Capital expenditure - to meet additional demand	0	0	0	121	0	0	0	0	0	0	0
Capital expenditure - to improve the level of service	0	340	0	148	835	461	1,311	675	0	0	1,222
Capital expenditure - to replace existing assets	0	0	0	0	0	0	0	0	0	0	0
Increase (decrease) in reserves	257	258	260	263	277	300	324	360	378	132	149
Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0	0
Total applications of capital funding	**257**	**598**	**260**	**532**	**1,112**	**761**	**1,636**	**1,036**	**378**	**132**	**1,371**
Surplus (deficit) of capital funding	**-289**	**-357**	**-306**	**-314**	**-341**	**-398**	**-429**	**-507**	**-560**	**-326**	**-341**
Funding Balance	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Figure 24: Waste Minimisation prospective CAPEX

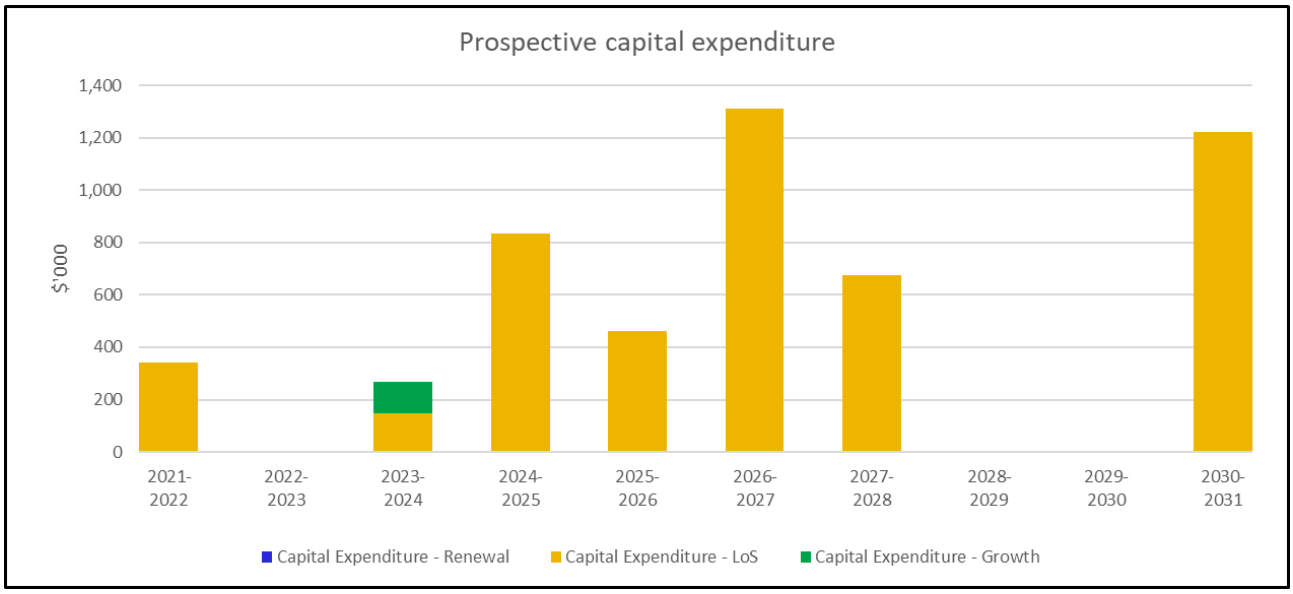


Table 15: Planned capital projects

Primary driver	Community	LTP Project name	Expected timing	Total
Growth	Dargaville	Dargaville solid waste - composting plant	2023/24	$150,000
	Maungaturoto	Maungaturoto solid waste and Paparoa Transfer Station		Unfunded
		Maungaturoto solid waste centralised recycling centre - first stage processing of fibre, plastic and polystyrene		Unfunded
LoS	Dargaville	Dargaville Landfill wetland renewal (to be reviewed every three years)	2030/31	$300,000
	Glinks Gully	Glinks Gully landfill cap renewal	2025/26	$300,000
	Hakaru	Hakaru Landfill	2027/28	$600,000
	Kaiwaka	Kaiwaka closed landfill	2026/27	$350,000
	Kaipara	Kaipara solid waste - climate change upgrades to closed landfills	2023/24 - 2030/31	$1,800,000
		Weighbridge	2021/22	$65,000
		Recycling bins	2021/22	$275,000
		Solar powered compacting	2024/25 - 2026/27	$200,000
		Transfer station sound proofing	2024/25	$250,000
			Total	**$4,290,000**

Renewal of Existing Assets

The Waste Minimisation assets likely to require renewal or major refurbishment over the ten year planning period are litterbins and landfill caps where identified to be at risk from climate change.

See Tables 13 and 14 for more detail on 10 year expenditure forecasts.

- District Disposal Operations – user pays general refuse and targeted/general rate for recycling. (To be confirmed in year 1 investigations).
- Maintenance of Closed Landfills – cost to Council
- Transfer Station Operations – user pays
- The Hakaru Transfer Station Contract is a zero dollar value contract and user pays applies, all buildings, major plant and machinery are owned by the contractor and there is very little cost to Council for providing this service. This contract is due to expire in June 2022
- The Dargaville Transfer Station Contract is major plant and machinery are owned by the contractor and there is very little cost to Council for providing this service. There are some buildings and storage facilities on site which are Council owned, Council has some minor budgets for building and grounds maintenance.
- Litter Control – this covers the costs associated with the collection (and disposal) of litter from the litterbins situated in all towns at Council's cost and includes abandoned Car retrievals. (This may go to the parks contract on renewal).

8 ASSET MANAGEMENT PRACTICES AND INFORMATION SYSTEMS

8.1 ASSET MANAGEMENT PLANNING

Asset management processes, practices, and systems are outlined in the KDC Activity Management Plan Overview.

Accountabilities and Responsibilities

KDC has a dedicated in-house team that manages both the strategic and operational matters for Waste Minimisation . This is done through direct employment of: a General Manager Infrastructure, a Roading & Waste Minimisation Manager and an Infrastructure Technical Officer. In summary, reporting occurs as follows: Contractor(s) report to the Infrastructure Technical Officer, who reports to the Roading and Waste Minimisation Manager. The Roading Manager reports to the General Manager Infrastructure, who reports to the Chief Executive. Overall, Asset management is the responsibility of the General Manager Infrastructure, with responsibility being delegated to the Roading and Waste Minimisation Manager's team for the day to day operations.

Physical works associate with the assets are primarily provided for through two contracts as illustrated. These cover the bulk of Council's Waste Minimisation assets across the district and deal with the day to day operations and maintenance. Council staff undertake inspections of all sites over the course of a year. As well as this NRC staff undertake inspections as part of resource consent monitoring. Any work identified in either inspection is then arranged by Kaipara District Council staff.

The assets are managed both strategically and operationally by in-house KDC staff. There is one primary contact which provides for daily operational management of its Waste Minimisation services, contracts and assets.

9 IMPROVEMENT PLAN

9.1 INTRODUCTION

It is important for Council to ensure that asset management practice is aligned with good practice that is fit for purpose and is always "forward-looking" when it comes to improvement in practices and standards. The previous sections have highlighted some of the main issues and challenges Council is facing for Waste Minimisation management. In response to this, an asset management improvement programme for Waste Minimisation is being implemented, with a number of items identified for improvement.

9.2 IMPROVEMENTS TO WASTE MINIMISATION ASSET MANAGEMENT

The purpose of the Improvement Plan is to:

- Identify and develop implementation of the asset management planning process.
- Identify and prioritise ways to cost-effectively improve the quality of the AMP.
- Identify indicative tasks, timescales, priorities and human and financial resources required to achieve asset management planning objectives.

The main drivers for asset management and thus improvements have been outlined in the previous sections (e.g. meeting regulatory requirements, managing risks, improving data and information).

Improvement Tasks

Table 16: Key improvement tasks

Description	When
• Assets registered in Assetfinder, includes closed landfills and litterbins and locations • Provision of waste minimisation, sustainable and circular economy education to communities and business, through Council website/publicity and external groups funded by Council • Installation of weigh bridge at Dargaville Transfer Station • Planning and procurement of new Transfer station and kerbside collection contracts for implementation in year 2 • Planning for improved recycling services for implementation in year 2. • Purchase recycling bins ready for recycling collection change in Year 2	2021/2022
• Implement changes set by Central Government, these could include container deposit schemes, kerbside collection standardisation of refuse and recycling, both products collected and how we collect them • Develop and implement composting facility • Implement recycling collection changes throughout the Kaipara District	2022/2023

Description	When
• Begin work on closed landfill remediation as identified in assessments • Develop and implement composting facility	2023/2024
• Potential reutilisation of some key closed landfill sites i.e. develop a dog park at the Kaiwaka site in partnership with Parks Team • Negotiation for potential buy back or Hakaru Landfill or site upgrade • Continue closed landfill remediation works • Solar power compaction bin installation • Transfer station sound proofing • Glinks Gully Cap renewal • Dargaville Wetland Renewal – if required	2024/2031

9.3 MONITORING AND REVIEW

The Improvement Plan will be monitored, reviewed and updated on an annual basis. The AMIP will then be adjusted accordingly (demonstrating an iterative cycle of continuous improvement) taking into account overall progress, changing business priorities, risks and affordability.

Table 17: Asset Valuations – Closed Landfills

Location	Legal Land Description	Land Ownership	Land Valuation	Leachate pond	Wetland	Pump and Retic	Piezometers	Fences
Access Road, Ruawai	Lot 1 DP 138215 Blk XIII Tokatoka SD Valuation 0113018100 Freehold Land	KDC	LV $87,000 CV $94,000	$2,000				$4,000
199 Awakino Road, Dargaville	Lots 1, 3, 4 DP 116318 Blk XII Kaihu SD Blk IX Maungaru SD Valuation 0101009300 Freehold land	KDC	LV $340,000 CV $395,000	$3,000	$10,000			$5,000
Hakaru, Kaiwaka-Mangawhai Road	Lot 1 DP 181761 Blk XV Waipu SD – Valuation 0122003701 Freehold land with gift back clause	KDC	LV $320,000 CV $650,000	$4,000	$10,000	$10,000	$20,000 (x2)	$5,000
Kellys Bay	Road Reserve Sec 40 BLK VIII Te Kuri SD-Rec Res Valuation - 0110010000	KDC	N/A					N/A
Mosquito Gully Pouto Road	Parcel ID 5237004	KDC	N/A					$3,000
Moir Point, Mangawhai	Lot 2 DP 99103	B Ogilvy	Private land	$1,000			$20,000 (x2)	
Glinks Road	Pt Allot 141 Kopuru Psh Blks IV, V Kopuru	DOC	N/A				$10,000 (x1)	$3,000
Omamari Road	Road Reserve	KDC	N/A					$3,000
Oneriri Road, Kaiwaka	Road Reserve	KDC	N/A	$2,000				$4,000
Pahi Road	Road Reserve	KDC	N/A					$3,000
Parawanui Road	Lot 1 DP 130476 Blk IV Kopuru SD Valuation – 0107008401 Freehold Land	KDC	LV $39,000 CV $41,000				$10,000 (x1)	$4,000
Te Kowhai Road, Ruawai	Road Reserve	KDC	N/A					$3,000
Cole Road	Road Reserve	KDC	N/A					$3,000
Sandy Beach Road, Tinopai	Lot 27 DP 16979 Hukatere SD	Liang Li	Private land					
Bickerstaffe Road	Road Reserve	KDC	N/A					N/A

Appendix A - Asset Valuations – Transfer Stations and General Litter

Location	Legal Land Description	Litterbins	Buildings	Bottle Bay	Recycling Cont'	Disposal Pit
Kaipara District	Various throughout Kaipara	$135,000 (x90)				
Dargaville Transfer Station	199 Awakino Road Dargaville		$50,000			
Dargaville Transfer Station	199 Awakino Road Dargaville			$25,000		
Dargaville Transfer Station	199 Awakino Road Dargaville				$5,000	
Dargaville Transfer Station	199 Awakino Road Dargaville					$15,000

Appendix B - Database of all Closed Landfill Consents

	Site	Land Ownership	Operational Period	Post Closure Management Plan	Current consent	Expires	Consent conditions	Monitoring Required	Inspection	Outstanding work Requirements
1	Dargaville (Awakino)	KDC	1922 - 1996	Yes	4433	2052	Reg Testing by NRC	yes	Six-monthly	Capping and leachate control, renew consent
2	Ruawai (Access Road)	KDC	1990 - 2001	Yes	7234	2035	Cap and leachate pond check yearly, water and sediment tests NRC 2xyearly. Drains, fly tipping quarterly	yes	Quarterly	
3	Pahi	KDC	1985 - 1993	Yes	2257	2035	Annual water and sediment tests NRC (winter and ebbtide)	yes	Annual	Needs engineering assessment
4	Kaiwaka (Oneriri Road)	KDC	1974 - 1996	Yes	4809	2035	Cap and leachate pond check yearly, water and sediment tests NRC 2xyearly. Drains quarterly	yes	Quarterly	Needs engineering assessment
5	Kaiwaka (Hakaru)	KDC	1997 - 2005	Yes	7562	2053	Reg testing by NRC	yes	Quarterly	Leachate improvements 20/21
6	Mangawhai	Private	1985 - 1993	Yes	4816	2050	Reg testing at 2 piezometers by NRC	yes	Annual	
7	Tinopai	Private		Yes	4812	2030	Drains and Cap check yearly, water tests NRC yearly.	yes	Quarterly	
8	Parawanui	KDC	1950 - 1997	Yes	4811	2035	Cap check yearly, water tests NRC yearly	yes	Quarterly	
9	Glinks Gully	DOC	1960' - 1992	Yes	4810	2035	Sampling completed by KDC	yes	Six-monthly	
10	Omamari	KDC	Closed 1997	Yes	4814	2049	Cap check yearly, water tests NRC yearly	yes	Annual	
11	Kellys Bay	KDC	Unknown	Yes	7226	2035	Cap check yearly. Drains, fly tipping quarterly	yes	Quarterly	
12	Mosquito Gully		Unknown	Yes	7227	2035	Cap check yearly. Drains, fly tipping quarterly	yes	Quarterly	
13	Bickerstaffe	KDC	Unknown	Yes	38848	2051	Cap and leachate check yearly, sediment monitoring annually for first 5 years.	yes	Annual	**Needs engineering assessment**
14	Te Maire			Yes	4815	1996	Cap check yearly. Drains, fly tipping quarterly	Yes	Quarterly	Consent has expired no request has been received from NRC re renewing this consent
15	Franklin Road	KDC		No	4916	1992		nil	nil	
16	Te Kowhai Road			No	illegal			nil	nil	**Needs engineering assessment**
17	Tangiteroria			No	illegal			nil	nil	Need location
18	Pouto Point			No	illegal			nil	nil	Need Location
19	Kaihu			No	illegal			nil	nil	Need Location
20	Te Kopuru			No	illegal			nil	nil	Complete engineering assessment

APPENDIX C - Acronyms

LoS	Levels of Service
WMA	Waste Minimisation Act
LGA	Local Government Act
RMA	Resource Management Act
SR	Service Requests
CCRA	Climate Change Response Act 2008
WMMP	Waste Minimisation and Management Plan
AMP	Asset Management Plan
IS	Infrastructure Strategy