

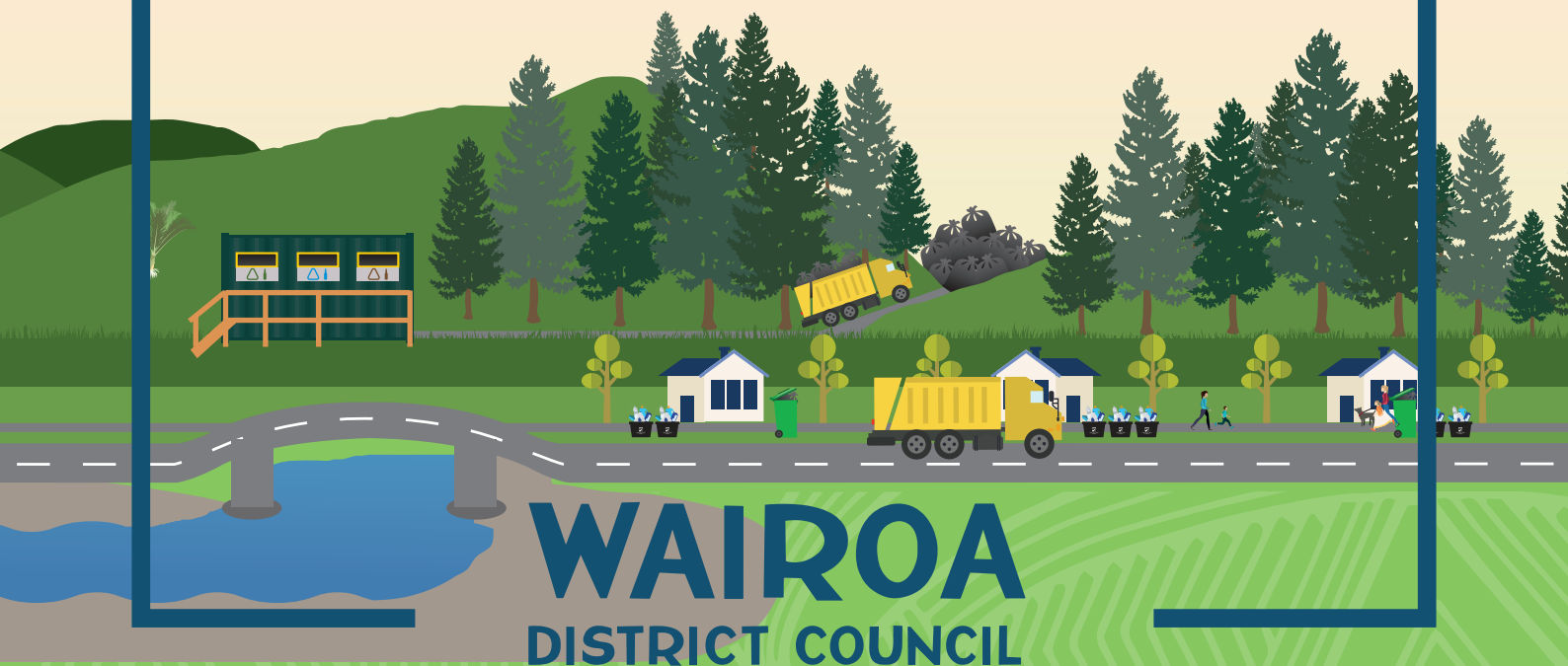


WAIROA DISTRICT COUNCIL

WASTE MANAGEMENT

ACTIVITY MANAGEMENT PLAN

2021-2031



WAIROA
DISTRICT COUNCIL

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EXECUTIVE SUMMARY

This Waste Management Activity Management Plan acts as a route map for the future. It provides the reasoning and context behind how we propose to maintain, operate, renew and improve Wairoa's waste management service.

The primary purpose of the Waste Management Activity is to support the following key functions and services:

- The provision and operation of the Wairoa District Council's waste management strategy
- The maintenance of the landfill assets including the landfill, recycling centre, rural recycling drop-off points and weighbridge
- Provision of a domestic waste and recycling collection service
- Aftercare of closed landfills.

STRATEGIC FOCUSES

We want to clearly show the value of any investment made in addressing our strategic waste management problems and undertaking core business activities. Any investment needs to **achieve the desired outcomes and benefits for our customers and represent value for money**. It is also important that we show how we will meet regulatory requirements and environmental protection.

OUR VISION

Desirable Lifestyles, Thriving Economy, Treasured Environments, Connected Communities

NATIONAL DRIVERS

The focus on climate change impacts and restrictions on international recycling are elevating the importance of good waste management in New Zealand. Key national drivers include:

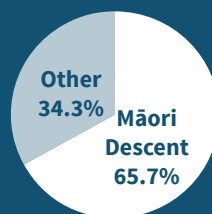
Ministry for the Environment Waste Disposal Levy – this is applied to all waste disposed to all types of landfills in New Zealand. In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The proposal would see the landfill levy be gradually expanded to all landfill types and increase from \$10 to \$50 or \$60 per tonne at landfills that take household waste by 2023. For other landfill types, the proposed level would be either \$10 or \$20 per tonne of waste disposed. **This will see an increase in waste disposal costs being passed onto our community.**

The newly amended **Climate Change Response (Emissions Trading Reform) Amendment Act 2020** includes a target of reducing emissions of biogenic methane and other greenhouse gases 2050. This will impact the solid waste asset portfolio with increasing Emissions Trading Scheme costs (carbon tax) and to a lesser degree transport costs used to collect and cart to landfills.

China's National Sword Policy (now replaced with Blue Sky) – has imposed tighter restrictions on the importation of certain recyclables, primarily mixed paper and plastic. China was the largest importer of recyclables. This has impacted the commodity price for recyclables globally. Nationally, the consequences of China's National Sword / Blue Sky Policy has impacted on the recycling collection contracts with significant cost escalations. Alternative markets are hard to find and are quickly getting overwhelmed. This has highlighted New Zealand's lack of investment in solid waste infrastructure. WasteMINZ (the national industry organisation) and the Ministry for the Environment are the leading the national response to China's National Sword Policy.

WAIROA AT A GLANCE

COMMUNITY



8,367
population

ENVIRONMENT



130KM
of coastline



4,119KM²
Land area

ECONOMY



\$32,778
GDP per capita



\$284
GDP (M)

WASTE MANAGEMENT ASSETS



6-7 YEARS
Wairoa landfill
cell life remaining



2031
Wairoa landfill
consent expires



5
Closed landfills
require ongoing
monitoring

OUR BIGGEST CHALLENGES & HOW WE PLAN TO RESPOND

Key problems identified for Wairoa's waste management activity are:



The table below provides a more detailed summary of our strategic responses and the benefits of investing in these areas.

Problem	Evidence	Investment Objective	Key Strategic Response	Benefits of Investing
Legislation Change Compliance requirements for Emissions Trading Scheme and Waste levy changes result in increased cost to the community	Legislation Changes to the Emissions Trading Scheme are anticipated in the near future that are likely to have a subsequent increase in landfill disposal costs. This will require changes to the way we plan, manage and fund the waste services. If waste management is not to the required standards, there are significant issues the community.	Mitigate harmful effects of waste to human health & environment	Proactive monitoring & planning for consent renewal We will monitor changes in legislation to ensure that we comply with requirements and to enable us to plan effectively. Ensure that the monitoring is being undertaken as per consent requirements and issue annual reports summarising any findings and issues for compliance purposes.	Compliant service delivery Meeting legislative requirements enables us to protect our environment, while still providing a key service to the community

Problem	Evidence	Investment Objective	Key Strategic Response	Benefits of Investing
Legislation Change Compliance requirements for Emissions Trading Scheme and Waste levy changes result in increased cost to the community	<p>Increase in waste levy In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The levy will increase from \$10 to \$50 or \$60 per tonne at landfills that take household waste by 2023. This increase is unaffordable for the District's small population.</p> <p>China's National Sword / Blue Sky Policy Council's current contract provides for management of types 1-7 plastics. At the end of the contract term this is likely to reduce to fewer plastic types and residual plastics will likely be landfilled where there is no market.</p>	<p>Sustainable service over the long term</p> <p>Affordable Level of Service</p>	<p>Landfill Service Sustainability Review A full options analysis of the future service provision, to assess the Levels of Service required and various options for meeting these. This includes reviewing:</p> <ul style="list-style-type: none"> Options and costs for replacement of the existing landfill facility once it meets capacity Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. Options to send waste to a bigger facility outside of the District. 	<p>Lower user costs Lower cost to individual users</p>
	<p>Capacity of existing landfill The survey has been completed in 2020 and indicates that there is less than 8 years life remaining in the existing cell based on current fill rates.</p>	<p>Sustainable service over the long term</p>	<p>Monitoring capacity of existing landfill Allocate funding to allow an annual survey to be completed to have a record of volume of refuse and remaining capacity to monitor when a new cell will be required.</p>	<p>Undisrupted service Will allow for service to continue without disruption</p>
Landfill Sustainability Uncertainty around landfill resource consent renewal in 2031 results in uncertainty around future service provision	<p>Waste Diversion volumes Tonnages of waste diverted from the landfill appears to have reduced in recent years, however monitoring and recording of this information may not be accurate.</p> <p>Resource consent Given the current life expectancy of the landfill an alternative site or an option for disposal of the district's waste needs to be found prior to consent renewal in 2031. Requirements to prepare the resource consent and increased monitoring conditions will likely increase the overall operational costs to provide service.</p>	<p>Sustainable service over the long term</p> <p>Mitigate harmful effects of waste to human health & environment</p>	<p>Waste Reduction Initiatives Update Waste Minimisation Management plan and ensure community are educated on how and why they need to reduce waste.</p> <p>Proactive monitoring & planning for consent renewal Allocate funding and resourcing to secure new resource consent. May need to be considered in the light of any regional approach to the delivery of waste services.</p>	<p>Reduced environmental impact Removing waste from the landfill reduces ongoing effects on environment</p> <p>Compliant service delivery Keeping resource consents current means no disruption to service to customers and better health and wellbeing of community</p>

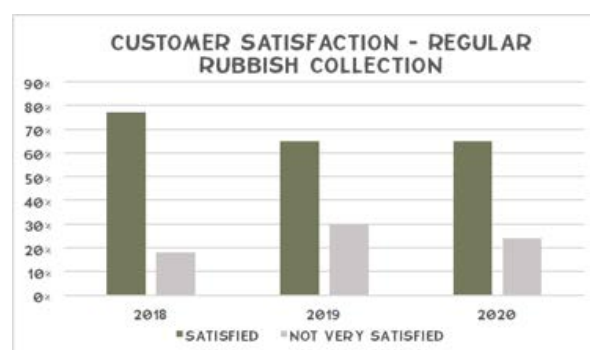
Problem	Evidence	Investment Objective	Key Strategic Response	Benefits of Investing
Landfill Sustainability Uncertainty around landfill resource consent renewal in 2031 results in uncertainty around future service provision	Landfill consent monitoring Limited monitoring is not meeting consent conditions for both operational and closed landfills.	Mitigate harmful effects of waste to human health & environment	Proactive monitoring & planning for consent renewal Ensure that the monitoring is being undertaken as per consent requirements and issue annual reports summarising any findings and issues for compliance purposes. This will help to inform the next consent monitoring requirements.	Compliant service delivery Ensure the landfill complies with consent requirements protecting human health and the environment
Affordability Reducing landfill revenue results in unaffordable Levels of Service for the Wairoa ratepayers	Legacy Issue The landfill revenue does not currently cover all operating costs, so the cost of service is supplemented through rates. Customer Satisfaction Customers satisfaction levels are down in Communitrak Surveys over the last 3 years Reducing usage A static, possibly decreasing population and thereby reduced waste customers and volumes will result in the increased costs of landfill operation being spread over a smaller population. This has the potential to affect costs to the remaining Wairoa residents.	Sustainable service over the long term Affordable Level of Service	Landfill Service Sustainability Review A full options analysis of the future service provision, to assess the Levels of Service required and various options for meeting these.	Lower user costs Lower cost to individual users

LEVELS OF SERVICE

Our community feedback on waste management services shows an increasing trend in dissatisfaction. Issues that continue to cause dissatisfaction with the Wairoa Landfill include:

- Limited opening hours/ not convenient
- Costs/too expensive/rates should cover
- Landfill is messy/ untidy

This presents a significant challenge for the provision of future Landfill services.



The key area of likely future Levels of Service change will be the Wairoa Landfill. There are a number of issues associated with ongoing provision of an ongoing service at the current service levels within the District, including:

- Increase waste disposal costs continuing to increase as a result of waste levy changes
- The existing landfill cell meeting capacity in 6-7 years' time
- The need to renew the Wairoa Landfill consent, with future consent likely to require much higher design standards, monitoring and aftercare than the existing consent.

A key improvement item to be completed in 2021/22 is a **Landfill Service Sustainability Review**. This will include completing a full options analysis of the future service provision to assess the various options for future waste disposal. This would include full cost accounting assessment of options for disposal within the District, as well as the option of taking waste from Gisborne District Council. As part of this exercise, an initial estimate of the new landfill cost will also be completed.

MANAGING RISK & RESILIENCE

Resilience has been identified as a significant challenge for Wairoa in the 2021-2051 Infrastructure Strategy with the following responses followed:

- Good asset management practices and robust renewals programmes based on the condition and the remaining life of infrastructure assets.
- Identification of critical assets and management of these assets to ensure that they do not fail or to limit the effect of a failure.
- Emergency Response and Business Continuity Plans to be in place for emergency events.

Our specific actions to improve the resilience for the waste management infrastructure assets to climate change include:

- To monitor the performance of closed landfills and undertake necessary maintenance and mitigation measures.
- To consider the impact on increased rainfall on the production of leachate from open and closed landfills and the potential effects on receiving systems including treatment plants.
- To consider the impact of increasing temperatures and dry periods on fire risk particularly regarding the ongoing management approach of the Wairoa Landfill.

WHAT WE ARE INVESTING IN

Our investment going forward will address the problems identified for Wairoa within the context of local and national strategic drivers.

OUR PROPOSED INVESTMENT PROGRAMME OVER THE NEXT 10 YEARS

The total amount of expenditure for operations and maintenance and capital over the next ten years is \$27.1 million as shown below. Operational expenditure represents 88% of the ten-year forecast total.



KEY PROJECTS

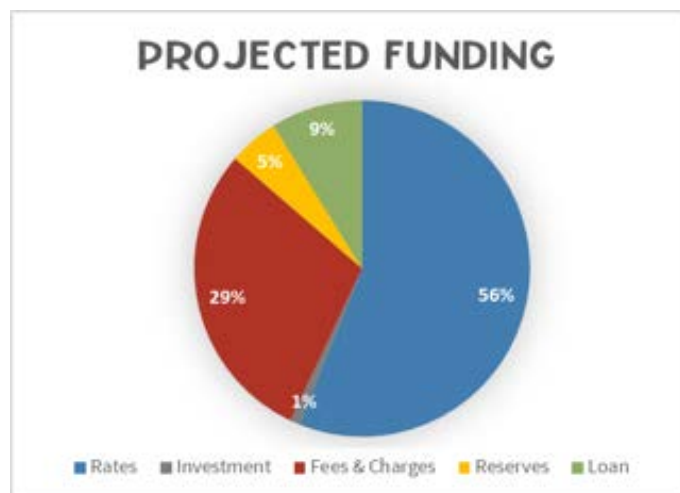
Key capital projects for the next 10 years are detailed below.

Project	Description	Timing	Estimated Cost
Recycling Centre Renewals	Compliance upgrades New recycling containers	Annual	\$1.11M over 10 years
Wairoa Landfill Roothing	Reseals of existing access road	2021/22 2025/26	\$40k \$78k
Wairoa Landfill Liner Extension	Extend liner to full height	2022/23	\$309k
Wairoa Landfill Replacement	At the current waste disposal rates, the Wairoa Landfill has sufficient capacity within the current operational cell for another 6-7 years. This indicates that a new cell will need to be constructed before the current consent expires.	Construction 2025-2027	\$2M including design and consent renewal

Expenditure Programme	Justification	Consequences if Budget Reduced
Opex	To meet Levels of Service for public health and consent conditions Adequate reactive maintenance to keep assets functioning	Non-compliance with consent conditions. Wairoa Landfill may need to be closed from public access if they cannot meet consent requirements or are unsafe for public use.
Capital Renewals	Adequate renewals to optimise life of assets	Environmental discharge and non-compliance with consent conditions. Backlog created that may never be addressed adequately resulting in health and safety or environmental incidents.
Capital New Works	Capital and upgrade works required to secure new landfill cell.	Closure of district landfill service Allowance for new landfill cell must be made during the 10 year period if the landfill service is going to continue. Alternative option is to ship all waste out of the district.

FUNDING SOURCES

Wairoa's waste management services operational costs are currently funded through a combination of user charges, rates, and reserves, as user charges do not cover the full operational costs of the activity. With increases to the waste levy, user charges will need to increase to cover these costs.



Capital costs are primarily funded through reserves and loans.

As part of the Landfill Service Sustainability Review, potential future costs of service and funding sources will be reviewed.

IMPACT OF BUDGET LIMITATIONS

The implications of meeting budget limitations, including justification for the expenditure forecast and consequences if the budget is reduced, are summarised below.

PLAN IMPROVEMENT

Improvement opportunities have been identified throughout the development of this AMP. The improvement projects to be achieved in the next three years due to their priority and importance for achieving core asset management for the waste management activity include:

Improvement Area	Description	Action	Indicative Framework
Levels of Service	Consent Monitoring	Currently consents have not been regularly monitored to ensure their conditions are being met. A formal ongoing monitoring process with an external provider should be implemented for both the operational and closed landfills to ensure consent conditions are being monitored and reported on annually.	2020/21 (annual programme required)
	Landfill Service Sustainability Review	A full options analysis of the future service provision should be completed, to assess the Levels of Service required and various options for meeting these. This would include full cost accounting assessment of: <ul style="list-style-type: none"> Options and costs for replacement of the existing landfill facility once it meets capacity Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. Options to send waste to a bigger facility outside of the District. 	2021/22
Asset Data	Asset Inventory	Develop a data collection programme and complete asset inventory for the waste management activity, including key attributes such as install date, condition and criticality.	2020/21
	Landfill Capacity	Annual Landfill survey to monitor the remaining usable life of the current Wairoa Landfill. Spatial information will provide an accurate platform to calculate the remaining airspace volume and double as an as built of the landfill at a date in time.	2021/22
	Asset Valuation	The last formal valuation was completed in 2012 and is out of date. An updated formal asset valuation to be completed to understand financial risk and potential renewals requirements in future.	2023/24
Risk & Resilience	Risk Register	There is a need for full review of the Waste Management Risk Register to ensure risk issues have been adequately identified and ensure that current high risks are still relevant.	2021/22
	Emergency Response Plans	To improve the resilience Level of Service delivery, Emergency Response Plans need to be developed. The plan will cover the effects of moderate and significant events on vulnerable and critical assets.	2022/23
Lifecycle Management	Service Delivery Contracts	Ensure formal contracts are in place with all external service providers.	2021/22

LIMITATIONS & ASSUMPTIONS

Key areas of uncertainty and assumptions made as part of this planning process and their likely consequence or impact are included below.

Limitation/ Assumption	Description	Consequence/Impact	Risk Level	Uncertainty Level
Community ability to pay	Current predictions of a static (or decreasing) population base and socio-economic demographics mean makes it difficult to provide sustainable services that the community can afford. Ongoing COVID-19 impacts may also result in further impacts on the local economy, including possible income reduction.	Programmed works are not affordable in the long term for rate payers.	High	Medium
Consenting & Compliance	Existing landfill consent expires within the 10 year planning period.	Renewal of consents may have significant cost impact and may result in increased ongoing compliance costs.	High	Medium

Limitation/ Assumption	Description	Consequence/Impact	Risk Level	Uncertainty Level
Climate Change	Climate change makes our weather more extreme and unpredictable leading to flooding and rising sea levels. Although we understand that change is occurring, it is unknown how fast change will occur or the full extent to which consequences will happen in future.	Gas emissions from the landfill may be a contributor to climate change in future. Intense storm events may cause disruptions to leachate levels and may impact on service delivery due to flooding.	Medium	High
Asset Data Accuracy	Asset renewal and maintenance forecasts are based on the condition and the remaining life of infrastructure assets. There is limited asset data and asset valuation information available for waste management assets. Assumptions on an asset's useful life and its replacement cost have been made. We have targeted data collection for continuous improvement.	The accuracy of asset data has a direct impact on the accuracy of renewals and maintenance forecasts.	Medium	Medium
Physical Works Costs	Project estimates of cost and timing are based on the best available scope, asset and market information available at the time of planning.	Physical Works Costs may be more or less than budgeted for based on estimates	Medium	Medium

1. INTRODUCTION

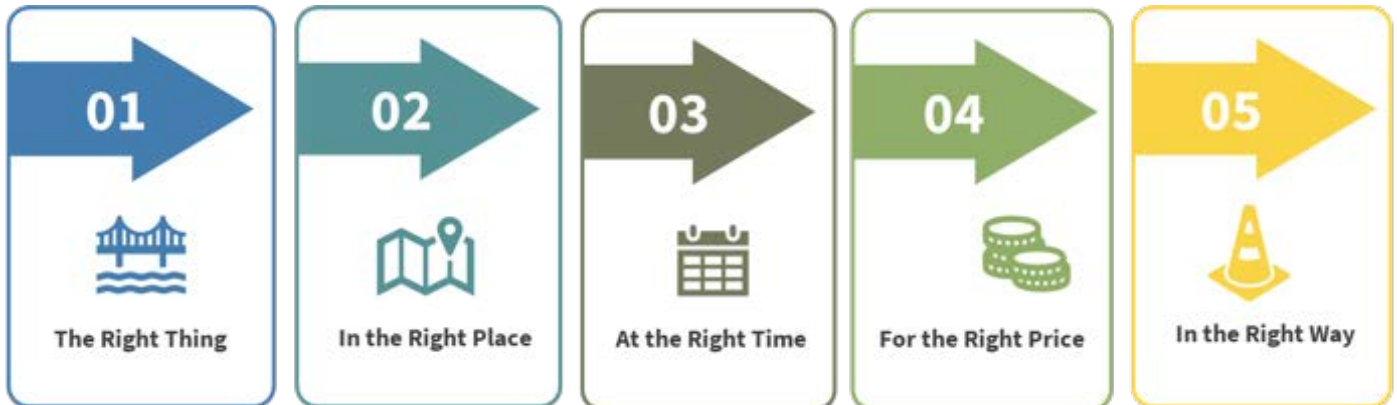
1.1 PURPOSE OF THIS PLAN

This Waste Management Activity Management Plan (AMP) acts as a route map for the future, by providing the logic, reasoning and context behind how we propose to maintain, operate, renew and improve Wairoa's solid waste facilities. It informs the development of Wairoa District Council's (Council's) 2021-31 Long Term Plan (LTP).

A key driver for the waste management activity is compliance with regulatory requirements, so this is core to the development of this

plan. However, we also to clearly show the value of any investment made in addressing our strategic waste management problems and undertaking core business activities. Any investment needs to achieve the desired outcomes and benefits for our customers and represent **value for money**.

This AMP seeks to demonstrate that the proposed programme presents **value for money** by doing:



1.2 SCOPE OF THIS PLAN

1.2.1 OVERVIEW OF SERVICES

The primary purpose of the Waste Management Activity is to support the following key functions and services:

- The provision and operation of the Council's waste management strategy including promoting waste minimisation by informing our community and education.
- The maintenance of the landfill assets including the landfill, recycling centre, rural recycling drop off points and weighbridge.
- Provision of a domestic waste and recycling collection service.
- Aftercare of closed landfills.

1.2.2 PLAN STRUCTURE

To achieve the above purposes, this AMP is structured to provide a 'top down' approach to managing the Waste Management activity. This means we link to key Strategic Drivers, at the start of the plan, to inform the direction for the plan. The plan is divided up into the following sections.

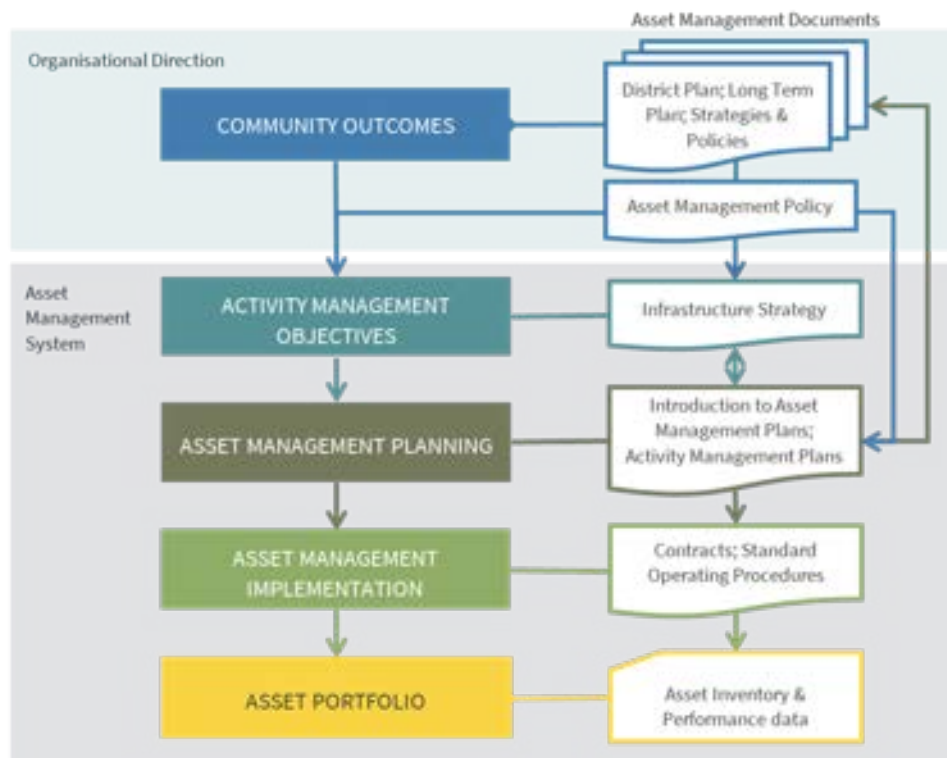


1.3 RELATIONSHIP WITH OTHER COUNCIL PLANS

The Activity Management Plan (AMP) is a tactical plan that gives effect to a range of other strategic and tactical planning documents including Council's strategic direction and Long Term Plan (LTP).

This plan should be read in conjunction with Council's other key planning documents, including the "Introduction to Asset

Management Plans". The diagram below shows "line of sight" between Council's objectives and our Activity Management Planning through Council's various strategic and planning documents.



This plan signals a step change for Council to a more proactive approach to managing the waste management activity. This AMP demonstrates how Council's goals and strategic targets will be achieved through effective sustainable management of waste management assets. This AMP covers a period of ten years between 1 July 2021 and 30 June 2031. The AMP is updated every three years, unless there are significant changes to activities, programmes and expenditure.

This plan has been written to provide the 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 (IIMM) 2015, published by New Zealand Asset Management Support (NAMS).

1.4 LIMITATIONS & ASSUMPTIONS

Key areas of uncertainty and assumptions made as part of this planning process and their likely consequence or impact are included below.

Limitation/Assumption	Description	Consequence/Impact	Risk Level	Uncertainty Level
Community ability to pay	<p>Current predictions of a static (or decreasing) population base and socio-economic demographics mean makes it difficult to provide sustainable services that the community can afford.</p> <p>Ongoing COVID-19 impacts may also result in further impacts on the local economy, including possible income reduction.</p>	Programmed works are not affordable in the long term for rate payers.	High	Medium

Limitation/ Assumption	Description	Consequence/Impact	Risk Level	Uncertainty Level
Consenting & Compliance	Existing landfill consent expires within the 10 year planning period.	Renewal of consents may have significant cost impact and may result in increased ongoing compliance costs.	High	Medium
Climate Change	Climate change makes our weather more extreme and unpredictable leading to flooding and rising sea levels. Although we understand that change is occurring, it is unknown how fast change will occur or the full extent to which consequences will happen in future.	Gas emissions from the landfill may be a contributor to climate change in future. Intense storm events may cause disruptions to leachate levels and may impact on service delivery due to flooding.	Medium	High
Asset Data Accuracy	Asset renewal and maintenance forecasts are based on the condition and the remaining life of infrastructure assets. There is limited asset data and asset valuation information available for waste management assets. Assumptions on an asset's useful life and its replacement cost have been made. We have targeted data collection for continuous improvement.	The accuracy of asset data has a direct impact on the accuracy of renewals and maintenance forecasts.	Medium	Medium
Physical Works Costs	Project estimates of cost and timing are based on the best available scope, asset and market information available at the time of planning.	Physical Works Costs may be more or less than budgeted for based on estimates	Medium	Medium

2. THE STRATEGIC CONTEXT

2.1 NATIONAL CONTEXT

Key changes for Wairoa's waste management from a national strategic perspective are included in the following table. These play a key role in the development of this AMP.

National Strategies, Plans	Providing Direction for Wairoa
Climate Change Response (Zero Carbon) Amendment Act	Includes a target of reducing emissions of biogenic methane within the range of 24 to 47% below 2017 levels by 2050, and an interim target of 10% by 2030. It also has a target of reducing net emissions of all other greenhouse gases to zero by 2050. This will impact Council's asset portfolios including Three Waters, land transport and solid waste. The Act will impact the solid waste asset portfolio with increasing Emissions Trading Scheme costs (carbon tax) and to a lesser degree transport costs used to collect and cart to landfills.
Ministry for the Environment Landfill Levy	Through the Waste Minimisation Act (2008), a Waste Disposal Levy of \$10/tonne is applied to all waste disposed to all types of landfills in New Zealand. In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The proposal would see the landfill levy be gradually expanded to all landfill types and increase from \$10 to \$50 or \$60 per tonne at landfills that take household waste by 2023. For other landfill types, the proposed level would be either \$10 or \$20 per tonne of waste disposed. Changes proposed to take effect between mid-2020 and mid-2023. Changes to the Emissions Trading Scheme are also anticipated in the near future that are likely to have a subsequent increase in landfill disposal costs.
WasteMINZ (the national industry organisation) & Ministry for the Environment response to China's National Sword/Blue Sky Policy	In early 2018, China's National Sword Policy (now replaced with Blue Sky), imposed tighter restrictions on the importation of certain recyclables, primarily mixed paper and plastic. China was the largest importer of recyclables. This has impacted the commodity price for recyclables globally. Nationally, it has impacted on recycling collection contracts with significant cost escalations. Alternative markets are hard to find and are quickly getting overwhelmed. This has highlighted New Zealand's lack of investment in solid waste infrastructure. WasteMINZ (the national industry organisation) and the Ministry for the Environment are the leading the national response to China's National Sword Policy. At a local level, Council's current contract provides for management of types 1-7 plastics. At the end of the contract term this is likely to reduce to fewer plastic types and residual plastics will likely be landfilled where there is no market.

2.2 REGIONAL CONTEXT

At a regional level, the following policy applies.

National Strategies, Plans	Providing Direction for Wairoa
Hawkes Bay Regional Policy Statement 2006	This contains policies and rules relating to discharges to air, land and water, landfills and transfer stations and non-regulatory methods to control adverse effects on the environment.

Council needs to ensure that the landfill remains viable given the relatively low tonnages it receives from within the Wairoa District. There are opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. This will improve the long term viability of the facility and provide a solution for Gisborne District Council. However, it would increase tonnages impacting on the remaining life of the current landfill cell.

2.3 WAIROA LOCAL CONTEXT

Council's mission defines who we are, what we are trying to achieve and who our intended customers are in a single succinct statement.

OUR MISSION	To lead and support the Wairoa community through decision-making that promotes the social, economic, environmental and cultural well-being of the District now and in the future.
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Council's vision defines our aspirations for Wairoa's future. It helps us to focus on what matters the most for our community.

OUR VISION	Desirable Lifestyles, Thriving Economy, Treasured Environments, Connected Communities
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Council's specific vision for the future for the Waste Management Activity is:

WASTE MANAGEMENT GOAL	To manage waste in a cost-effective way that reduces harmful effects & improves efficiency of resource use
------------------------------	--

The vision is supported by the following principles:

- Prudent financial management provides for maintaining Levels of Service for current and future generations
- Proactive provision and management of critical assets
- Integrated provision of infrastructure
- Making the best use of our existing investment
- Robust asset management practices
- Partnership with Māori.

PARTNERSHIP WITH MĀORI

Council acknowledges the inclusion and importance of mātauranga Māori in its infrastructure design and implementation processes. Council is committed to exercising due diligence in this area in order to achieve the best outcome for the community and the environment.

Council is committed to meaningful engagement with Māori on issues that are pertinent to all parties and working together to agree on the best pathway forward for the community and the environment.



2.3.1 CONTRIBUTION TO COMMUNITY OUTCOMES


Sitting beneath this vision is a statement outlining the expected Strategic Result for each activity. The vision is supported by **four community well beings and four Council Outcomes**.

COMMUNITY OUTCOMES	Cultural Wellbeing <i>Valued and cherished community</i>	Social Wellbeing <i>Safe, supported and well-led community</i>
	Economic Wellbeing <i>Strong and prosperous economy</i>	Environmental Wellbeing <i>Protected and healthy environment</i>

From these community outcomes, activity specific objectives and Level of Service statements are derived. Associated performance measures and targets allow for a monitored achievement of Council's contribution towards those community outcomes.

The waste management contribution to the Community Outcomes are shown below.

Community Outcome	Open Spaces Contribution
 Oranga Social	Safe, supported and well-led community <ul style="list-style-type: none"> Education component within waste management looks to gain support and educate local communities about responsible waste management. Future planning of the activity ensures a sustainable service over time. Protection of public health through availability of appropriate waste disposal.
 Ōhanga Economic	Strong and prosperous economy <p>Provision is made for the ability to create business growth around the disposal of waste.</p>
 Ahurea Cultural	Valued and cherished culture <p>Council continues to develop waste management models in collaboration with rural communities and local hapu/iwi.</p>

Community Outcome	Open Spaces Contribution
 Taiao Environmental	Protected and healthy environment <ul style="list-style-type: none"> Compliance with RMA and legislative requirements ensures a protected environment. Safe from harmful contamination is a result from well managed waste disposal.

2.3.2 INFRASTRUCTURE CONTEXT

OUR PEOPLE

Wairoa is home to 8,670 people (estimate as at 30 June 2020) and has the highest proportion of Māori of any local authority area in the country, with approximately 65.7% of the district's people being of Māori descent. This is significantly higher than New Zealand average Māori population of 16.5%.

Statistics New Zealand predict that the population of the district will increase to 9,130 in 2051 (under the medium growth projection).

OUR COMMUNITIES

While Wairoa township is the primary service area for the district there are a large number of other smaller rural communities throughout the district. Smaller settlements are scattered throughout the districts and include Frasertown, Tuai, Māhia, Raupunga, Nūhaka, Maungataniwha, Ruakituri, Mōrere and Whakaki.

It is expected that growth, if any, will occur in Māhia, as that is a desirable location for holiday homes and more people are retiring and returning to the area. It is relatively affordable for coastal property.

OUR CULTURE

Wairoa has a rich cultural heritage which is an integral part of the Wairoa community today. 20% of the population speak Te Reo Māori. Māori communities and Marae are located throughout the district, and many of these communities are in isolated parts of the district, with limited access opportunities.

The tangata whenua of Wairoa and their culture and traditions have special relationships with their ancestral lands, water, sites, waahi tapu and other taonga. Some activities and developments can have significant adverse effects on these relationships. Council plays an integral part in promoting and encouraging Māori culture and values and ensuring this remains central to key decision making, including within the waste management activity.

The Māori Standing Committee acts as a check and balance on Council processes, especially on those matters requiring a Māori perspective. Recommendations from the Māori Standing Committee will be communicated through the Chair and will be given due consideration by the Council when making decisions that directly impact on Māori and on all matters that require the perspective of Māori.

OUR GEOGRAPHY

Area: 4,118 square kilometres, with approximately 130 kilometres of coastline.

Topography: The majority of the district is hill country merging with mountains in the west, often dissected with gorges. Areas of coastal and river flats of versatile soils give greater variety to the landscape.

Rivers: The rivers within the Wairoa district are treasured by tangata whenua and our communities as sources that nourish and sustain us. They hold large cultural significance to the local Ngāti Kahungunu Iwi as places for many cultural practices such as ceremony and kai gathering.

OUR CLIMATE

Wairoa district receives the highest levels of rainfall out of the territorial authorities in the region. Over the next 30 years Council expects to see an increase in the frequency and intensity of storm events and droughts. Flooding continues to be a major hazard in Wairoa with many lowland areas, including the Wairoa township, at risk.

Climate change is already potentially irreversibly affecting our natural systems, and we can expect more effects on our waste management services as the change continues.

OUR ECONOMY

Economic Development is viewed as a vital element in keeping the Wairoa District alive and thriving, both now and into the future. The economy of Wairoa is based on the rural sector. Approximately

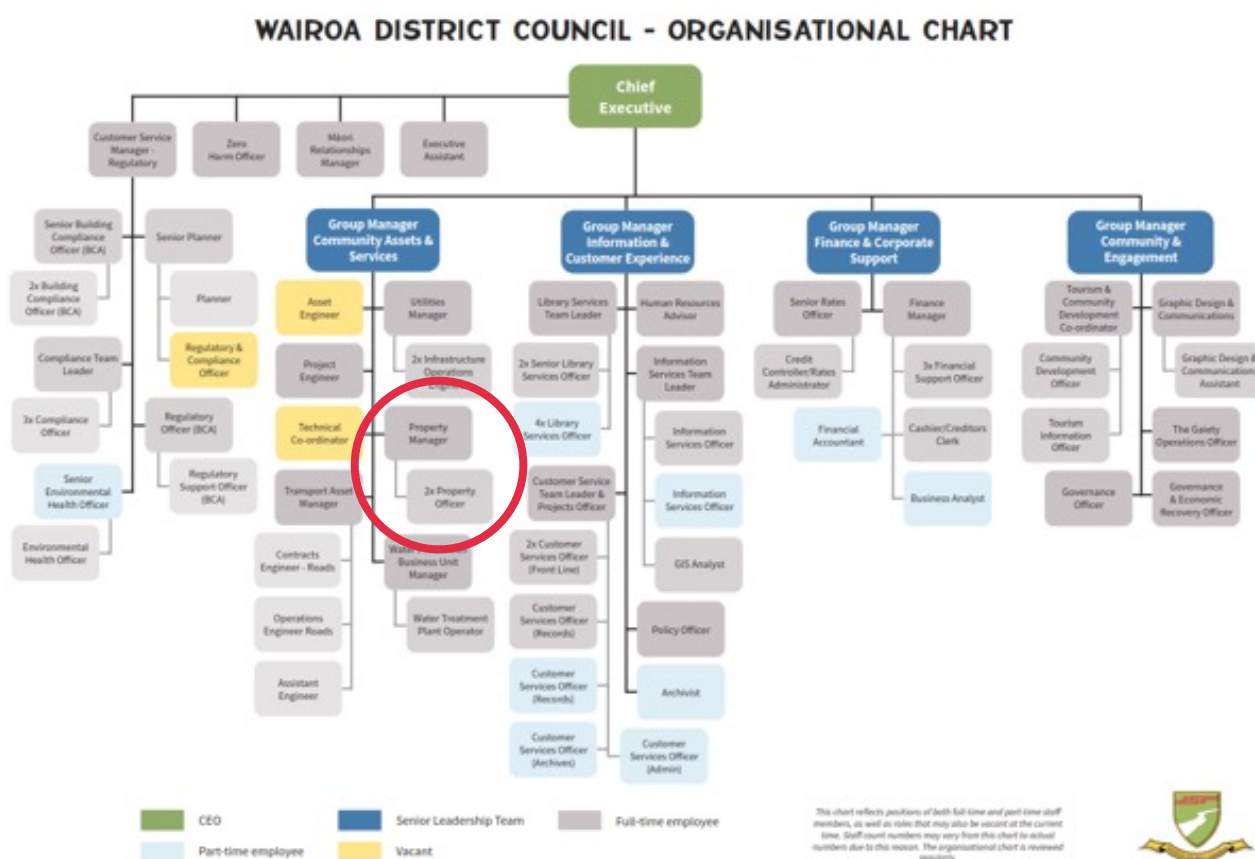
60% of the total land is in productive use, of which some 48% is in pasture. Sheep/beef farming and related processing, and forestry are the leading rural production industries in Wairoa district.

2.3.3 OUR TEAM

Our Community Assets & Services Team delivers core services, including waste management, to our community. The waste management activity is managed through our Property Management Team. The Property manager reports to the Group Manager, Community Assets & Services who is part of the Senior Leadership Team.

Our team provides management and engineering services to deliver all asset-based activities. We are supported by professional services providers who provide planning, technical design and asset management support. The physical works required to deliver the services and assets are completed through various short and long term physical works contracts.

Our Property management Team also work closely with other Council service areas, including transportation and Three Waters, to deliver all community services in a coordinated and efficient way.



2.3.4 OUR CUSTOMERS AND STAKEHOLDERS

Our **key partners** are those groups or organisations that we are aligned with as owners of the waste management issues in our region and district.

Our **key stakeholders** are those groups or individuals who can help us to focus our strategic planning on the right things. They have information and knowledge to help us make better decisions. They may not use the schemes directly, but they have an interest in how they are operated and managed.

Our **customers** are people who use our waste management services. In terms of setting the strategic context and direction for the AMP our key partners and stakeholders and their reason for involvement are shown in the tables below.

OUR KEY PARTNERS

Partners	Knowledge/Involvement
Government agencies (MfE, Office of the Auditor General, Audit NZ, Ministry of Health)	Interested in prudent solid waste management and minimisation that is environmentally robust
Hawke's Bay Regional Council	Interested in compliance with resource consents
Environmental groups	Interested in improvement to the natural environment and waste minimisation initiatives
Gisborne District Council	Require collaboration and coordination in the combined initiative the sub regional use of the Wairoa Landfill
Trusts that manage independent collection centres	Interested in Council facilitation of their centres through providing land leases and funding where appropriate

MĀORI STAKEHOLDERS

Stakeholder Groups	Full List of Stakeholders
Council acknowledges the inclusion and importance of mātauranga Māori in its infrastructure design and implementation processes. Council is committed to meaningful engagement with Māori on issues that are pertinent to all parties and working together to agree on the best pathway forward for the community and the environment.	
Iwi	Ngāti Kahungunu Ngāti Pāhauwera Ngāi Tūhoe Ngāti Ruapani Ngāti Rakaipaaka Rongomaiwahine
Post-Treaty Settlement Governance Entities (PSGE) – Treaty Partners	Ngāti Pāhauwera Development Trust Tu Uru Taumatua (Tūhoe) Tātau Tātau of Te Wairoa Trust (including Tripartite Agreement and Matangirau Reserve Board)

Stakeholder Groups	Full List of Stakeholders
Mandated Iwi Authority (Resource Management Act 1991)	Ngāti Pāhauwera Development Trust Tātau Tātau o Te Wairoa Trust Te Rākatō Marae Te Iwi o Rakaipaaka Incorporated/Trust Ngāti Kahungunu Iwi Incorporation (NKII) Te Uru Taumatua (Ngāi Tūhoe) Rongomaiwahine Iwi Trust (to be confirmed by TPK)
Mandated Iwi Organisation (Māori Fisheries Act 2004)	Ngāti Kahungunu Iwi Incorporation (NKII) Te Uru Taumatua (Ngāi Tūhoe)
Māori Boards / Māori Committees / Tribal Authority	Wairoa Waikaremoana Māori Trust Board Waikaremoana tribal Authority – representing interests for Ngāi Tūhoe Ngāti Kahungunu (Wairoa Taiwhenua) Incorporated – representing the interests of NKII Ngāti Ruapani ki Waikaremoana – representing the interests of Ngāti Ruapani (Treaty Claim) Kahungunu Executive (Māori health and social services) Te Whare Māire o Tapuwae (Whānau Ora) Māhia Māori Committee (Rongomaiwahine) Rongomaiwahine Iwi Trust – representing the commercial interests of Rongomaiwahine Whakaki Lakes Trust Whakaki Lands Trust
Māori Land Blocks	Including Māori trusts, whanau trust (including Ahu Whenua Trusts), farm blocks (stations, etc.)
Marae	Wairoa District Council Māori Standing Committee (representing all 39-operational marae) Ngāti Kaungunu (Wairoa Taiwhenua) Incorporated Kahungunu Executive (Māori Executive Committee) Wairoa Waikaremoana Māori Trust Board Māhia Māori Committee (Representing all marae in Rongomaiwahine) All marae within the Wairoa district
Māori Community at Large	

OTHER STAKEHOLDERS

Stakeholders	Knowledge/Involvement
Mayor and Councillors	<ul style="list-style-type: none"> Strategic outcomes Rates impact Customer satisfaction
Community Boards	Interested in specific projects in their area, Levels of Service, and rates impact, and working with community groups
Contractors	<ul style="list-style-type: none"> Provide maintenance and management services to Council Health and safety of staff and other workers Council are working to collaborate more with Contractors and involve them in monitoring the landfill to deliver the best outcomes.
Adjoining Landowners	Ensure they are unaffected by the service operating in terms of noise, odour and mess.

OUR CUSTOMERS

Customer Group	Key Service Focus
The community - citizens and ratepayers	<ul style="list-style-type: none"> Rates impact Need for healthy and sustainable environment
Residential and visitors to the District	<ul style="list-style-type: none"> Prompt collection services Drop off facilities Litter collection provision in public areas

2.3.5 OUR LOCAL STRATEGIES AND PLANS

Council strategies, plans	Linkages to Open Spaces
Long Term Plan (LTP)	<p>The LTP is the key planning document for Council and describes how Council will fulfil its responsibilities under the Local Government Act (LGA) 2002 to promote the well-being of the district and enable democratic decision making.</p> <p>The LTP outlines the Community Outcomes and land transport Level of Service (including associated customer performance measures) the Council seeks to achieve, which this AMP links back to. The LTP is to be adopted by June 2021 with reviews triennially.</p> <p>The LTP outlines the Community Outcomes and Waste Management Levels of Service the Council seeks to achieve, which this AMP links back to.</p>
Infrastructure Strategy 2021-2051	<p>The 2021-2051 Infrastructure Strategy provides guidance on key district infrastructure issues that need to be at the forefront of infrastructure planning and decision-making. They are:</p> <ul style="list-style-type: none"> Legislative and policy change Land use change Affordability Economic development Climate change Servicing Māhia Resilience
A Wairoa Journey Together: Covid-19 Economic Recovery	Tātau Tātau o Te Wairoa, Ngāti Pāhauwera Development Trust and Wairoa District Council have come together to develop a community driven, aligned, focused, and coordinated socio-economic response to COVID-19 supporting the Wairoa region, its communities, and peoples.
Waste Management & Minimisation Plan	<p>Council had the WMMP updated in late 2017 and accepted it for use in September 2018. Council has a statutory responsibility under section 42 of the WMA 2008 to “promote effective and efficient waste minimisation” within the District. In order to do this, the Council is required to adopt a WMMP under section 43 of the Act.</p> <p>The WMMP is a guiding document which identifies Council’s vision, goals, objectives, targets and methods for achieving efficient and effective waste management and minimisation. It also provides information on how Council intends to fund the activities of the WMMP over the next six years.</p>

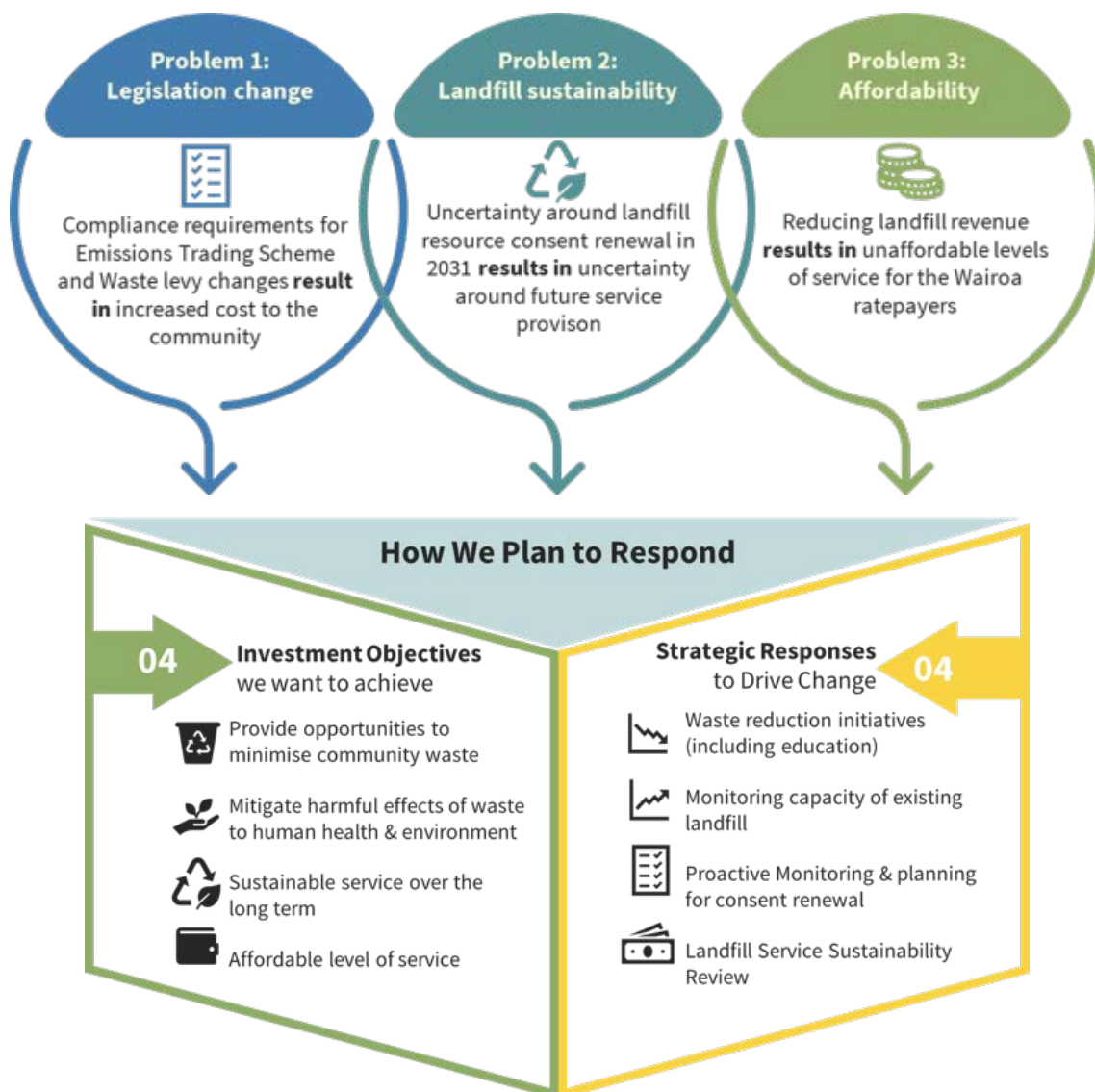
Council strategies, plans	Linkages to Open Spaces
Procurement Strategy 2020	Outlines procurement objectives and legislative requirements to ensure value for money, transparency and fairness, accountability and integrity, and sustainability.
Long Term District Planning, Demographic and Economic Growth Directions, 2018-2048	This report completed by Economic Solutions Ltd was developed in December 2017 and provides key insights into economic development and growth over the 2018-2028 LTP period, and beyond. It provides context and direction for potential future Wairoa district transport impacts. This response focuses on immediate actions, employment, short and long term projects, that address the current response and align with the aims of Wairoa.
Economic Development Strategy	This document provides key strategy for economic development in the district. It outlines Wairoa's current and future economic prospects and goals for further economic development and population growth.
Māori Policy 2012	<p>This policy provides a foundation for establishing processes that provide for tangata whenua to contribute to Council's decision-making responsibilities.</p> <ul style="list-style-type: none"> • Establish a relationship between Wairoa District Council and tangata whenua to achieve mutually beneficial outcomes for the community of Wairoa. • Set up processes and procedures that facilitate effective communication between Wairoa District Council and Tangata Whenua o te Wairoa. • Enable a Māori world view to be incorporated into local government decision making, policies and procedures. • Improve the degree to which Māori participate in Council/community consultation.
District Plan	The Plan sets out the framework for the sustainable management of natural and physical resources in the Wairoa District. It gives key guidance on land use, changes and effects, as well as natural resource management impacting on land transport considerations.
Annual Plan	The Annual Plan provides details on the current year's financial predictions and budgets, in accordance with the current LTP. It primarily describes the projects for a single year, however, it may give some indication of projects for subsequent years.
Annual Report	The Annual Report details achievements against performance measures and targets set in the Annual Plan.

2.4 STRATEGIC ASSESSMENT

This section outlines the need for investment. It defines the key issues and challenges facing our district, the evidence base for these issues and the benefits of investing to address them.

2.4.1 KEY ISSUES & CHALLENGES

The key problems Wairoa is facing are:



The table below provides a more detailed summary of the key evidence supporting our problem statements, investment objectives, strategic responses, the benefits of investing in these areas and how this investment aligns back to our Community Outcomes.

Problem	Evidence	Investment Objective	Key Strategic Responses	Benefit of Investing	Link to Community Outcomes
Legislation Change	<p>Legislation</p> <p>Changes to the Emissions Trading Scheme are anticipated in the near future that are likely to have a subsequent increase in landfill disposal costs. This will require changes to the way we plan, manage and fund the waste services.</p> <p>If waste management is not to the required standards, there are significant issues the community.</p>	Mitigate harmful effects of waste to human health & environment	<p>Proactive monitoring & planning for consent renewal</p> <p>We will monitor changes in legislation to ensure that we comply with requirements and to enable us to plan effectively. Ensure that the monitoring is being undertaken as per consent requirements and issue annual reports summarising any findings and issues for compliance purposes.</p>	<p>Compliant service delivery</p> <p>Meeting legislative requirements enables us to protect our environment, while still providing a key service to the community</p>	Protected and healthy environment
Compliance requirements for Emissions Trading Scheme and Waste levy changes result in increased cost to the community	<p>Increase in waste levy</p> <p>In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The levy will increase from \$10 to \$50 or \$60 per tonne at landfills that take household waste by 2023. This increase is unaffordable for the District's small population.</p> <p>China's National Sword / Blue Sky Policy</p> <p>Council's current contract provides for management of types 1-7 plastics. At the end of the contract term this is likely to reduce to fewer plastic types and residual plastics will likely be landfilled where there is no market.</p>	<p>Sustainable service over the long term</p> <p>Affordable Level of Service</p>	<p>Landfill Service Sustainability Review</p> <p>A full options analysis of the future service provision, to assess the Levels of Service required and various options for meeting these. This includes reviewing:</p> <ul style="list-style-type: none"> Options and costs for replacement of the existing landfill facility once it meets capacity Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. Options to send waste to a bigger facility outside of the District. 	<p>Lower user costs</p> <p>Lower cost to individual users</p>	Strong and prosperous economy
Landfill Sustainability	<p>Capacity of existing landfill</p> <p>The survey has been completed in 2020 and indicates that there is less than 8 years life remaining in the existing cell based on current fill rates.</p>	Sustainable service over the long term	<p>Monitoring capacity of existing landfill</p> <p>Allocate funding to allow an annual survey to be completed to have a record of volume of refuse and remaining capacity to monitor when a new cell will be required.</p>	<p>Undisrupted service</p> <p>Will allow for service to continue without disruption</p>	Safe, supported and well led community
Uncertainty around landfill resource consent renewal in 2031 results in uncertainty around future service provision	<p>Waste Diversion volumes</p> <p>Tonnages of waste diverted from the landfill appears to have reduced in recent years, however monitoring and recording of this information may not be accurate.</p>	Sustainable service over the long term	<p>Waste Reduction Initiatives</p> <p>Update Waste Minimisation Management plan and ensure community are educated on how and why they need to reduce waste.</p>	<p>Reduced environmental impact</p> <p>Removing waste from the landfill reduces ongoing effects on environment</p>	Protected and healthy environment

Problem	Evidence	Investment Objective	Key Strategic Responses	Benefit of Investing	Link to Community Outcomes
Landfill Sustainability Uncertainty around landfill resource consent renewal in 2031 results in uncertainty around future service provision	Resource consent Given the current life expectancy of the landfill an alternative site or an option for disposal of the district's waste needs to be found prior to consent renewal in 2031. Requirements to prepare the resource consent and increased monitoring conditions will likely increase the overall operational costs to provide service.	Mitigate harmful effects of waste to human health & environment	Proactive monitoring & planning for consent renewal Allocate funding and resourcing to secure new resource consent. May need to be considered in the light of any regional approach to the delivery of waste services.	Compliant service delivery Keeping resource consents current means no disruption to service to customers and better health and wellbeing of community	Safe, supported and well led community
	Landfill consent monitoring Limited monitoring is not meeting consent conditions for both operational and closed landfills. A number of non-compliances and infringements have been recorded in the past few years.	Mitigate harmful effects of waste to human health & environment	Proactive monitoring & planning for consent renewal Ensure that the monitoring is being undertaken as per consent requirements and issue annual reports summarising any findings and issues for compliance purposes. This will help to inform the next consent monitoring requirements.	Compliant service delivery Ensure the landfill complies with consent requirements protecting human health and the environment	Protected and healthy environment Safe, supported and well led community
Affordability Reducing landfill revenue results in unaffordable Levels of Service for the Wairoa ratepayers	Legacy Issue The landfill revenue does not currently cover all operating costs, so the cost of service is supplemented through rates. Customer Satisfaction Customers satisfaction levels are down in Communitrak Surveys over the last 3 years Reducing usage A static, possibly decreasing population and thereby reduced waste customers and volumes will result in the increased costs of landfill operation being spread over a smaller population. This has the potential to affect costs to the remaining Wairoa residents.	Sustainable service over the long term Affordable Level of Service	Landfill Service Sustainability Review A full options analysis of the future service provision, to assess the Levels of Service required and various options for meeting these. This includes reviewing: <ul style="list-style-type: none"> Options and costs for replacement of the existing landfill facility once it meets capacity Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. Options to send waste to a bigger facility outside of the District. 	Lower user costs Lower cost to individual users	Strong and prosperous economy

3. DEFINING LEVELS OF SERVICE

3.1 OVERVIEW

This section defines the Levels of Service customers can expect from Council and the measures that are used to identify Council's performance in delivering them.

This section outlines the following:

- Key drivers for Levels of Service (legislation requirements and engagement with customers to understand needs)
- Current Levels of Service and how they are measured
- Future changes to the Levels of Service.

Council aims to manage the Waste Management Activity to deliver the Levels of Service in a sustainable and safe manner over the long term.

3.2 LEGISLATIVE REQUIREMENTS

The AMP acknowledges Council's responsibilities to act in accordance with legislative requirements that impact on the goals and objectives for the maintenance and future development of Council's waste management assets. Compliance with all statutory requirements is essential for Council's integrity and continued access to government funding. Accordingly, a comprehensive knowledge and application of legislative requirements is vital to Council's business.

The table below details the summary of relevant legislative requirements that affect the Waste Management Activity.

Act	Description
Waste Minimisation Act 2008 (WMA)	<p>The purpose of the WMA is to encourage a reduction in the amount of waste we generate and dispose of in New Zealand, and aims to lessen the environmental harm of waste. This Act also aims to benefit our economy by encouraging better use of materials throughout the product life cycle, promoting domestic reprocessing of recovered materials and providing more employment. It puts a levy on all municipal waste disposed of in a landfill, initially at \$10 per tonne, effective as of 1st July 2009. In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The proposal will increase the landfill levy.</p> <p>The proposal would see the landfill levy be gradually expanded to all landfill types and increase from \$10 to \$50 or \$60 per tonne at landfills that take household waste by 2023. For other landfill types, the proposed level would be either \$10 or \$20 per tonne of waste disposed. Consultation on the proposed changes closed in February 2020 with changes proposed to take effect between mid-2020 and mid-2023.</p> <p>It clarifies the roles and responsibilities of territorial authorities with respect to waste minimisation e.g. updating Waste Management and Minimisation Plans (WMMPs) and administering levy funding for waste minimisation projects. Section 42 requires that a Territorial Authority promote effective and efficient waste management and minimisation within its district.</p>
New Zealand Waste Strategy & Ministry for the Environment (MFE) Guidelines	<p>The New Zealand Waste Strategy sets out the Government's high-level strategic direction for waste management and minimisation in New Zealand.</p> <p>The Strategy's two goals provide direction to local government, businesses (including the waste industry), and communities on where to focus their efforts in order to deliver environmental, social and economic benefits to all New Zealanders. The goals are:</p> <ul style="list-style-type: none"> • reducing the harmful effects of waste • improving the efficiency of resource use. <p>The MFE has also released many best practice guidelines for the management of various aspects of the waste management activity. Council considers these guidelines to manage this activity where practicable.</p>
Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (NES)	<p>This NES requires certain landfills (e.g. those with a capacity of more than 1 million tonnes of waste) to collect landfill gases and either flare them or use them as fuel for generating electricity. The result is increased infrastructure and operational costs for qualifying landfills, although with costs potentially offset by the harnessing of captured emissions for energy generation.</p> <p>Unless exemption criteria are met, the NES for Air Quality also prohibits the lighting of fires and burning of wastes at landfills, the burning of tyres, bitumen burning for road maintenance, burning coated wire or oil, and the operation of high-temperature hazardous waste incinerators. These prohibitions limit the range of waste treatment/disposal options available within New Zealand with the aim of protecting air quality.</p>
Health Act 1956	<p>The Health Act 1956 places obligations on territorial authorities (if required by the Minister of Health) to provide sanitary works for the collection and disposal of refuse, for the purpose of public health protection (Part 2 – Powers and duties of local authorities, s 25).</p>

Act	Description
Litter Act 1979	This act makes it an offence for any person to deposit litter in a public place or private land without approval from the landowner.
Hazardous Substances & New Organisms (HSNO) Amendment Act 2015	The HSNO Act addresses the management of substances that pose a significant risk to the environment and/or human health, from manufacture to disposal. The Act relates to waste management primarily through controls on the import or manufacture of new hazardous materials and the handling and disposal of hazardous substances.
Resource Management Act (RMA) 1991	<p>The RMA is the key legislation that sets out how we should manage our environment. Although it does not specifically define 'waste,' the Act addresses waste management and minimisation activity through controls on the environmental effects of waste management and minimisation activities and facilities, through national, regional and local policy, standards, plans and consent procedures.</p> <p>Operational and decommissioned landfills and transfer stations are operated in accordance with Resource Consents issued by Environment Waikato under the provisions of the RMA.</p> <p>The Resource Consent conditions may cover issues such as the control and monitoring of leachate, dust, odour, pests, wind-blown rubbish, aesthetics and other environmental impacts.</p>
Climate Change Response (Emissions Trading Reform) Amendment Act 2020	Includes a target of reducing emissions of biogenic methane within the range of 24 to 47% below 2017 levels by 2050, and an interim target of 10% by 2030. It also has a target of reducing net emissions of all other greenhouse gases to zero by 2050. It will impact the solid waste asset portfolio with increasing Emissions Trading Scheme costs (carbon tax) and to a lesser degree transport costs used to collect and cart to landfills.
Local Government Act (LGA) 2002	<p>This Act requires local authorities to:</p> <ul style="list-style-type: none"> • describe the activities of the local authority • provide a long term focus for the decisions and activities • prepare a LTP, at least every three years. <p>AMPs are the main method of demonstrating Schedule 10 requirements.</p> <p>Section 17A requires that Councils review the cost effectiveness of the way they deliver their services to ensure they meet the needs of communities. This service delivery review looks at the governance, funding and delivery of infrastructure, services or regulatory functions, and requires consideration of alternative delivery models including (but not limited to) in-house by Council, by another local authority, by a Council-controlled organisation, or by another person or agency. These reviews are an ongoing requirement and must be undertaken at least every six years. Council completed a Section 17A review of solid waste in 2017 in collaboration with Gisborne District Council for a regional approach.</p>

3.2.1 RESOURCE CONSENT REQUIREMENTS

The status of the Council's current landfill resource consents are detailed in the table below.

Scheme	Description	Expiry Date
Wairoa	The following resource consents for the purpose of operating a landfill and cleanfill:	31 December 2031
	Discharge Permit DP960105Lb	
	To discharge contaminants (municipal waste, cleanfill and leachate) into or onto land, and onto or into land where they may enter water	
	Discharge Permit DP960106Ab	
	To discharge contaminants (landfill gas) into the air	
	Discharge Permit DP960107Wb	
	To divert and discharge stormwater into water	
	The following resource consents for the purpose of operating a landfill:	
	Discharge Permit DP980240La	
	To discharge contaminants (municipal waste and leachate) into or onto land where they may enter water	
	Discharge Permit DP980244Aa	
	To discharge contaminants (landfill gas) into the air	
	Discharge Permit WP980241Da	
	To divert and discharge stormwater into the water	
	Discharge Permit LU980242Ca	
	To construct a culvert into an existing drain	

3.2.1 RESOURCE CONSENT REQUIREMENTS

The status of the Council's current landfill resource consents are detailed in the table below.

Scheme	Description	Expiry Date
	The following resource consents for the purpose of operating a closed landfill:	
	Discharge Permit DP960108Lb	To discharge contaminants (leachate) into or onto land where they may enter the water
	Discharge Permit DP960109Ab	To discharge contaminate into the air
	Discharge Permit DP960110Db	To divert and discharge stormwater into water
Frasertown (Closed Landfill)	Discharge Permit DP950127L	To discharge leachate from the decomposition of refuse into or onto land in circumstance which may result in those contaminants entering water, and to discharge landfill gas derived from the decomposition of refuse into the air.
Māhia (Closed Landfill)	Discharge Permit DP950126La	To discharge leachate from the decomposition of refuse within the Māhia closed landfill into or onto land in circumstance which may result in those contaminants entering water, and to discharge landfill gas derived from the decomposition of refuse into the air.
Nūhaka (Closed Landfill)	Discharge Permit DP950125L	To discharge leachate from the decomposition of refuse within the Nūhaka closed landfill into or onto land in circumstance which may result in those contaminants entering water, and to discharge landfill gas derived from the decomposition of refuse into the air.
Raupunga (Closed Landfill)	Discharge Permit DP950129L	To discharge leachate from the decomposition of refuse into or onto land in circumstance which may result in those contaminants entering water, and to discharge landfill gas derived from the decomposition of refuse into the air.
Ruakituri (Closed Landfill)	Discharge Permit DP950128L	To discharge leachate from the decomposition of refuse into or onto land in circumstance which may result in those contaminants entering water, and to discharge landfill gas derived from the decomposition of refuse into the air.

IMPROVEMENT ITEM – Currently consents have not been regularly monitored to ensure their conditions are being met. A formal ongoing monitoring process with an external provider should be implemented for both the operational and closed landfills to ensure consent conditions are being monitored and reported on annually.

3.3 UNDERSTANDING OUR CUSTOMERS' NEEDS

Community and customer expectations are very important in determining future Levels of Service and in assessing how well Council is performing against current Levels of Service.

3.3.1 COMMUNITY ENGAGEMENT

Community engagement on developing Levels of Service for the Waste Management Activity used the following main consultation initiatives:

- Long Term plan and Annual Plan consultation processes
- Customer Service Request (CRS) System
- Customer surveys.

LONG TERM PLAN

The Long Term Plan (LTP) places significant emphasis on the need to consult with the community and other stakeholders.

The intended process is to gather expectations of all stakeholders and then to communicate back on the cost of meeting these expectations. Through this process, an indicative understanding of customer focus can be achieved. This will help in developing future Levels of Service.

To better understand the cost of service versus service expectations we also complete:

- Customer satisfaction surveys annually
- Workshops/meetings on more specific aspects of service (i.e. a specific project) to better understand customer needs and wants
- Analysis of service costs against specific service expectations of community and other stakeholders and then feed this information back
- Undertake a detailed analysis of research and customer expectations to better define the links between customer and technical Level of Service.

CUSTOMER SERVICE REQUEST (CSR) SYSTEM

Council maintains a Customer Service Request System to allow customer comments and feedback to be recorded and managed. These results give Council some direction for prioritisation and targeted activities to undertake in their endeavour to improve public satisfaction and deliver an acceptable Level of Service.

ANNUAL COMMUNITY SURVEY

Communitrak™ is a survey undertaken by the National Research Bureau (NRB). Council has a long history of using this annual survey to assist in the assessment of customer satisfaction, and more importantly to monitor trends over time.

3.3.2 CUSTOMER SATISFACTION

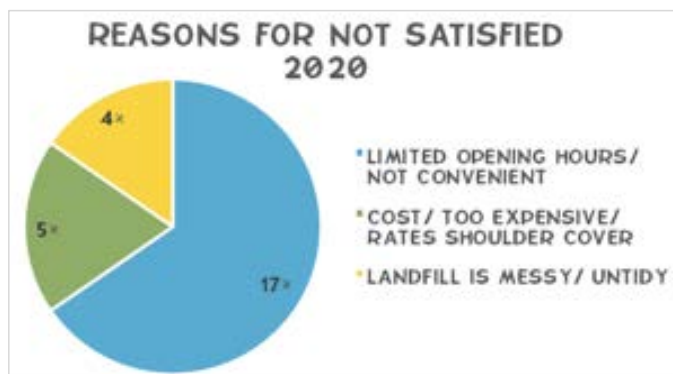
The latest NRB Communitrak survey was completed in August 2020. Results from this survey are included below. There has been a downward trend in satisfaction with 2020 returning the worst satisfaction result of only 52%.



Source: Communitrak Survey (August 2020)

Issues that continue to cause dissatisfaction include:

- Limited opening hours/ not convenient
- Costs/too expensive/rates should cover
- Landfill is messy/ untidy

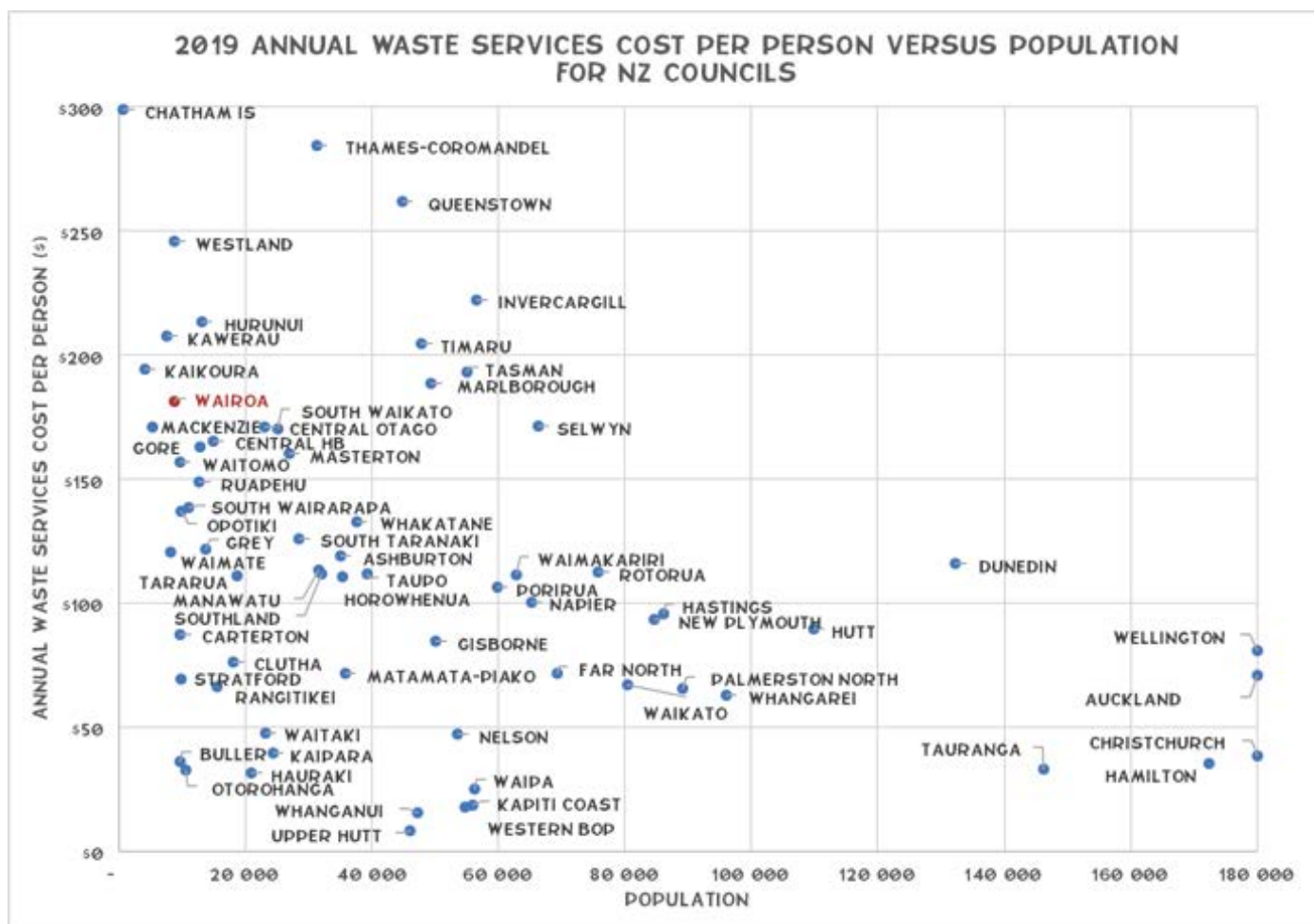


The following graphs show the satisfaction of customers that used the landfill and regular rubbish collection services over the last three years. It shows a decline in satisfaction levels of the landfill over the last year years and satisfaction of rubbish collect services was the same in the last two years.



3.3.3 WASTE COST OF SERVICE COMPARISON

The graph below shows the annual waste service costs per person for the New Zealand Councils. Wairoa's waste service costs are high compared to Councils with similar sized populations.



Source: Stats NZ Infoshare, 2019 population and 2019 sold waste/ refuse total operating expenditure

3.4 LEVELS OF SERVICE OVERVIEW

Levels of Service statements describe how Council intends to deliver the waste management activity to the customer. Levels of Service are used to:

- Inform customers of the existing and alternate types and Levels of Service
- Enable customers to assess suitability and affordability of the services offered
- Develop asset management strategies to deliver the required Level of Service
- Measure performance against defined targets
- Identify costs and benefits of the services provided

The key drivers of the Levels of Service are:

- Community expectations are established through both formal and informal research with stakeholders and users of each activity. These are covered in detail in section above.
- Community Outcomes as outlined in the Strategic Context Section.
- Statutory requirements determine the minimum Levels of Service for waste management activities. These are covered in detail in the Legislative Requirements Section.

The Council ensures that Levels of Service are customer focused, technically meaningful and address the issues that are important to the community. There are two types of Level of Service performance measure used by Council:

- **Customer Measure:** How the customer receives or experiences the service, e.g. “% customers satisfied with the reliability of waste management services”. Key customer performance measures linking Community Outcomes to the planned Levels of Service.
- **Technical Measure:** What the organisation does, e.g. “the number of disruptions to service”. These operational measures and other technical guidelines are relevant for setting service standards for waste management services.

3.4.1 PERFORMANCE AGAINST LEVELS OF SERVICE

Performance measures are monitored and reported on annually through the Long Term and Annual Planning process.

Where possible target levels are set for each performance measure. Any non-achievement of these targets, while not favourable, gives Council the ability to focus on specific issues for resourcing improvements where necessary.

The Levels of Service customers can expect for each activity is tabulated below. Performance against these and other key Council measures against target for the last three years is detailed below. The highlighted red, yellow and green cells indicate where Council has performed worse or better than target. **Red = target not achieved, yellow = close to target, green = target achieved.**

Where there are ‘Service Gaps’ between the Level of Service provided and the target Level of Service we have outlined initiatives to address these gaps.

3.5 CURRENT LEVELS OF SERVICE

Community Outcome	Customer Outcome	Customer Level of Service	Performance Measure
Safe, supported and well led community	Safety / Reliability	Provide safe and reliable refuse and recycling kerbside collection services and rural waste services	Number of times when minimum frequency of kerbside refuse and recycling service in Wairoa & Frasertown (fortnightly) is not met, per year
			Number of times when minimum frequency of collection from specified drop-off points from Māhia, Nūhaka and Mohaka (twice a month) is not met, per year
			Number of health and safety breaches by waste services contractors, per year
			Percentage of missed household refuse service requests responded to by 12 pm the next day (on validation)
Strong and prosperous economy	Availability / Accessibility	Provide the Wairoa Landfill for safe waste disposal	Council will operate and maintain the Wairoa landfill for the disposal of domestic and commercial refuse, being open for the public at least: <ul style="list-style-type: none"> 6 hours per day 4 days per week
Protected and healthy environment	Environmentally Sustainable	Effects on the natural environment are minimised	Number of non-compliance events with the resource consent conditions for the Wairoa Landfill, per year
		Council facilitates waste minimisation practices and promotes reduction of the amount of waste going to landfill	Number of non-compliance events with the resource consent conditions for the closed landfill sites, per year The amount of material diverted from landfill by the Wairoa community in tones (target excludes green waste)

	Measure Type	Annual Target 2021-2024	2017/18 Actual	2018/19 Actual	2019/20 Actual
	Customer	0	100%	100%	100%
	Customer	0	100%	100%	96%
	Technical	0	0	0	0
	Customer	100%	100%	100%	96%
	Customer	100%	100%	100%	100%
	Technical	0	0	0	2
	Technical	0	0	0	0
	Technical	>75tonnes	New	Not Achieved	72.23

3.6 INITIATIVES TO ADDRESS GAPS

Customer Level of Service	Performance Measure	Service Level Gap	Initiative	Desired Outcome
Effects on the natural environment are minimised	Number of non-compliance events with the resource consent conditions for the Wairoa Landfill, per year	Consent breaches – two leachate spills in 2019. The first spill resulted in an infringement warning. The second spill resulted in an infringement notice and fine. Both dealt with in conjunction with HBRC.	Bunding, renewal of pump and implementation of an inspection programme and SCADA have been completed in response to this gap. An ongoing monitoring process will be implemented for both the operational and closed landfills to ensure consent conditions are being monitored and reported on annually.	Meet target of zero non-compliances
Council facilitates waste minimisation practices and promotes reduction of the amount of waste going to landfill	The amount of material diverted from landfill by the Wairoa community in tones (target excludes green waste)	Waste diversion data not well document, but apparent decreasing trend in waste diversion tonnages in recent years.	All tonnages are now accurately weighed at the weighbridge and recorded by the waste management contractor and reported to Council. Waste minimisation education programme requires further development	Increased waste diversion to extend capacity of existing landfill cell.

3.7 FUTURE CHANGES TO LEVELS OF SERVICE

The key area of likely future Levels of Service change will be the Wairoa Landfill. There are a number of issues associated with ongoing provision of an ongoing service at the current service levels within the District, including:

- Increase waste disposal costs continuing to increase as a result of waste levy changes
- The existing landfill cell meeting capacity in 6-7 years' time
- The need to renew the Wairoa Landfill consent, with future consent likely to require much higher design standards, monitoring and aftercare than the existing consent.

IMPROVEMENT ITEM – A full options analysis of the future service provision should be completed, to assess the Levels of Service required and various options for meeting these. This would include

full cost accounting assessment of:

- Options and costs for replacement of the existing landfill facility once it meets capacity
- Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill, sharing the cost of operation and renewal of the landfill facility.
- Options to send waste to a bigger facility outside of the District.

CONSENT RENEWAL REQUIREMENTS

A key aspect of providing an ongoing service at the current service levels, is the renewal of the Wairoa Landfill consent. Consent renewal requirements, costs and timeline are included below. It is estimated that the consent renewal process should begin up to 7 years prior to the renewal date.

Requirement	Description	Estimated Cost (as at 2020)	Timing
Planning Designation	Designate the subject site and Council owned land for landfill purposes as part of the District Plan review.	\$10,000	2020/21
Consent Renewal	Long Term Site Plan and Engineering inputs including: <ul style="list-style-type: none"> • Volume and types of material to be dumped • Stormwater management assessment • Ground water testing results • Surface water testing results • Details of leachate accumulation and removal process • Details on landfill gas • Ecological report by a suitably qualified experienced professional confirming that the anticipated environmental outputs by matters e) – h) will not adversely affect ecological life • Details of sealing the landfill and site remediation 	\$80,000	2022/23

Requirement	Description	Estimated Cost (as at 2020)	Timing
Consent Renewal	Odour Assessment Report if odour is an issue perceptible to any private land, an odour assessment report will be needed	\$20,000	2022/23
	Planner fees to complete consent renewal application	\$50,000	2023/24
Iwi Consultation	Consultation regarding discharge quality	\$20,000	2023/24
Public Notification	Depending on outcome of iwi engagement and water and odour discharge quality, public notification may be required. This includes expert attendance and preparation of evidence.	\$50,000	2024/25
Total Estimated Costs		\$230,000	

The estimated costs outlined above may be higher or lower in reality, depending on water quality and odour issues and whether the consent needs to go before the Environment Court.

It is also expected that when the Wairoa Landfill consent is renewed in 2031, there will be new design and consent monitoring requirements as outlined below. As part of the consent renewal process a full design of the new landfill will need to be completed.

Change Type	Description	Level of Service Cost Impact
Design Standards	<p>Design standards will be increased requiring a composite liner as the default minimum standard (clay liner, geosynthetic plus HDPE layers) as opposed to a single clay layer as the current consent requires. It is also normal practice to provide a protection layer and a leachate drainage layer.</p> <p>It is not current practice to gravity drain leachate through the liner. In most situations, large diameter pipes (600mm dia) are placed down the inner slope of the liner and submersible pumps used to extract the leachate.</p> <p>Stormwater treatment requirements are minimal in the current consent with only one settlement pond required. Current default standard is a primary and secondary pond followed by a wetland prior to discharge into downstream receiving waters.</p>	While these changes will reduce environmental impact of future landfill services, it will come at an increased cost to customers
Monitoring	<p>The current groundwater monitoring strategy may require review. There are currently minimal bores and no evidence of determination of the groundwater gradient. This may need to be updated as the testing regime is consistent.</p> <p>The landfill gas monitoring in the consent may change for such a small landfill. It may be there more for odour monitoring.</p>	Increased monitoring will ensure a safer service is provided, but will increase the cost of service.
Aftercare	The operating landfill consent currently has a 10 years aftercare condition which is much less than the Ministry for the Environment's 35 years standard. Wairoa District Council should be prepared for a possible increase in the aftercare provisions in either the next revision or new consent.	No significant change to service levels, but will result in increased costs

4. DRIVERS FOR CHANGE

4.1 POPULATION & DEMOGRAPHIC CHANGE

The waste services provided are directly influenced by the number of customers accessing these services

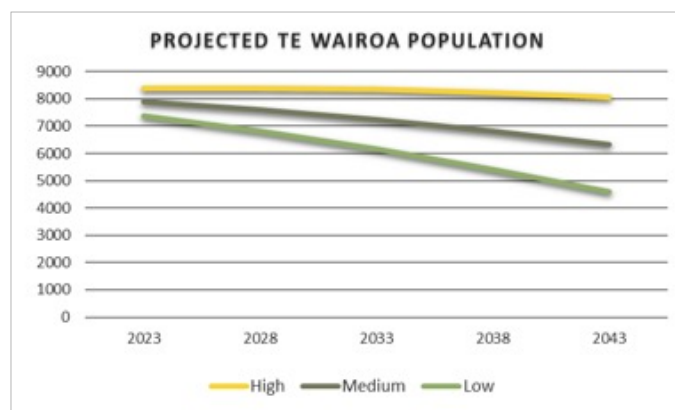
The current estimated population for the Wairoa District is 8,960 people (estimate as at 30 June 2020). Statistics New Zealand have provided various prediction scenarios through to 2043, based off 2013 census data. These show general population decline. However, recent population data shows growth for Wairoa. It is expected that Wairoa's population will remain relatively static over the duration of this plan.

It is expected that growth, if any, will occur in Māhia, as that is a desirable location for holiday homes and more people are retiring and returning to the area. It is relatively affordable for coastal property.

An assessment of the change in demographics of the population will also need consideration. **Statistics suggest that by 2028, 1 in 5 Wairoa residents will be over the age of 65.** As the workforce declines and people move to retirement incomes, the ability to fund cost increases can reduce.

A decrease in population density of rural areas will affect the viability of the Council collection contract providing service to these areas. This has the potential to impact the service offered to rural areas in the future.

The Māhia area is a popular location in the summer season, particularly the Christmas and New Year period. The large influx of visitors and non-resident holiday house owners causes the population to increase to much greater numbers than the usually resident population. This seasonal peak has a large impact on demand for services, including solid waste. The population in this area can increase by up to 10 times from a normally resident population of 1,000, to 10,000 over the summer season.



4.1.1 COMMUNITY BEHAVIOUR CHANGE

Council is proactive in involving communities in managing waste in their own areas. Previously this has involved the breaking down of large waste management contracts to allow smaller, community minded organisations to manage waste in their area.

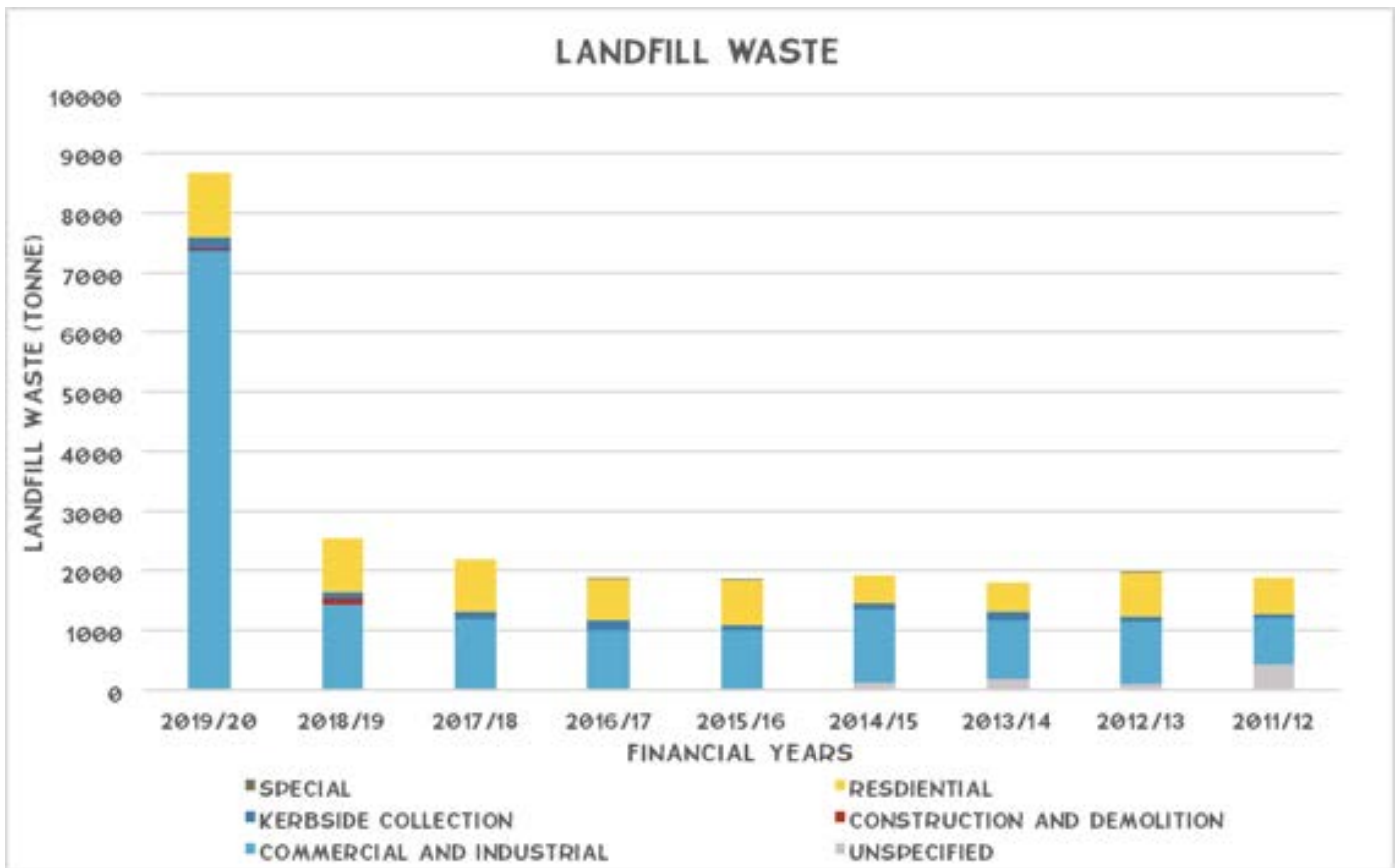
Individual householders in Wairoa often choose to manage their own refuse by taking their waste directly to the landfill. Landfill charges have been increased to match kerbside collection costs (bags sales) to mitigate the effect, however it is expected that this behaviour will impact demand for kerbside services and contracts going forward.

Fly tipping is also a current practice within the District. This behaviour is being addressed with education and enforcement where necessary.

4.1.2 SOLID WASTE DISPOSAL TRENDS

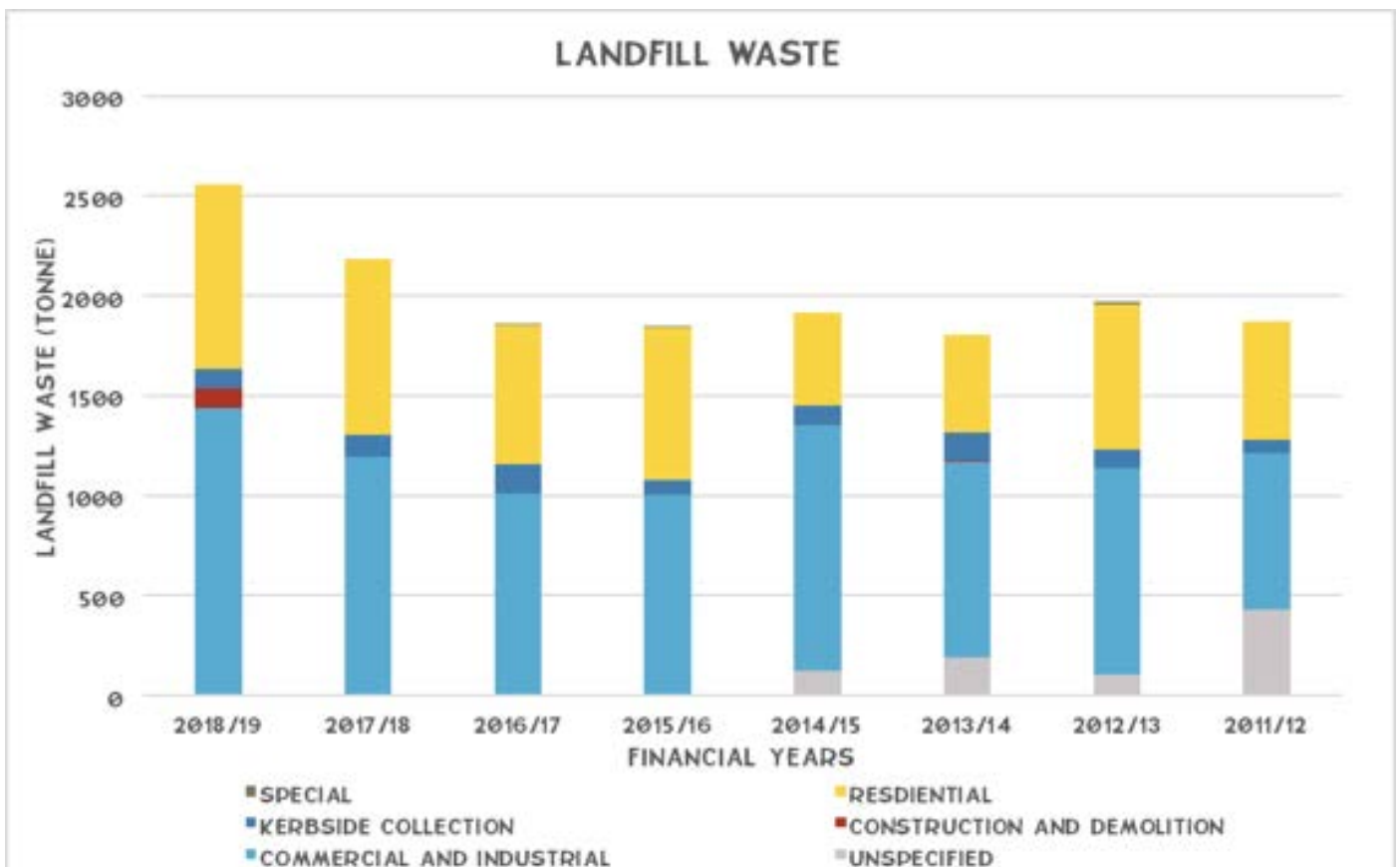
The graphs below show trends in various waste streams over the period 2011/12 to 2019/20. Total waste to landfill has been at around 2,000 tonnes per annum but has been trending upwards closer to 2,500 tonnes since 2016/17. The significant increase during the 2019/20 year was a large amount of sludge dumped from Wairoa District Council owned ponds during a three-month period from July to October 2019 which account for the large spike in commercial and industrial waste in the 2019/20 year. This was a one off and is not anticipated to be a regular occurrence.

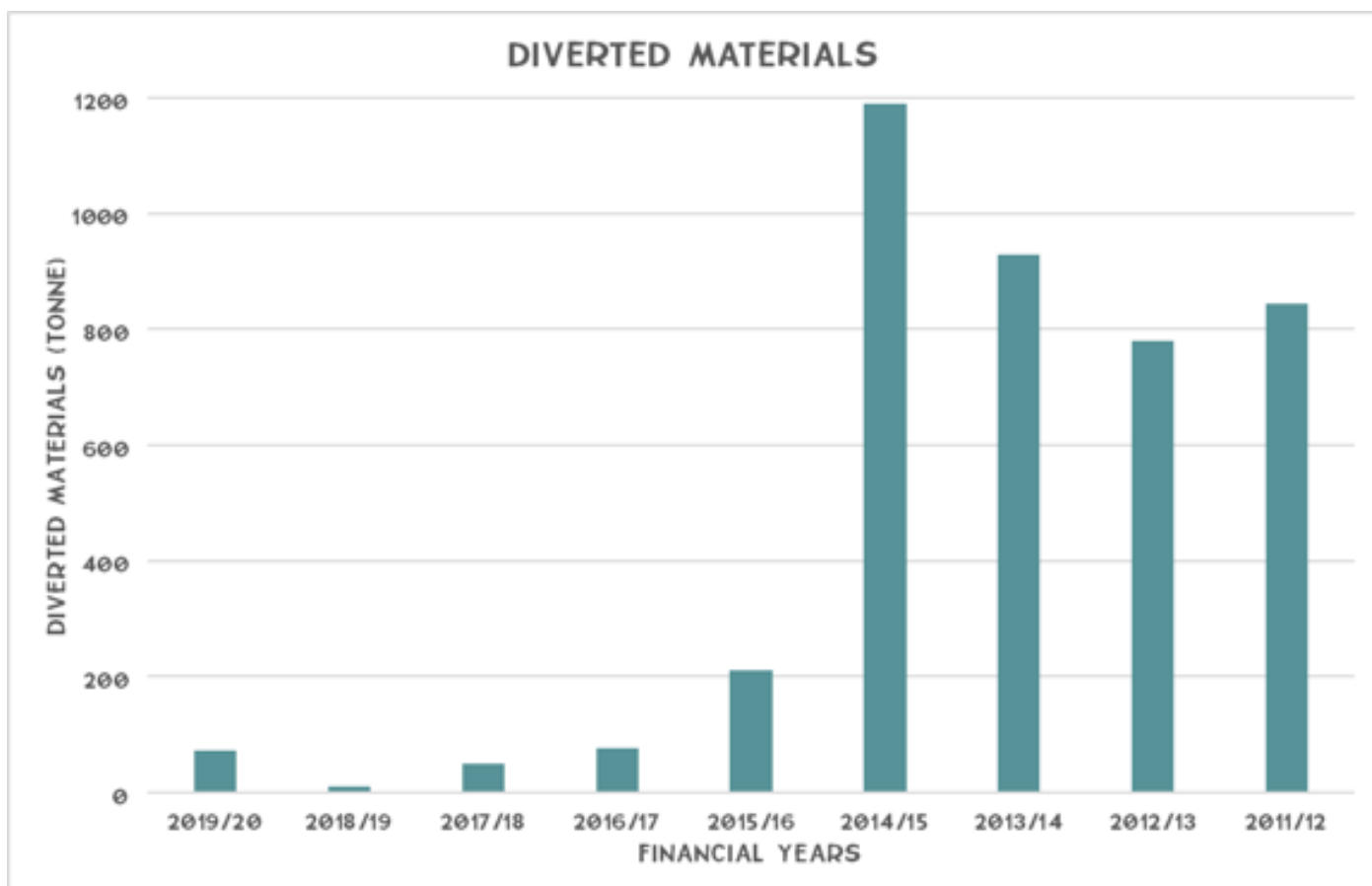
Total landscape waste received is generally between 800 tonnes to 1,200 tonnes per annum as shown below. The last graph shows a decline of diverted materials since 2014/15.



Taking out the 2019/20 year gives a better representation of the normal trend. It had been below 2,000 tonnes but has crept above in the 2017/18 and 2018/19 years. This seems to be an increase in commercial and industrial waste with kerbside collection tonnes

staying consistent. There appears to have been a fair amount of construction and demolition waste disposed in 2018/19 compared to other years.





Source: Council supplied Levy Returns (as at 15 October 2020)

4.2 AFFORDABILITY

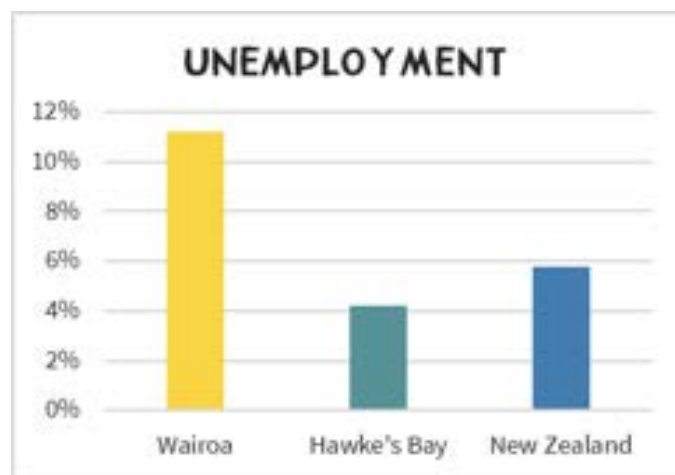
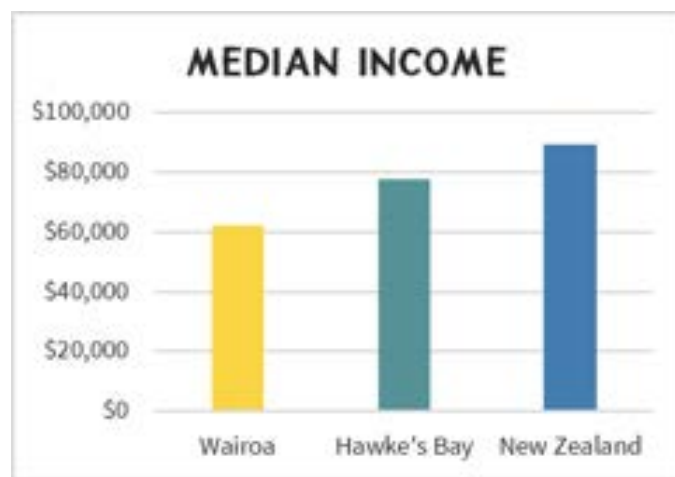
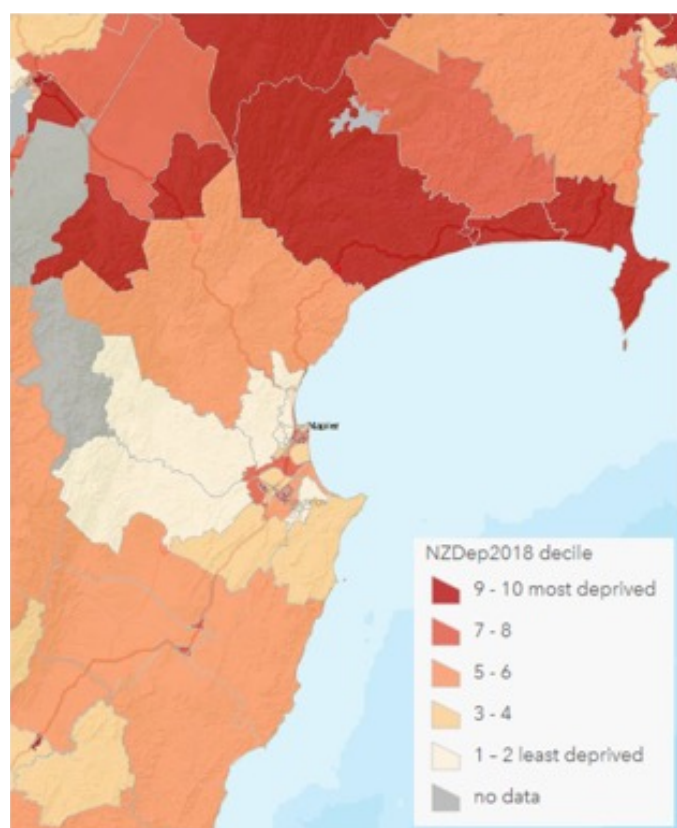
Population and socio-economic depravity indicators have a significant impact on affordability of the waste services activity, with limited ability for the ratepayers to finance any increases in waste services maintenance and renewals costs. Economic Solutions Ltd's 2017 Report outlines "In terms of the ability of district residents to meet Wairoa District Council rating requirements, it is noted that the current level of average residential rates (\$2,500-\$3,000 as advised by Council staff) represents approximately 6-7% of estimated annual median household income in the district at the present time. This compares to approximately 3-4% at the national level."

With a small rating base and higher ability to pay challenges, Council needs to think more broadly about how to fund its infrastructure programme. This will therefore challenge Council to look for alternative funding sources.

Council also needs to make sure its infrastructure is well maintained to avoid future unexpected costs for repair or replacement, and to prevent unexpected disruption of services to the community.

WAIROA COMMUNITY ABILITY TO PAY

Wairoa's low population base and median household income significantly impacts on the community's ability to pay for transport services. Wairoa is also has high unemployment and is the most deprived part of the Hawke's Bay region, with most of the district being Decile 9-10.



4.2.1 OUT OF DISTRICT WASTE

Long term the Wairoa Landfill will become more cost effective and sustainable if there is an increase in usage, so that increased legislative and compliance costs can be shared across more users. One of the key demand increases would be if Wairoa District Council starts accepting out of district waste in collaboration with Gisborne District Council.

A full cost accounting assessment was carried out by Opus (predecessor to WSP) in October 2006 when Wairoa District Council were considering accepting refuse from Gisborne District Council. If accepting "out of district" refuse is still on the table this assessment would need to be updated. Ministry for the Environment regularly updates the default values in the model by issuing an updated excel spreadsheet. Wairoa District Council would need to update the quantities values to put into the model to predict current disposal cost values.

4.3 LEGISLATIVE & POLICY CHANGE

Changes have been made to the Waste Minimisation Act 2008 (WMA). In November 2019 the Ministry for the Environment announced proposed change to the landfill levy. The proposal would increase the landfill levy. Consultation on the proposed changes closed in February 2020 with changes proposed to take effect between mid-2020 and mid-2023. This increase has been tabulated below.

Landfill Class	1 July 2021	1 July 2022	1 July 2023	1 July 2024
Municipal Landfill (class1)	\$20	\$30	\$50	\$60
Construction and demolition fill (class 2)			\$20	\$30
Managed fill (class 3)			\$10	\$10
Controlled fill (class 4)			\$10	\$10

4.4 CLIMATE CHANGE

Climate change is a gradual process, and its impacts for the district are difficult to determine due to the range of plausible emission scenarios, and uncertainty in region specific results.

CAUSES

Waste disposal is one cause contributing to climate change by adding to greenhouse gas emissions. The Ministry for Environment has released a guide to Measuring Emissions¹. While Wairoa District Council is not currently required to measure such emissions, this may be a requirement in future.

IMPACTS

Wairoa District Council commissioned a study in 2017 on the effects of climate change impacts on Wairoa². The objectives of the report were to provide an overview of climate change prediction on a regional scale for Wairoa and to look at the potential impact on the district and how to mitigate this.

Potential impacts that Wairoa could expect include:

- Increased coastal inundation and erosion.
- Inland flooding from the Wairoa River.
- Longer growing seasons for the agriculture sector – short to medium term.
- Negative impacts of drought over the longer term.
- Increased likelihood of wildfire.

Our current actions to improve the resilience for the waste management infrastructure assets to climate change include:

- To monitor the performance of closed landfills and undertake necessary maintenance and mitigation measures.
- To consider the impact on increased rainfall on the production of leachate from open and closed landfills and the potential effects on receiving systems including treatment plants.
- To consider the impact of increasing temperatures and dry periods on fire risk particularly regarding the ongoing management approach of the Wairoa Landfill.

4.5 LAND USE CHANGES

Land use change, particularly in urban areas, can result in changes to waste services patterns and demand. More residential dwellings can collectively have a high impact on the waste services capacity. Changes in zoning from rural to rural residential, and development of visitor attractions, can increase demand on our waste services.

The rural areas of Wairoa have traditionally been used for sheep and beef farming, however, some change to land use has occurred over the past decade. These include further residential developments, primarily in Māhia, which require additional waste services to be able to service the area.

4.6 ECONOMIC DEVELOPMENT

Economic Development is viewed as a vital element in keeping the Wairoa District alive and thriving, both now and into the future. The economy of Wairoa is based on the rural sector. Approximately 60% of the total land is in productive use, of which some 48% is in pasture. Sheep/beef farming and related processing, and forestry are the leading rural production industries in Wairoa district.

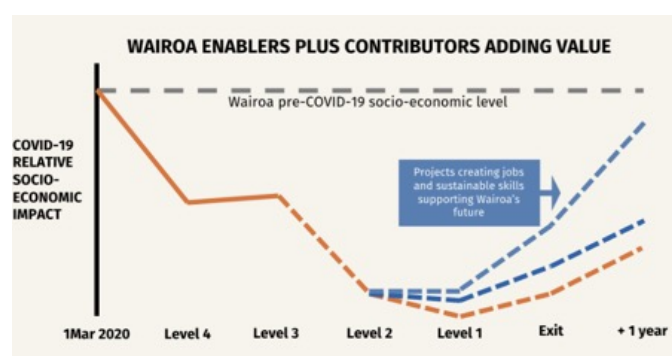
Council has embarked on an ambitious programme of attracting new businesses to the district and further developing our district's strength in land-based industries. An increased emphasis by the Wairoa District Council on economic development, particularly aimed at encouragement of diversification of agribusiness, ecotourism, digital creative industry attraction, and attraction of new and returning residents, has led to an increasingly positive community view of the district's future.

Tourism is an area of focus, in particular the potential tourism related to Rocketlab. This has the potential to attract a significant number of visitors to the Māhia area and infrastructure must be in place to support this.

4.6.1 POST COVID RECOVERY

Wairoa has put considerable effort into proactively responding to COVID-19 through strategic planning. A Wairoa Journey Together: Covid-19 Economic Recovery outlines the key impacts of COVID-19.

Most businesses halted during Level 4 and Level 3 because they were unable to operate from their home due to the nature of their business, the lack of connectivity and/or no online marketplace presence. Infrastructure, forestry, and other industries that provide employment to Wairoa people were halted. Although there was a large uptake by businesses of the wage subsidy programme and other government assistance, job losses occurred. A survey of a sample of local businesses during Level 4, identified approximately 17% expected to cut jobs. This aligns with MSD's information noting an increase in job seeker support.



¹ Measuring Emissions: A guide for organisations. May 2019

² The Implications of Future Climate Change on the Wairoa District, J. Oram, Jan 2017

4.7 DEMAND MANAGEMENT

The key growth and demand assumptions are as follows:

- Aging and youth population results are based on Statistics New Zealand 2013 Census.
- The summer seasonal peak period will continue based on historical trends and locations.
- Construction of a new cell at Wairoa Landfill is excluded at this stage as filling rates too low.

Managing waste demand is not only about managing future needs and expectations, but also about change in behaviours and philosophy. Through this multifaceted approach, waste can be diverted from landfills.

Our current demand management actions are summarised below.

Management Initiative	Description
Waste Minimisation Management Plan	Long term planning is instrumental to managing growth and demand requirements. Council's key strategy for managing waste is the Waste Minimisation Management Plan. This plan is to be updated every 6 years, with the next update scheduled for 2023/24.
User Pays with Weighbridge at Wairoa Landfill	Customers are charged on a user pays basis for waste disposal at the Wairoa Landfill and user pay bags for kerbside refuse collection. Our landfill and bag charges are structured to both incentivise users to minimise waste to landfill and prevent illegal dumping.
Rubbish & Recycling Education	<p>Council is committed to promoting responsible waste management solutions and is keen to work with groups or individuals to improve their waste management.</p> <p>Council staff and contractors are encouraged to engage with schools, community groups, maraes and individuals regarding ways to reduce the amount of waste being produced and better ways to deal with what is produced.</p> <p>As part of the collaboration effort, Wairoa is working with other Hawke's Bay Councils to ensure educational messages are consistent across all Districts.</p>
Service Sustainability Review	A full options analysis of the future service provision should be completed, to assess the various options for future waste disposal. This would include full cost accounting assessment of options for disposal within the District, as well as the option of taking waste from Gisborne District Council. As part of this exercise, an initial estimate of the new landfill cost will also be completed.

5. RISK AND RESILIENCE

5.1 RISK MANAGEMENT POLICY

Risk Management continues to be an area of learning and growth for Council. We are focussed on developing a consistent organisational approach to risk management.

Council's updated Risk Management Policy was adopted in December 2017. This is a Council-wide policy overseen by the Chief Executive Officer. Staff, contractors, and elected members have a shared role to play in the identification, reporting and management of risk through risk management processes being integrated with planning processes and embedded in management activities.

Since this time, Council has commissioned a Risk Management Framework Review by independent consultants in March 2018, which introduced a number of improvement recommendations for future implementation. Then in early 2020, we commissioned WSP to further review our risk management processes and develop a practical Risk Management Strategy to align risk management across the Community Assets and Services Group. A key component of the Risk Management Strategy is the provision of a process for identifying critical assets.

This section of the AMP highlights key Risk Management outcomes incorporated into the future planning included in this AMP.

5.2 CRITICAL ASSETS

Asset Criticality is the consequence arising from the sudden and total loss of an asset. The principal objective is to prevent the deterioration of critical assets to "very poor" condition where major and urgent replacement is required, to allow for service continuity and minimise disruption costs. To assess the criticality of an asset the following three factors are considered:

- **Service Importance:** The importance of core asset groups providing the service to the community. This answers the question: What is the effect on the community of losing service provision?
- **Functionality:** Reflects how important the specific asset is to the functionality of the core asset groups providing the service. It answers the question: What is the impact on the service if the asset fails?
- **Down-time:** Duration that the asset will be "down", until return of the asset to full capacity, if it fails. It answers the question: How quickly can the asset be repaired/replaced?

Service Importance has a 1 to 5 scale where 1 is of Low Importance and 5 is Extremely Important. Using this assessment process from our Risk Management Strategy, the Service Importance of core asset groups within the waste management activity have been determined as follows.

Core Asset Group	Service Importance of Core Asset Group
Landfill	3 - Important
Recycling Centre	3 - Important
Weighbridge	2 - Moderately Important

As there are limited number of assets within the waste management activity, the assets at the landfill are considered most critical, in line with the service importance above.

5.3 KEY RISKS

The following are current known key risks for the waste management activity. These risks were initially identified in 2018 and required further review.

Risk	Cause	Assessed Risk	Controls	Mitigation Strategies
Fire damage to property specifically neighbouring Council owned forestry block	The Wairoa Landfill is surrounded by a mature forestry block owned by Council. Landfill fire management processes not currently sufficient to mitigate the risk.	Critical		Landscaping capital works are planned annually to establish fire breaks to actively mitigate this risk. Regular cover of waste helps to mitigate the risk of fire.
Consent breach at Wairoa Landfill due to leachate overload, causing landfill to be shut down.	There is currently limited separation of clean stormwater from leachate. Furthermore, during high rainfall events, stormwater overtops the containment bund between the landfill and the stormwater pond, resulting in additional stormwater entering the leachate system.	High	Resource consent monitoring Landfill Management Plan (LMP)	Proactive resource consent monitoring. The requires updating to better reflect the current site practices. Quantification of the composition and volume of leachate produced by Wairoa Landfill. Improve stormwater separation by raising the bund between the stormwater pond and the landfill. This has increased the stormwater storage capacity to reduce incidents of clean stormwater flowing into the landfill.

Risk	Cause	Assessed Risk	Controls	Mitigation Strategies
Public or personnel incident resulting in ill health, injury or death	Asbestos poses a serious health risk to workers and the public.	High	Landfill Health & Safety Plan	Asbestos handling procedures should be reviewed to ensure immediate burial of asbestos-containing material and records of its location are being kept.
Public or personnel incident resulting in ill health, injury or death	The tipping face is a high hazard area where staff and members of the public are exposed to fall hazards and moving machinery. Exclusion zones improperly enforced resulting in fall from height or interface between pedestrians and heavy machinery	High	Landfill Health & Safety Plan	Exclusion zone procedures and enforcement is to be reviewed to ensure the ongoing safety of the public and staff.
Public or personnel incident resulting in ill health, injury or death	Explosion due to combustible atmosphere	High	Landfill Health & Safety Plan	Review of the confined space component will also include ensuring all confined spaces have physical access prevention and are clearly labelled. This could extend to the identification of low lying depressions where landfill gas could accumulate to high levels
Equipment breakdown of specialist machinery (compactor), causing service disruption	Age / unexpected issues with gear	Medium	Maintenance & servicing of core equipment	Key equipment, including the compactor have recently been replaced, and with maintenance have sufficient remaining useful life to meet service requirements.

5.3.1 RISK REGISTER

As a result of this Risk Management Strategy, we are currently completing a full review of our Risk Register. In the interim, our previously identified high risks have been included. At this point investment has been primarily been prioritised through our understanding of our critical assets and their condition / performance.

IMPROVEMENT ITEM – There is a need for full review of the Waste Management Risk Register to ensure risk issues have been adequately identified and ensure that current high risks are still relevant.

5.4 RESILIENCE

Resilience has been identified as a Significant Challenge for Wairoa in the 2021-2051 Infrastructure Strategy with the following responses followed:

- Good asset management practices and robust renewals programmes based on the condition and the remaining life of infrastructure assets.
- Identification of critical assets and management of these assets to ensure that they do not fail or to limit the effect of a failure.
- Emergency Response and Business Continuity Plans to be in place for emergency events.

5.4.1 EMERGENCY RESPONSE PLANS

IMPROVEMENT ITEM - To improve the resilience Level of Service delivery, Emergency Response Plans need to be developed. The plan will cover the effects of moderate and significant events on vulnerable and critical assets.

5.4.2 NATURAL DISASTERS & BUSINESS CONTINUITY

We assume that in the event of a significant disaster, natural or man-made, Council can continue to provide sufficient services to the community. We have assumed we could extend our external borrowing to fund the clean-up and ongoing capital work to rebuild any damaged assets, for which we don't fully insure.

Alongside the Council, Central Government also has a role in disaster recovery and restoration works after natural disasters happen.

Other than increased insurance costs, there is no further allowance in this plan for funding the repair of infrastructure damaged by any future natural disasters.

BUSINESS CONTINUITY PLANS

Business Continuity Plans (BCP) are developed to coordinate efforts for keeping Council business operating through high risk events such as pandemics, staff death and terrorism, as well as if a place of business, such as the main office building, are affected by adverse physical conditions. Events may include earthquakes, storm, unhealthy building (i.e. asbestos), fire, crime, prolonged IT outage, or the death of a key role.

Council has an existing BCP (2001) for response processes to be implemented for any major interruption to business operations and service delivery. It is recognised that it needs updating to better reflect latest industry practices. Furthermore, the loss of function of the Wairoa Landfill has been identified as a moderate level risk and planning for this event should be included in an update of Council's BCP, for example by identifying alternative landfill disposal sites.

5.4.3 CLIMATE CHANGE & RESILIENCE

Our current actions to improve the resilience for the waste management infrastructure assets to climate change include:

- To monitor the performance of closed landfills and undertake necessary maintenance and mitigation measures.
- To consider the impact on increased rainfall on the production of leachate from open and closed landfills and the potential effects on receiving systems including treatment plants.
- To consider the impact of increasing temperatures and dry periods on fire risk particularly regarding the ongoing management approach of the Wairoa Landfill.

6. OUR ASSETS

6.1 INTRODUCTION

The Waste Management Activity provides a number of services for waste to be properly disposed of to protect public health and the environment. The activity also promotes reuse, recycling and resource recovery with the objective of reducing the amount of waste going to landfill.

We provide litter collection in public areas, kerbside collection services and a rural recycling drop off service. We are looking at the possibility of introducing public recycling bins in addition to the existing litter bins. At a high level, our Waste Management Activity includes activities shown in the table below.

Activity	Description
Wairoa Landfill	Operation and management of the Wairoa Landfill
Wairoa Recycling Centre (waste diversion)	Operation and management of the recycling facility located at the landfill
Refuse & Recycling Kerbside Collection	Weekly collections in urban areas

Activity	Description
Rural Recycling Drop Off	Eight locations are provided for rural recycling drop off once per month. A truck arrives on collection day and transports recycling to the central Wairoa landfill location.
Public Litter Bins	Provision of public litter bins
Waste Management Services	Promotion of waste minimisation by informing our community and educating about recycling and re-use opportunities
Closed Landfills	Management of the five closed landfills within our District

6.2 ASSETS LOCATION

Below is a map showing locations of our Operating Landfill, recycling centre and our closed landfills. The Wairoa Operational Landfill is our key waste management facility, located on Fraser Street in the Wairoa township.



Below is an image from the 2020 UAV Survey showing key assets within the Wairoa landfill site.



6.3 ASSETS DESCRIPTION

The breakdown of Wairoa's waste management facilities by asset class is shown below.

Asset Class	Asset Group	Description
Wairoa Landfill	Land	The Wairoa Landfill consists of cells for waste
	Access Road	Sealed access road (320m long – gate to tip face)
	Buildings	<p>There are buildings associated with various assets as follows:</p> <p>Recycling centre</p> <ul style="list-style-type: none"> Recycling building and receiving area for depositing of recyclable materials Amenities block Steel shed for sorting recyclables <p>Weighbridge</p> <ul style="list-style-type: none"> Operator's office including computer hardware & software
	Structures	<p>There are structures associated with various assets as follows:</p> <p>Landfill</p> <ul style="list-style-type: none"> Concrete tipping wall with safety rail Canopy over main operations area where recyclable materials are sorted and processed Canopy over area where general waste is dumped by public Perimeter fencing Electronic security gate <p>Recycling centre</p> <ul style="list-style-type: none"> Concrete pad for receiving and sorting Bins / bags are used for the recycling to be collected in
	Drainage	<p>Drainage system to manage leachate and stormwater:</p> <ul style="list-style-type: none"> Leachate system comprising 50mm leachate pipes and four leachate chambers Stormwater system including 900mm culverts, open drains, stormwater bunds

Asset Class	Asset Group	Description
Wairoa Landfill	Weighbridge	A weighbridge is located at the Wairoa Landfill
	Compactor	A compactor is located on site at the Wairoa Landfill parked by the dumping area
Closed Landfills		There are five closed landfills holding consents in the District, these are: <ul style="list-style-type: none"> • Frasertown • Māhia • Nūhaka • Raupunga • Ruakituri
Other Assets	Public Litter Bins	42 bins in the Wairoa township and 17 bins in Māhia

6.3.1 ASSET OWNERSHIP

Land assets and key facilities including the recycling centre, Wairoa Landfill and all closed landfills are owned by Council. The Council has also recently purchased a Bomag compactor to compact landfill waste. The contractor with the Solid Waste Management Services contract supplies their own collection trucks used for the kerbside collection service.

6.4 ASSET CRITICALITY & RISK

Although there has been no formal asset criticality assessment, Wairoa Landfill is considered critical. Its unavailability would result in significant loss of service to the community.

6.5 ASSET VALUATION

The indicative value of the waste management assets is detailed in the table below. Where assets are new, value is based on purchase price. Other valuation information is taken from Council's database for rating values and is dated August 2012. As such, the following limitations apply:

- Figures include 'reinstatement value' for buildings, replacing like for like, are based on 2012 values
- Buildings were not broken down into components as they are generally of a relatively simple construction form and do not involve significant mechanical plant or ancillary services
- Land values are based on fair market value in 2012 and need updating
- New assets are valued at purchase value and are depreciated every year on a straight-line basis. The valuation figures given do not provide for depreciation
- These figures only include the Wairoa Landfill assets; they are exclusive of land assets at the now closed landfill sites.

Asset Group	Asset	Quantity	Indicative Value (2020)
Landfill	Compactor	1	\$125,000
	Gate	1	\$60,500
	Perimeter Fencing		\$45,000
	TOTAL		\$230,500

Asset Group	Asset	Quantity	Indicative Value (2020)
Buildings & Structures	Amenities Building		\$166,200
	Weighbridge Building		\$99,900
	Storage Shed		\$16,700
	Canopy		\$197,900
	Glass Recycling Bins		\$90,000
	TOTAL		\$570,700
Land	Wairoa Landfill		\$285,000
	TOTAL		\$285,000
The total indicative value of the Wairoa Waste Management (landfill) assets is \$1,086,200			

IMPROVEMENT ITEM – The last formal valuation was completed in 2012 and is out of date. An updated formal asset valuation to be completed to understand financial risk and potential renewals requirements in future.

6.6 ASSET CONDITION & REMAINING LIFE

A visual condition rating was completed for the assets at the landfill. They were rated against the IIMM Framework as shown in the table below.

Condition Rating	Description	Intervention
1	Very Good Condition	None required
2	Good Condition	Minor defects only, programme proactive maintenance or monitor
3	Fair or Average Condition	Some defects, maintenance required to return to accepted Level of Service
4	Poor Condition	Substantial defects, consider renewal
5	Very Poor Condition	Approaching unserviceable, consider disposal or replacement

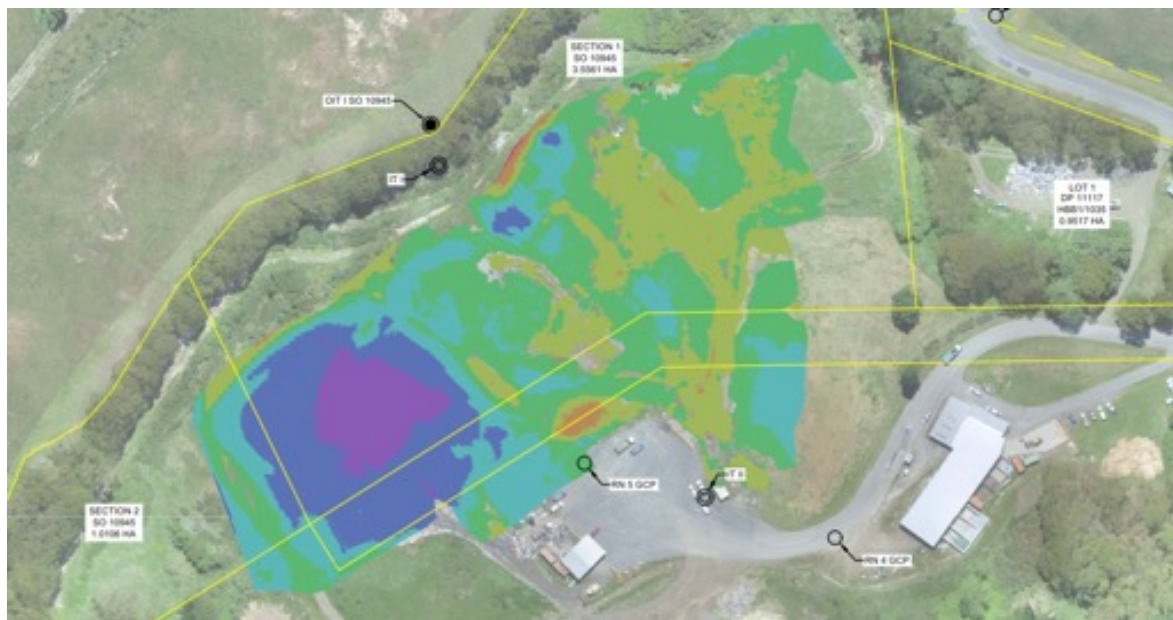
**condition definitions (IIMM 2015)*

Generally, all assets were found to be either in Very Good or Good condition. All waste management assets are adequate for current and future use. Based on visual inspection the buildings in the portfolio are in Very Good or Good condition and still have substantial remaining life. There is one lean to shed that is in Very Poor condition.

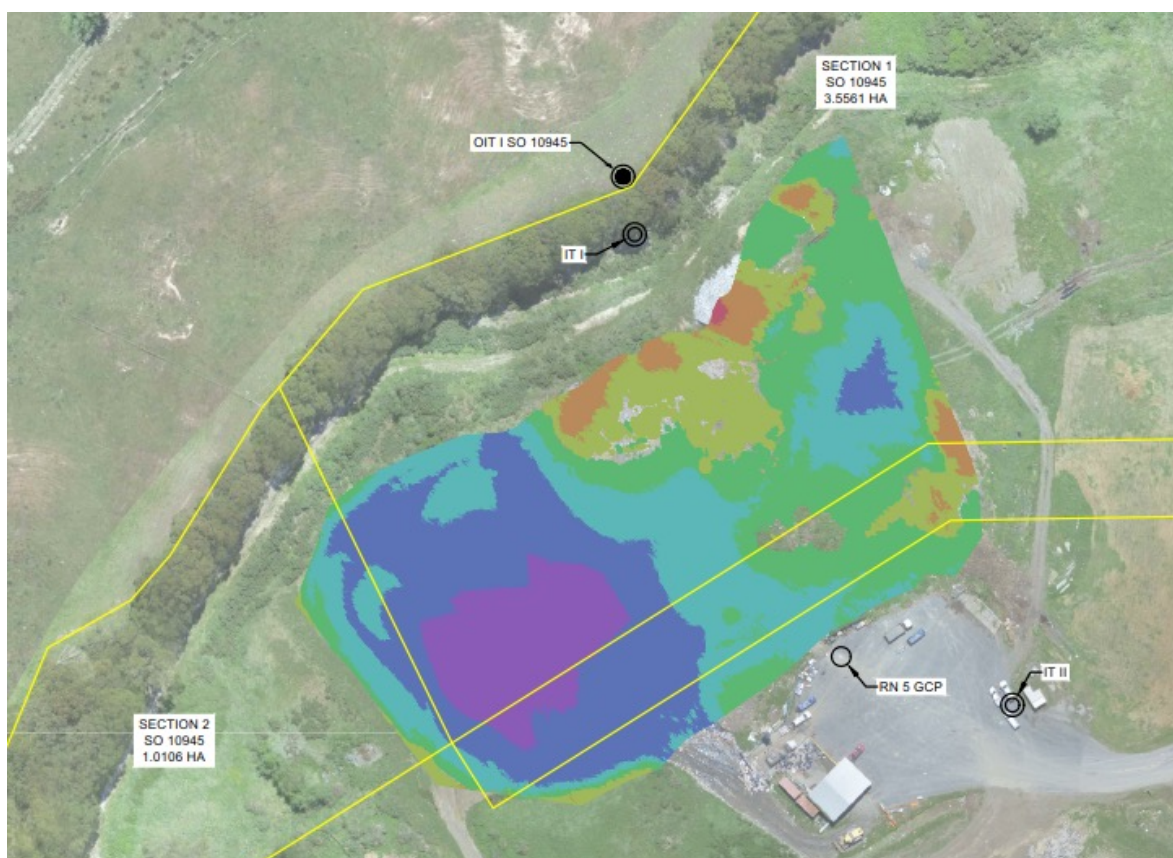
6.7 ASSET UTILISATION & CAPACITY

6.7.1 WAIROA LANDFILL

In November 2020, a full survey of the existing landfill cell was completed. **The survey results show that since the last survey was completed in November 2012 approximately 33,800 cubic meters of fill material (waste, cover etc) has been placed.** The image below shows this fill area and volumes.



The comparison between the November 2020 survey and the design capacity surfaces shows that approximately 30,700 cubic metres of fill space is remaining. The image below shows this fill area and volumes.

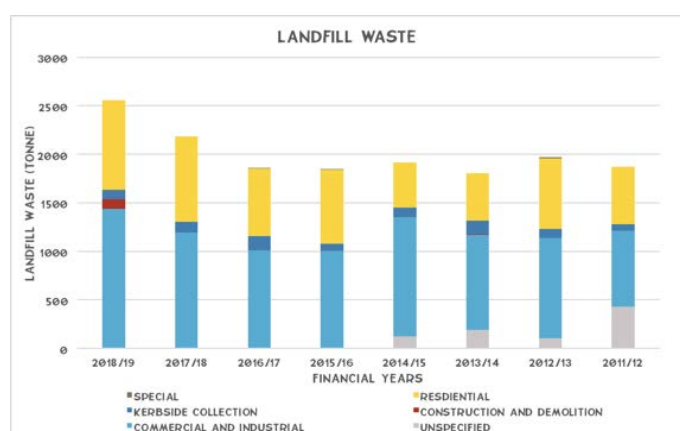


At the current waste disposal rates, the Wairoa Landfill has sufficient capacity within the current operational cell for another 6-7 years. This indicates that a new cell will need to be constructed before the current consent expires.

IMPROVEMENT ITEM – Annual Landfill survey to monitor the remaining usable life of the current Wairoa Landfill. Spatial information will provide an accurate platform to calculate the remaining airspace volume and double as an as built of the landfill at a date in time.

6.7.2 KERBSIDE COLLECTION

From the landfill waste data supplied by Wairoa District Council, it appears that limited tonnages come from kerbside collection. This is likely partly due to the type of waste collected (which is likely to weigh less), however the graph below indicates that people dump significantly more residential waste directly in the landfill. Communitrak surveys show a decline in satisfaction levels of rubbish collection services over the last two years, but the key reasons for this are unknown.



6.8 ASSET PERFORMANCE

The performance of the Wairoa Landfill and five closed landfills are not currently meeting consent conditions. Over the last few years there have been two infringements at the Wairoa Landfill regarding leachate and moderate non-compliances at all closed landfills. The key performance issues are summarised in the tables below.

WAIROA LANDFILL ASSET PERFORMANCE

Issue	Description	Performance
Consent Conditions	The Wairoa Landfill site is currently managed by Smart Environmental who are responsible for implementing the Landfill Management Plan (LMP) which forms part of the consent.	The LMP requires regular updating to better reflect the current site practices. Contractor is currently meeting LMP requirements.
Landfill Cover	Regular cover of waste helps to mitigate the risk of fire, odour, vermin, and exposure of staff and the public to contaminants.	Daily cover is now being implemented on a consistent basis at the Wairoa Landfill.

Issue	Description	Performance
Leachate System	Having appropriate stormwater storage capacity reduces the incidents of clean stormwater flowing into the landfill.	There is currently limited separation of clean stormwater from leachate. During high rainfall events, stormwater overtops the containment bund between the landfill and the stormwater pond, resulting in additional stormwater entering the leachate system.

CLOSED LANDFILLS ASSET PERFORMANCE

Issue	Description	Performance
Consent Conditions	There are currently five closed landfill sites that are consented. To meet the consent conditions, they require monitoring annually to complete visual inspections and sampling at Nūhaka and Māhia sites. The observations and results should be reported annually to Council to ensure they are complying with consent conditions and monitoring trends.	Current monitoring regime needs to be improved to ensure regular monitoring and reporting to meet consent conditions. Proposals are underway.

IMPROVEMENT ITEM – Organise an ongoing monitoring contract with external provider for both the operational and closed landfills to ensure consent conditions are being monitored and reported on annually.

7. LIFECYCLE MANAGEMENT PLAN

7.1 INTRODUCTION

Affordability is a key issue for Wairoa District, **so achieving value for money is critical**. Population and socio-economic deprivation indicators have a significant impact on affordability of the solid waste activity, with limited ability for the ratepayers to finance any increases in maintenance and renewals costs.

A key affordability driver is ensuring asset integrity – **through a whole-of-life approach**, implementing good asset management planning including lifecycle management planning and modelling.

In the context of this plan, the lifecycle of an asset is “understanding the rate of change.” The primary objective is to know when to maintain OR renew OR improve (upgrade through capital works) an asset or its component.



This section of the AMP outlines:

- Operation and maintenance plans
- Planning for renewal of assets
- Upgrade and creation of assets for activities and services delivered to the community
- Disposal.

It describes Council’s practices that are delivering current Levels of Service, and explores opportunities to enhance the asset lifecycles through condition monitoring.

One of the keys to good lifecycle management is **better data (confidence) and better interpretation of that data to enable more informed decisions**. This enables us to ‘get the best out of our infrastructure’ and is of particular importance for mature and critical assets.

It is also critical that management and funding of established assets and capital development **meets all resource consent and safety requirements** in order to ensure that solid waste services remain viable within the Wairoa District to serve the needs of this District.

7.2 OPERATIONS & MAINTENANCE PLAN

Maintenance strategies cover the practices that we employ to operate and maintain the waste management assets to achieve the optimum use of the asset, and at the agreed service levels. Council keeps the waste management assets suitable, accessible, safe and well maintained by carrying out planned, cyclic and responsive maintenance.

Maintenance of an asset does not increase the asset’s service potential or keep it in its original condition. It slows down deterioration and delays when rehabilitation or replacement is needed. It is a way of ensuring that an asset continues to deliver the required Level of Service.

Operations and maintenance for the Waste Management Activity comprise the following:

O&M Type	Description
Operations	Operations are the day-to-day activities completed to provide the service, including: <ul style="list-style-type: none">• Collection of kerbside refuse and recyclables• Manning and operation of the landfill• Manning and operation of the recycling centre
Routine Maintenance	Regular ongoing day-to-day work that is necessary to keep assets at their required standards, such as cleaning and clearing of service facilities and inspections. Routine maintenance also includes for the regular monitoring and aftercare activities of closed landfills.
Reactive Maintenance	Maintenance that is completed as a result of asset failure or deterioration, such repairs to areas affected by fires.
Planned Maintenance	Maintenance that is completed proactively to ensure an asset does not fail, such as annual activities e.g. weighbridge servicing.

7.2.1 SERVICE DELIVERY ARRANGEMENTS

Council implements service levels for solid waste and recycling operations through its operational contracts, which are predominantly performance-based. These contracts are supervised and administered by Council’s Community Services and Assets team. Smart Environmental is Council’s current operational contractor.

Contract No & Name	Location Served	Contract Term	Contractor	Responsibilities	End Date
18/03 Solid Waste Management Services	Wairoa Frasertown Māhia Nūhaka Tureanga Ruakaturi	Started July 2019 7+3 years Lump sum contract – with limited performance metrics	Smart Environmental	<ul style="list-style-type: none"> • Kerbside Refuse Collection • Kerbside Recyclables Collection • Resource Recovery Operations • Reserve and Street Litterbin Collection • Kiosk and Weighbridge Operation • Residual Waste Disposal • Landfill Operation 	31 March 2026
No formal contract in place	Mohaka Raupunga Waihua		Waipapa Recycling	<ul style="list-style-type: none"> • Kerbside collection • Recycling centres • Reserves rubbish bins 	
16/01 Tuai Township Maintenance	Tuai	Started January 2017 3+1+1	Waikaremoana Contracting	<ul style="list-style-type: none"> • Kerbside Refuse Collection • Kerbside Recyclables Collection 	31 December 2021
Landfill Consent Monitoring - No formal contract in place	Wairoa Landfill Closed Landfills		Environmental Assessments & Monitoring NZ Ltd. (EAM)	<ul style="list-style-type: none"> • Capping of Wairoa landfill cell and monitoring required under the resource consent • Monitoring of five closed landfills 	

IMPROVEMENT ITEM – Ensure formal contracts are in place with all external service providers.

7.2.2 OPERATIONS & MAINTENANCE ACTIVITIES

COUNCIL STAFF RESPONSIBILITIES

Wairoa District Council staff are responsible for the following activities.

Activity	Responsibilities
Consents	<ul style="list-style-type: none"> • Overall responsibility for ensuring consents are adhered with
Waste Education	<ul style="list-style-type: none"> • Waste Minimisation Management Plan • Community engagement • Community education programmes
Waste Levy	<ul style="list-style-type: none"> • Oversees monthly payment of landfill levy

CONTRACTORS RESPONSIBILITIES

Contractors are responsible for the operational landfill and associated services activities.

Operational Action	Description
Kerbside Refuse Collection	<ul style="list-style-type: none"> • Weekly collection of bagged refuse from the kerbside in Wairoa and Frasertown • Weekly collection of bagged refuse from rural areas on designated collection routes with increased frequency over summer in Māhia • Collection of refuse from reserve and street bins • Annual “inorganic collection” from rural areas

Operational Action	Description
Kerbside Recyclables Collection	<ul style="list-style-type: none"> • Uplift recyclables from kerbside in Wairoa & Frasertown (weekly), sort and process for diversion from landfill • Note returns from recyclables belong to the Contractor
Waste Diversion at Wairoa Landfill	<ul style="list-style-type: none"> • Inspection of refuse loads of all incoming vehicles to the landfill and direction to appropriate part of site • Actively assist customers to divert waste, supervise site to ensure materials are deposited to appropriate part of site, educate customers on how to sort waste for maximum recovery • Sort and process recovered materials for on sale or other beneficial use (may include processing to substitute for cover or drainage media in landfill construction)
Recovery of Metals	<ul style="list-style-type: none"> • Receive car bodies, whiteware and other metals • Prepare as required for crusher/transportation from the District • All returns from metal recoveries belong to the Contractor
Green waste	<ul style="list-style-type: none"> • Receive green waste loads, inspect and remove major contaminants
Hazardous waste	<ul style="list-style-type: none"> • Receive any small (household or farm) quantities of hazardous waste and place in secure storage awaiting disposal by others
Weighbridge Operation & Maintenance	<ul style="list-style-type: none"> • Operate, staff and maintain weighbridge, collecting landfill charges on behalf of Council

Operational Action	Description
Landfill Operations & Maintenance	<ul style="list-style-type: none"> Spread, place and compact refuse Maintain access and tipping wall Maintain site, buildings, site roading (including sealed roads from gate), fencing Vegetation control and maintenance of landscape plantings Control of vermin, litter and nuisances
Leachate & Stormwater Control	<ul style="list-style-type: none"> Maintain and operate (existing) leachate system Maintain stormwater ponds
Complying with Consents	<ul style="list-style-type: none"> All operations carried out in compliance with all relevant consents

Contractors are responsible for the following closed landfill activities.

Activity	Requirements
Site Walkovers & Inspections	<ul style="list-style-type: none"> Site walkovers are undertaken at least on an annual basis to ensure the landfill sites are safe and that there are no significant changes or issues to the facility after any remediation work
Landfill Operations	<ul style="list-style-type: none"> Typical closed landfills operations include upkeep of the vegetation (i.e. weed spraying), ensuring there is good grass cover and inspections to make sure the sites are safe and the landfill cover integrity is maintained
Fault Repairs	<ul style="list-style-type: none"> Repair damaged assets, typically defective equipment assets. These are normally identified from customer faults and operators at the closed landfills
Environmental Monitoring	<ul style="list-style-type: none"> Closed landfills are monitored in accordance with the consent conditions and the risk management approach for that specific site



High



Medium



Low

Asset	Renewal Requirements	10-yr Cost	Strategic Alignment	Service Delivery	Risk & Criticality	Financial Impact	Priority
Recycling centre		\$1,110,115					Medium
Access road	Reseals every 5-8 years	\$117,630					Medium

7.4 CAPITAL / UPGRADE PLAN

New works are those works that create a new asset that did not previously exist, or works that upgrade or improve an existing asset beyond its existing capacity. Council will continue to invest in waste infrastructure with the main drivers being:

- To meet the demands of growth by contributing waste management services to encourage recycling.
- To meet the Levels of Service with respect to safe and effective refuse and recycling kerbside collection services.

7.3 RENEWALS PLAN

7.3.1 RENEWAL STRATEGY OVERVIEW

Renewals are generally defined as major work which restores, rehabilitates, replaces or renews an existing asset to its original condition/function. The purpose of the renewal strategy is to maintain the Levels of Service by identifying the most cost-effective time to renew the asset.

Upgrades or renewals are normally undertaken on an 'as needed' basis. Typical works could include:

- Hardstand area repairs
- Recycling Centre renewals
- Landscaping for firebreak purposes.
- Resealing of access roads.
- Compactor renewals

7.3.2 RENEWALS PROGRAMME

To date, renewal of waste management assets has generally been reactive. However, going forward we are looking to proactively plan for renewals, particularly of critical assets.

There are \$1,227,745 renewals planned for waste management renewals over the next ten years. This consists of the following programmes. Each renewal project or programme has been prioritised using our investment decision making criteria described in Section 9.2.1. Each investment criteria is assigned one of the following ratings:

- To meet legislative compliance and reduce the exposure to risk (consent requirements for closed landfills and WMMP requirements for waste minimisation).

Service level and growth driven new works planned in the next ten years are included below.



High



Medium



Low

Asset	Upgrade Requirements	10-yr Cost	Strategic Alignment	Service Delivery	Risk & Criticality	Financial Impact	Priority
Wairoa Landfill	Construction of a new cell as current cell expected to meet capacity in 6-7 years.	\$1,985,500					High
Landscaping	Fire break landscaping	\$30,005					Medium

The construction of new cell at Wairoa Landfill will depend on the long term options considered in the Service Sustainability Review. If a new cell is to be built it is anticipated that there will be an upgrade to leachate requirements in consent.

7.5 DISPOSAL PLAN

Disposal is any activity associated with disposal of a decommissioned asset, including sale, demolition or relocation. Asset disposal requires making the site safe, removing surplus structures, and covering the costs of any environmental remediation. These costs are generally included as part of the capital project.

There is a derelict building at the landfill that may need to be disposed of during this period of this AMP. The building is next to the green waste disposal area and appears to be unused. A small cost should be allowed for to dispose of this in case of there being any asbestos etc.

8. FINANCIAL SUMMARY

8.1 INTRODUCTION

This section contains the financial requirements resulting from all the information presented in previous sections. It defines the different cost areas (maintenance/operations, renewals and capital/new works) and details the expected expenditure against each.

8.2 FINANCIAL PROJECTIONS

8.2.1 EXPENDITURE CATEGORIES

Expenditure types are defined and reported as follows:

Expenditure Type	Description
Opex	Operating expenditure is used to fund the ongoing day to day activities and services of the Council. It is expensed (not capitalised) work that continues the provision of services provided by assets. Operational activities include repairs and maintenance, security, utility costs (e.g. rates and power)

Expenditure Type	Description
Capital Renewals	Capital Renewals expenditure increases the life of an existing asset with no increase in service level. It replaces existing deteriorated assets or components of assets to restore their remaining life and service potential.
Capital New Works	<p>Council has two categories of Capital New Works expenditure spread across its activities</p> <ul style="list-style-type: none"> • Level of Service – Defined as capital expenditure that increases the service level delivered by the asset. • Growth – Defined as capital expenditure that is required to provide additional capacity in whole or part under Council's Development Contributions Policy necessary to accommodate growth. It is the capitalised works that add new or enlarged existing assets to increase the capacity to cater for further growth in demand

SUMMARY OF TOTAL 10-YEAR EXPENDITURE FORECAST

District Wide for Activity	YR 1 2021/22	YR 2 2022/23	YR 3 2023/24	YR 4 2024/25	YR 5 2025/26
OPEX	1,941,760	2,048,836	2,375,097	2,504,995	2,359,103
CAPEX RENEWALS	90,000	252,350	380,160	167,710	110,900
CAPEX NEW WORKS	15,000	309,000	0	0	1,109,000
TOTAL	2,046,760	2,610,186	2,755,257	2,672,705	3,579,003

8.2.3 OPERATIONAL EXPENDITURE SUMMARY

The recommended ten-year operational expenditure forecast is shown in the table below with \$1.98 million forecast over the next ten years.

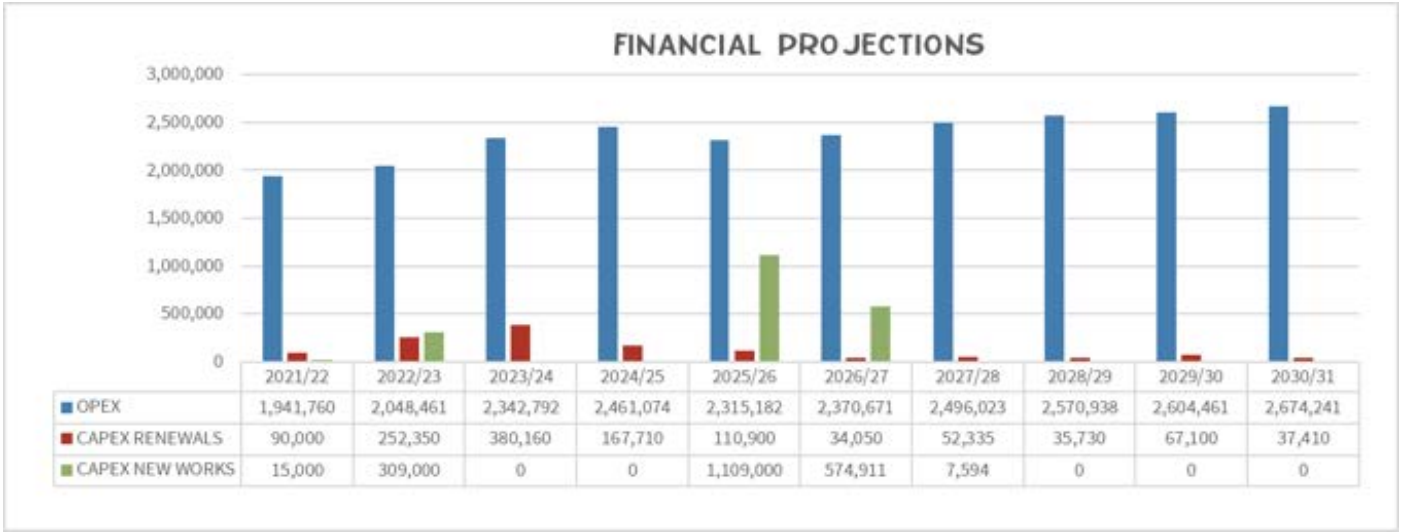
SUMMARY OF PLANNED OPERATIONAL EXPENDITURE

Opex Forecast	YR 1 2021/22	YR 2 2022/23	YR 3 2023/24	YR 4 2024/25	YR 5 2025/26
Direct Activity Cost					
WM10355. WASTE LEVY PAYMENT	56,000	86,436	118,048	151,060	154,700
WM10356. ETS LEVY PAYMENTS	98,000	100,842	103,292	105,742	108,290
WM1535. INSURANCE	4,130	4,250	4,353	4,456	4,563
WM202201. RMA: LANDFILL AFTERCARE - WAIROA DISTRICT COUNCIL	15,000	15,435	15,810	16,185	16,575
WM202202. RMA: LANDFILL MONITORING-HBRC	40,000	41,160	42,160	43,160	44,200
WM202203. RMA: LANDFILL MONITORING - WAIROA DISTRICT COUNCIL	40,000	41,160	42,160	43,160	44,200

8.2.2 10-YEAR FORECAST SUMMARY

The total amount of expenditure for operations and maintenance and capital over the next ten years is **\$27.1 million** as shown below. Operational expenditure represents 88% of the ten-year forecast

total. Capital expenditure includes minor renewals works for existing assets, and for establishing a new landfill in Wairoa, once the current landfill reaches capacity.



	YR 6 2026/27	YR 7 2027/28	YR 8 2028/29	YR 9 2029/30	YR 10 2030/31	Total 10 Years
	2,488,525	2,651,896	2,727,001	2,760,524	2,830,304	24,688,041
	34,050	52,335	35,730	67,100	37,410	1,227,745
	574,911	7,594	0	0	0	2,015,505
	3,097,486	2,711,825	2,762,731	2,827,624	2,867,714	27,931,291

	YR 6 2026/27	YR 7 2027/28	YR 8 2028/29	YR 9 2029/30	YR 10 2030/31	Total 10 Years
	158,200	161,840	165,620	169,400	173,040	1,394,344
	110,740	113,288	115,934	118,580	121,128	1,095,836
	4,667	4,774	4,886	4,997	5,104	46,180
	16,950	17,340	17,745	18,150	18,540	167,730
	45,200	46,240	47,320	48,400	49,440	447,280
	45,200	46,240	47,320	48,400	49,440	447,280

Opex Forecast	YR 1 2021/22	YR 2 2022/23	YR 3 2023/24	YR 4 2024/25	YR 5 2025/26	
WM204000. LANDFILL OPERATIONS - WAIROA	335,175	344,895	353,274	361,654	370,368	
WM204019. REFUSE - LITTER BINS	112,750	116,020	118,839	121,657	124,589	
WM204040. RECYCLING - OPERATIONS CENTRE	148,625	152,935	156,651	160,366	164,231	
WM204041. RECYCLING - STREET COLLECTION	356,700	355,641	375,962	384,879	394,154	
WM204043. RECYCLING - RURAL	51,250	52,736	54,018	55,299	56,631	
WM204046. Raupunga Co-Management	34,850	35,861	36,732	37,603	38,509	
WM204047. Tuai Co-Management	49,713	51,154	52,397	53,640	54,932	
WM204061. INCIDENTAL CLEANUPS	30,750	31,642	32,411	33,179	33,979	
WM204063. MĀHIA HOLIDAY CLEANUPS	25,625	26,368	27,009	27,649	28,316	
WM204080. WEIGHBRIDGE - ADMIN SYSTEMS	73,800	75,940	77,785	79,630	81,549	
WM204200. ANNUAL DRY GDS COLL WAIROA	0	20,580	0	22,659	0	
WM207010. WASTE MINIMISATION - EDUCATION	15,375	15,821	16,205	16,590	16,989	
WM2077. Environs	15,000	15,435	15,810	16,185	16,575	
Consultancy						
WM2022. RESOURCE CONSENT NEW CELL	0	0	105,400	129,480	0	
WM202500. CONSULTANCY	75,000	20,580	21,080	21,580	11,050	
WM202510. CONTRACT DOCUMENTS	0	0	0	0	38,675	
WM202581. CONSULTANCY - NEW CELL DESIGN	0	0	105,400	107,900	0	
TOTAL	1,577,743	1,604,891	1,874,796	1,993,713	1,803,075	
Indirect Asset Costs						
WM2030. Depreciation Wairoa Landfill	0	0	135,156	138,484	141,940	
WM20301. Depreciation Neell	366	366	319	0	0	
WM203099. Non Funded Depreciation	127,989	131,829	0	0	0	
WM1540. Internal Loan Interest	32,615	47,934	53,586	52,268	82,002	
WM15402. INTEREST-AFTERCARE PROV WAIROA	23,948	35,419	30,534	30,534	30,534	
WM39051. CORPORATE OVERHEADS	159,548	163,859	177,143	174,681	182,043	
WM39052. ENGINEERING OVERHEADS	19,337	63,943	71,032	71,163	75,352	
WM3910. RATES	214	220	226	231	236	
TOTAL	364,017	443,570	467,996	467,361	512,107	
TOTAL	1,941,760	2,048,461	2,342,792	2,461,074	2,315,182	

Notes on the operational expenditure are:

- Wairoa participate in the Emissions Trading Scheme

	YR 6 2026/27	YR 7 2027/28	YR 8 2028/29	YR 9 2029/30	YR 10 2030/31	Total 10 Years
	378,748	416,362	426,087	435,812	445,176	3,867,551
	127,408	150,280	153,790	157,300	160,680	1,343,313
	167,946	184,960	189,280	193,600	197,760	1,716,354
	403,071	439,280	449,540	459,800	469,680	4,088,707
	57,913	61,268	62,699	64,130	65,508	581,452
	39,381	41,616	42,588	43,560	44,496	395,196
	56,175	62,424	63,882	65,340	66,744	576,401
	34,748	41,616	42,588	43,560	44,496	368,969
	28,956	31,212	31,941	32,670	33,372	293,118
	83,394	93,405	95,586	97,768	99,869	858,726
	24,860	0	27,209	0	29,664	124,972
	17,374	19,074	19,520	19,965	20,394	177,307
	16,950	18,496	18,928	19,360	19,776	172,515
	0	0	0	0	0	234,880
	11,300	11,560	11,830	12,100	12,360	208,440
	0	0	0	0	0	38,675
	0	0	0	0	0	213,300
	1,829,181	1,961,275	2,034,293	2,052,892	2,126,667	18,858,526
	145,268	148,851	152,435	156,147	159,603	1,177,884
	0	0	0	0	0	1,051
	0	0	0	0	0	259,818
	94,573	90,119	85,438	80,756	76,074	695,365
	30,534	31,755	32,977	32,977	31,755	310,967
	192,422	193,775	193,505	202,075	202,429	1,841,480
	78,451	70,001	72,037	79,355	77,449	678,120
	242	247	253	259	264	2,392
	541,490	534,748	536,645	551,569	547,574	4,967,077
	2,370,671	2,496,023	2,570,938	2,604,461	2,674,241	23,825,603

8.2.4 CAPITAL EXPENDITURE SUMMARY

There is a total of \$3.24 million for capital expenditure for the next ten years as shown in the table below. Capital renewal expenditure is for the Wairoa Landfill and Recycling Centre renewals, and new works are the landscaping for fire breaks. Capital new works expenditure is for construction of new cell at Wairoa Landfill (estimated at \$1.7M including design costs) has been included. A full review of the waste services is recommended to be completed in 2020/21 and will inform whether these new landfill costs can be justified.

SUMMARY OF PLANNED CAPITAL EXPENDITURE

Capital Expenditure Forecast	YR 1 2021/22	YR 2 2022/23	YR 3 2023/24	YR 4 2024/25	YR 5 2025/26	
Renewals						
Landfill - road resealing	40,000	0	0	0	77,630	
Recycling Centre renewals	50,000	252,350	380,160	167,710	33,270	
TOTAL	90,000	252,350	380,160	167,710	110,900	
New Works - Growth						
TOTAL	0	0	0	0	0	
New Works - LOS						
Landscaping / Trees	15,000	0	0	0	0	
Construction of New Cell (incl. Extension of Liner)	0	309,000	0	0	1,109,000	
TOTAL	15,000	309,000	0	0	1,109,000	
TOTAL	105,000	561,350	380,160	167,710	1,219,900	

Notes on the capital expenditure are:

- Construction of new cell at Wairoa Landfill is expected to occur within the next 10 year period
- Road is resealed about every five years.

	YR 6 2026/27	YR 7 2027/28	YR 8 2028/29	YR 9 2029/30	YR 10 2030/31	Total 10 Years
	0	0	0	0	0	117,630
	34,050	52,335	35,730	67,100	37,410	1,110,115
	34,050	52,335	35,730	67,100	37,410	1,227,745
	0	0	0	0	0	0
	7411	7594	0	0	0	30,005
	567,500	0	0	0	0	1,985,500
	574,911	7,594	0	0	0	2,015,505
	608,961	59,929	35,730	67,100	37,410	3,243,250

8.3 REVENUE SUMMARY

The revenue forecast for the next ten years as shown in the table below. Wairoa's waste management services operational costs are currently funded through a combination of user charges, rates, and reserves, as user charges do not cover the full operational costs of the activity. With increases to the waste levy, user charges will need to increase to cover these costs. Capital costs are primarily funded through reserves and loans.

As part of the Landfill Service Sustainability Review, potential future costs of service and funding sources will be reviewed.

SUMMARY OF REVENUE FORECAST

District Wide for Activity Revenue Forecast	YR 1 2021/22	YR 2 2022/23	YR 3 2023/24	YR 4 2024/25	YR 5 2025/26	
Rates						
RATES	1,109,942	1,153,656	1,569,879	1,648,524	1,479,737	
TOTAL	1,109,942	1,153,656	1,569,879	1,648,524	1,479,737	
Investment & Other						
INTEREST RESERVE FUNDS WAIROA	16,115	16,115	16,115	19,494	22,956	
TOTAL	16,115	16,115	16,115	19,494	22,956	
Fees & Charges						
WAIROA LANDFILL - USER CHARGES	628,000	675,024	720,936	768,248	786,760	
SALE OF RECYCLE BINS	1,400	1,441	1,476	1,511	1,547	
SALES REFUSE BAGS	4,000	4,116	4,216	4,316	4,420	
WASTE DISPOSAL LEVY	30,000	30,870	31,620	32,370	33,150	
TOTAL	663,400	711,451	758,248	806,445	825,877	
Reserves						
OPERATIONS	152,303	167,614	30,853	30,534	30,534	
CAPITAL	90,000	25,750	147,840	167,710	110,900	
TOTAL	242,303	193,364	178,693	198,244	141,434	
Loan						
LOAN	15,000	535,600	232,320	0	1,109,000	
TOTAL	15,000	535,600	232,320	0	1,109,000	
TOTAL	2,046,760	2,610,186	2,755,255	2,672,707	3,579,004	

	YR 6 2026/27	YR 7 2027/28	YR 8 2028/29	YR 9 2029/30	YR 10 2030/31	Total 10 Years
	1,586,924	1,726,011	1,775,992	1,785,525	1,833,192	15,669,380
	1,586,924	1,726,011	1,775,992	1,785,525	1,833,192	15,669,380
	26,504	30,136	33,857	37,668	41,572	260,532
	26,504	30,136	33,857	37,668	41,572	260,532
	804,560	823,072	842,296	861,520	880,032	7,790,448
	1,582	1,618	1,656	1,694	1,730	15,655
	4,520	4,624	4,732	4,840	4,944	44,728
	33,900	34,680	35,490	36,300	37,080	335,460
	844,562	863,994	884,174	904,354	923,786	8,186,291
	30,534	31,755	32,977	32,977	31,755	571,835
	34,050	52,335	35,730	67,100	37,410	768,825
	64,584	84,090	68,707	100,077	69,165	1,340,660
	574,911	7,594	0	0	0	2,474,425
	574,911	7,594	0	0	0	2,474,425
	3,097,484	2,711,825	2,762,729	2,827,623	2,867,715	27,931,288

8.3.1 IMPLICATIONS OF MEETING BUDGET LIMITATIONS

The implications of meeting budget limitations, including justification for the expenditure forecast and consequences if the budget is reduced, are summarised below.

Expenditure Programme	Justification	Consequences if Budget Reduced
Opex	To meet Levels of Service for public health and consent conditions	Non-compliance with consent conditions. Wairoa Landfill may need to be closed from public access if they cannot meet consent requirements or are unsafe for public use.
	Adequate reactive maintenance to keep assets functioning	
Capital Renewals	Adequate renewals to optimise life of assets	Environmental discharge and non-compliance with consent conditions. Backlog created that may never be addressed adequately resulting in health and safety or environmental incidents.
Capital New Works	Capital and upgrade works required to secure new landfill cell.	Closure of district landfill service Allowance for new landfill cell must be made during the 10 year period if the landfill service is going to continue. Alternative option is to ship all waste out of the district.

8.4 FUNDING STRATEGIES & POLICIES

8.4.1 CURRENT FUNDING POLICIES

The Council waste management activity will be funded in accordance with the financial policies of Council as indicated below. However, Council wishes in future to balance the rates impact with a move to a user pays model as well as additional income from out of District waste if possible (such as Gisborn District Council).

Programme	Funding Mechanism
Opex	Funded through general rates, income received from user charges at the Wairoa Landfill and the waste disposal levy
Capital Renewals	Provided by rates
Capital New Works	Funded by loans

8.4.2 FUTURE FUNDING STRATEGY

Capital costs to improve waste diversion facilities can attract funding from the Waste Levy Rebate from Ministry for the Environment. Wairoa District Council's intention is to seek this external funding. We have been successful in the past through the waste levy contestable fund.

Capital works can also be funded by rates or loans as stated.

IMPROVEMENT ITEM – As outlined in the Levels of Service Section, a full options analysis of the future service provision should be completed, to assess the Levels of Service required and various options for meeting these. This would include full cost accounting assessment of:

- Options and costs for replacement of the existing landfill facility once it meets capacity
- Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill, sharing the cost of operation and renewal of the landfill facility.
- Options to send waste to a bigger facility outside of the District.

8.5 ASSUMPTIONS & CONFIDENCE LEVELS

8.5.1 FINANCIAL ASSUMPTIONS

The assumptions upon which the financial needs are based include the following:

- Based on 2021/31 LTP budgets
- Operational and capital forecasts are inflated
- Based on the existing legislation, service levels and no growth
- Based on information available and provided by Council's Property Manager
- The order of priority or call on funds by Council is generally:
 - Operations and Maintenance
 - Renewals
 - New works for service level improvement
 - New works for growth.

8.5.2 CONFIDENCE OF FINANCIAL FORECASTS

Considering the assumptions made in deriving the future financial needs of the service and asset needs and the historical levels of expenditure for the activity, the reliability of the financial forecast to deliver the current Level of Service is assessed as follows.

Information Type	Degree of Confidence	Comments
Expenditure Projections	Medium	<p>The operational projections are largely based on historical operational budgets and the current Lump Sum Operations contract with Smart Environmental.</p> <p>Renewals projections are based on limited asset age and condition data and are not considered as robust as operational expenditure costs. They do give an indication of the timing and magnitude of cost.</p> <p>Capital and Upgrade costs are rough order costs only.</p>
Asset Values	Low	Asset values are based on the 2011 asset valuation. It has been identified that as an improvement project to revalue the waste management assets.
Depreciation	Low	The assessment of useful lives and the calculation of depreciation expense are undertaken with the asset valuation.
Funding Sources	Medium	Most capital renewal expenditure will be funded by depreciation reserves. Opex is funded by rates and user charges. The funding model may change as noted above.

9. PLAN IMPROVEMENT AND MONITORING

9.1 OVERVIEW

9.1.1 ASSET MANAGEMENT PRINCIPLES

As outlined in our Council 'Introduction to Asset Management Plans', key principles of infrastructure asset management practice that we are guided by are:

- Providing a defined Level of Service and monitoring performance
- Managing the impact of demand changes (growth as well as decline) through demand management, infrastructure investment and other strategies
- Taking a lifecycle approach to development cost-effective management strategies for the long term that meet that defined Level of Service
- Identifying, assessing and appropriately controlling risks
- Having a long term financial plan which identifies required expenditure and how it will be funded.

Our Asset Management Policy outlines that a **'Core' level of asset management advancement is required for the waste**

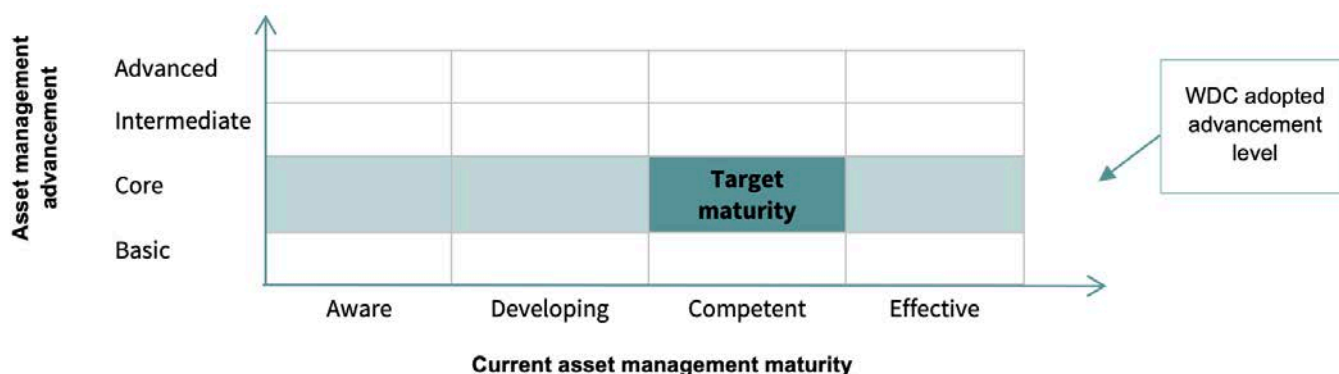
management activity. This approach is consistent with the guidance provided in the International Infrastructure Management Manual (IIMM, 2015).

Core maturity represents custodial responsibilities identified in the National Asset Management Framework and the IIMM and comprises minimum requirements on:

- Record and report on the state of all assets to the community;
- Meet current statutory reporting requirements;
- To enable Council through information to understand the cumulating impact of decisions;
- Ensure community safety.

9.1.2 ASSET MANAGEMENT MATURITY

In early 2020, we commissioned WSP to complete a review of our asset management maturity to assess how well we are delivering on our asset management policy, to achieve a 'Core' level of asset management practice. Our aim is to become 'Competent' within our adopted level of advancement as shown below.



For the waste management activity areas, asset management maturity is 'Developing'. While waste management is considered a

key service provided to the community, this activity only accounts for approximately 1-2% of the total replacement value of Council's assets, so it is appropriate for asset management practices to be less developed. However, in order for Wairoa District Council to most efficiently manage their assets to provide these services to the community, as a minimum improved knowledge of assets and their lifecycle requirements is required to meet 'Core' asset management practice level.

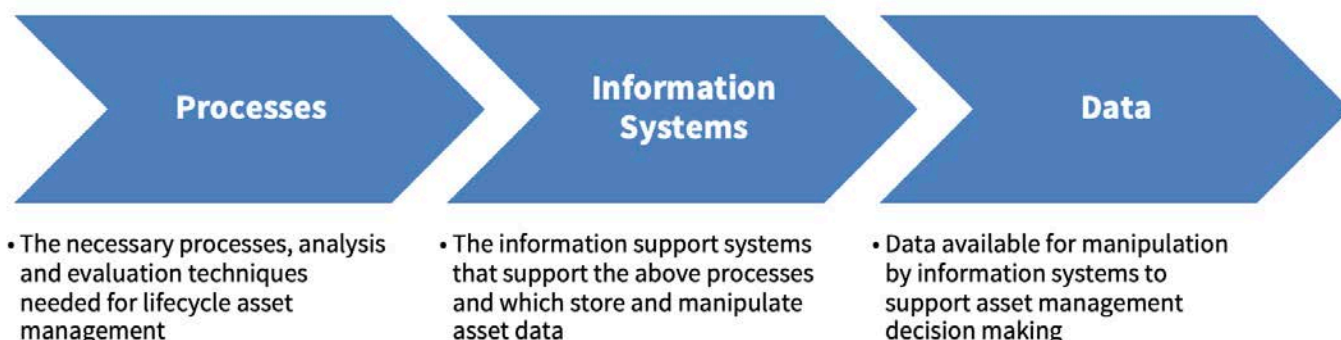
DESIRED LEVEL OF ASSET MANAGEMENT PRACTICES

Asset management processes need to be fit for purpose. For the Waste Management Activity, Core level asset management is appropriate. It is important that compliance requirements are met, and therefore it is important to continue moving towards a "Competent" Core level. This would enable Council to better manage the sustainability and long term whole of life cost of providing a fit for purpose waste management service.

Implementation of this improvement programme will contribute to meeting this desired increased asset management capability.

9.2 ASSET MANAGEMENT PRACTICES

This section discusses the status of Council's current Asset Management practices and identifies practices the organisation wishes to use. The key Asset Management practices can be grouped into three broad areas.



9.2.1 PROCESSES

INVESTMENT DECISION MAKING

In early 2020, we commissioned WSP to complete a review of our investment decision making processes. As part of this review a new Investment Decision Making Process has been developed for use across all Service Areas. This process includes the use of specific project 'criteria' to evaluate the relative priority of capital renewals and improvement projects. This is a form of **Multi-Criteria Analysis**. These criteria are meant to consistently score projects across all the things that are important to Wairoa District Council. This aids decision makers to prioritise projects for both the medium and short term.

The following four criteria have been identified for prioritising renewals and capital improvement projects:

- 1. Strategic Alignment** – How strongly does this project align with Wairoa District Council's vision, community outcomes and/or strategic goals (where applicable)?
- 2. Service Delivery** – How important is this project in contributing to the delivery of Wairoa District Council's core activities and services? Will it contribute to service reliability and meeting customer service level expectations?
- 3. Risk & Criticality** – What is the risk to safety and service reliability if the project is not done?
- 4. Financial Impact** – What is the return on investment or financial benefit? Does the project provide value for money?

Below are the factors considered for each of the four investment decision making criteria.

	High	Medium	Low
Criteria			
Strategic Alignment	Strongly contributes to applicable national drivers AND community outcomes	Some contribution with applicable national drivers AND community outcomes	Limited contribution to national drivers OR community outcome
Service Delivery	Will result in significant improvement in service delivery factors	Will result in moderate improvement in service delivery factors	Will result in minimal improvement in service delivery factors
Risk & Criticality	Extremely/Highly critical asset in very poor/poor condition OR risk level significantly decreased	Critical asset in poor condition OR risk level somewhat decreased	Moderate/low critical asset in very good / good condition OR risk level remains the same or increases
Financial Benefit	High financial benefit (e.g. High NPV for renewals). Lowest lifecycle cost option	Moderate financial benefit when whole of life costs are considered (e.g. positive NPV for renewals)	Limited financial benefit when whole of life costs are considered (e.g. neutral NPV for renewals)

LIFECYCLE MANAGEMENT PLANNING & REPORTING

Process	Description
Consent Monitoring	<ul style="list-style-type: none"> Consent compliance requirements managed through maintenance contract. Monitoring of consent conditions completed by Council.
Operational programming	<ul style="list-style-type: none"> Day to day inspections and landfill operation is managed by maintenance contractor through Lump Sum contract
Maintenance Planning	<ul style="list-style-type: none"> Managed by maintenance contractor through Lump Sum contract
Forward Work Programmes	<ul style="list-style-type: none"> No formal forward work programme for renewals

IMPROVEMENT ITEM: The last formal valuation was completed in 2012 and is out of date. An updated formal asset valuation to be completed to understand financial risk and potential renewals requirements in future.

STANDARDS & GUIDELINES

Process	Description
Design	<ul style="list-style-type: none"> Compliance with all relevant technical standards including NZS 4404
Maintenance & Operations	<ul style="list-style-type: none"> Compliance with Council's maintenance specifications.
Materials	<ul style="list-style-type: none"> Selection of materials to comply with industry best practice as well as all relevant standards including NZS4404, contract specifications and policies

9.2.2 INFORMATION SYSTEMS

A summary of Council's existing asset management systems are included below.

Process	Description
AssetFinda	AssetFinda is Council's primary asset register for Waste Management activities. It stores asset attributes, and other limited other details, including condition, criticality, and installation date. To date there is limited data included in AssetFinda for waste management assets, with preliminary asset data added in November 2020.
Financial Information System	NCS is the software used as the Financial Information Systems. Long term financial decisions are based on the development of 10 year plans as part of the LTP process. These 10 year plans are updated every three years on a cycle linked to the development of this AMP.
Capital Works Programming	Estimates of project costs, timing, asset capacity and funding sources are developed using Microsoft Excel by the Property Manager with assistance from consultants and the maintenance contractor. These programmes are managed and updated by the Property Manager.

Process	Description
Work Management Systems	Council's operations and maintenance contractor has appropriate systems for scheduling of all works, including routine maintenance, operations and replacements. All required preventative, corrective and breakdown maintenance information is recorded and linked to the assets that work is to be carried out on.
Customer Service Request (CSR) System	CSRs are raised by the public or internal departments within Council. They are forwarded onto the appropriate personnel, either Council staff or direct to the operations and maintenance contractor with the relevant response times.
Asset Risk Register	The current risk register is out of data and requires review. The current risk framework requires consolidation for consistency across all Council activities.

9.2.3 DATA

Types of data and information held by Council and details of existing data sets are included below. Legend indicates completeness of data set as follows:

No existing data set Partial data set Full data set

Type of Asset Information	Description	Existing Data Sets	Data Collection Approach
Inventory	The various attributes of the assets e.g. location, classification, asset ID number, size (width, thickness, length, etc.), type, material, date of construction, and date of major renewal or upgrades.	AssetFinda (not all assets & attributes included)	
Condition	The condition rating of each asset. This also includes the date when the condition rating was measured. The results from the various inspections that are undertaken, including what was inspected and the methodology used during inspection.	AssetFinda (visual condition only for some assets)	
Operations & Maintenance	Information on the activities completed to ensure assets are functioning correctly, including inspections, date and type of maintenance work completed, works order prioritization and management.	Contractor's records	
Utilisation	Ratio of the time a service (system or component) is functional to the total time; service capacity versus utilisation requirements.	Weighbridge records	
Lifecycle Planning	Information on asset lifecycle processes including acquisition, commissioning and handover, renewal interventions for assets (e.g. replacement), and disposal.		
Financial	Information on costs related to build/acquire, maintain and renew assets, e.g. design, labour, material, cost of managing contracts.	Financial system	Information collected through Capital projects completion records.
Valuation	Asset valuation to establish current replacement and depreciated replacement costs.	No formal record, needs updating	
Risk	Information on risk management related to existing assets, including data supporting risk identification, mitigation, mitigation costs.	Spreadsheet, needs updating	
Performance	Information on how assets are meeting regulatory requirements. Tracking inspections, and certification for assets that require it.	Spreadsheets	

IMPROVEMENT ITEM – Capture all asset data, including key asset attributes in AssetFinda. Formalise a process for future asset data collection.

9.3 HOW EFFECTIVENESS OF AMP WILL BE MONITORED

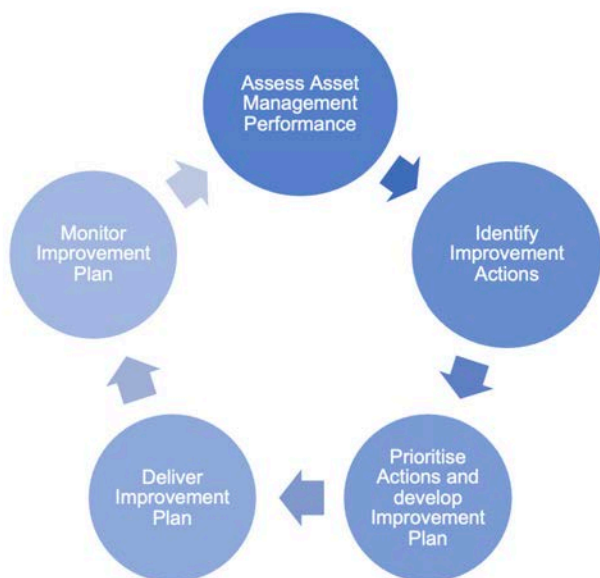
The AMP is a living document and needs to be kept current and relevant. It is recognised that priorities will change which makes

review activities even more important to ensure this plan is a live document. The following review activities will be undertaken.

Frequency	Review Task	Action	Document/Report	Audience
Three Yearly	AMP Development (including Peer Review)	Formally review to assess adequacy and effectiveness Formal adoption of the plan by Council	Waste Management Activity Management Plan	Property Manager, Community Services & Assets Manager, LTP team, Council and Audit New Zealand
Annually	AMP Improvement Plan Review (internal)	Tracking the progress of implementing the improvement programme	Internal report	Property Manager and Community Services & Assets Manager

9.4 IMPROVEMENT PLAN

A key feature in Council's Asset Management system is continuous improvement. This is essential to ensure the asset management system and services are effectively managed. Through the initiatives presented in this section, Council is committed to appropriate asset management practices. Council is committed to delivering the most appropriate Levels of Service balanced with affordability and good industry practice.



Details of future improvements required and a timeframe for these improvements is included in the table below. Implementation of this Improvement Plan will also provide a framework from which the AMP can be developed to meet all the requirements of a core asset management system.

Key improvement programmes and associated projects have been developed through a review of the gaps in developing this AMP and issues identified. The three year improvement programme is summarised below.

9.4.1 IMPROVEMENT MONITORING

The Improvement Plan addresses short-term priorities because the effects of those actions must be monitored before medium and long term improvement plans can be put in place.

Undertaking a review of the Improvement Plan, in terms of comparing progress to the proposed timeframes etc., will affect the introduction of a programme of performance reporting, auditing and reviews of the AMP.

While no extensive monitoring programme has been put in place at this time, it is proposed to review progress against the plan on a six-monthly basis with the mid-year report being an interim look at progress year to date, while the Annual Report will be a more formal review of the Improvement Plan.

Improvement Area	Item No.	Description	Action	Resource	Indicative Framework	Estimated Cost	Priority	Status
Levels of Service	1	Consent Monitoring	Currently consents have not been regularly monitored to ensure their conditions are being met. A formal ongoing monitoring process with an external provider should be implemented for both the operational and closed landfills to ensure consent conditions are being monitored and reported on annually.	To be confirmed	2020/21 (annual programme required)	\$95,000 (total cost per year)	High	New item
	2	Landfill Service Sustainability Review	<p>A full options analysis of the future service provision should be completed, to assess the Levels of Service required and various options for meeting these. This would include full cost accounting assessment of:</p> <ul style="list-style-type: none"> Options and costs for replacement of the existing landfill facility once it meets capacity Opportunities for Council to work in partnership with Gisborne District Council to take their waste to the Wairoa Landfill. Options to send waste to a bigger facility outside of the District. 	External Consultant	2021/22	\$30,000	High	New item

Improvement Area	Item No.	Description	Action	Resource	Indicative Framework	Estimated Cost	Priority	Status
Asset Data	3	Asset Inventory	Develop a data collection programme and complete asset inventory for the waste management activity, including key attributes such as install date, condition and criticality.	To be confirmed	2020/21	\$10,000	High	Initial data capture completed Nov 2020
	4	Landfill Capacity	Annual Landfill survey to monitor the remaining usable life of the current Wairoa Landfill. Spatial information will provide an accurate platform to calculate the remaining airspace volume and double as an as built of the landfill at a date in time.	External consultant	2021/22	\$5,000 (per year)	High	Initial survey completed Nov 2020
	5	Asset Valuation	The last formal valuation was completed in 2012 and is out of date. An updated formal asset valuation to be completed to understand financial risk and potential renewals requirements in future.	External Consultant	2023/24	\$10,000	Medium	
Risk & Resilience	6	Risk Register	There is a need for full review of the Waste Management Risk Register to ensure risk issues have been adequately identified and ensure that current high risks are still relevant.	To be confirmed	2021/22		High	
	7	Emergency Response Plans	To improve the resilience Level of Service delivery, Emergency Response Plans need to be developed. The plan will cover the effects of moderate and significant events on vulnerable and critical assets.	To be confirmed	2022/23		Medium	
Lifecycle Management	8	Service Delivery Contracts	Ensure formal contracts are in place with all external service providers.	Wairoa District Council Property Team	2021/22		High	

GLOSSARY

Acronym	Definition
AMP	Activity Management Plan
AMS	Asset management system
BCP	Business Continuity Plans
ETS	Climate Change (Emissions Trading) Amendment Act 2008
GDC	Gisborne District Council
HSNO	Hazardous Substances and New Organisms Act
HSWA	Health and Safety at Work Act 2015
IIMM	International Infrastructure Management Manual
IPCC	International Panel on Climate Change
LCMP	Lifecycle Management Plans
LGA	Local Government Act
LMP	Landfill Management Plan
LOS	Levels of Service
LTP	Long Term Plan
MfE	Ministry for the Environment
NAMS	New Zealand Asset Management Support
NES	National Environmental Standards
RFS	Request for Service
RMA	Resource Management Act
WMA	Waste Minimisation Act 2008
WMMP	Waste Management and Minimisation Plan

This glossary is generally consistent with the International Infrastructure Management Manual Glossary (refer reference), which contains a larger range of items. The following terms and acronyms (in brackets) may be used in this Asset Management plan.

Activity	An activity is the work undertaken by Council to support and/or deliver services to the community. In the context of infrastructural assets, it is the work undertaken on an asset or group of assets to achieve a desired outcome.
Advanced Asset Management	Asset management, which employs predictive modelling, risk management and optimised renewal decision-making techniques to establish asset lifecycle treatment, options and related long term cashflow predictions. (See Basic Asset Management)
Annual Plan	The Annual Plan provides a statement of the direction of Wairoa District Council and ensures consistency and co-ordination in both making policies and decisions concerning the use of Wairoa District Council resources. It is a reference document for monitoring and measuring performance for the community as well as Council itself.
Asset	A physical component of a facility, or a collective or network of physical assets, which has value, enables services to be provided and has an economic life of greater than 12 months
Asset Management (AM)	The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required Level of Service in the most cost-effective manner.
Asset Management Plan (AMP)	A plan developed for the management of one or more infrastructure assets that combines multi-disciplinary management techniques (including technical and financial) over the lifecycle of the asset in the most cost-effective manner to provide a specified Level of Service. A significant component of the plan is a long term cash flow projection for the activities.
Asset Management System	A system (usually computerised) for collecting analysing and reporting data on the utilisation, performance, lifecycle management and funding of existing assets.
Asset Management Team	The co-ordinator or team appointed by an organisation to review and monitor the corporate asset management improvement programme and ensure the development of integrated asset management systems and plans consistent with organisational goals and objectives.
Asset Register	A record of asset information considered worthy of separate identification including inventory, historical, financial, condition, construction, technical and financial information about each.
Capital Expenditure (CapEx)	Expenditure used to create new assets or to increase the capacity of existing assets beyond their original design capacity or service potential. CAPEX increases the value of an asset. Expenditure falls into two main categories Operational (or expensed) cost and CAPEX.
Components	Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.
Condition Monitoring	Continuous or periodic inspection, assessment, measurement and interpretation of resulting data, to indicate the condition of a specific component so as to determine the need for some preventive or remedial action.
Core Asset Management	Asset management which relies primarily on the use of an asset register, maintenance management systems, job/resource management, inventory control, condition assessment and defined Levels of Service, in order to establish alternative treatment options and long term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than risk analysis and optimised renewal decision making).
Council	Wairoa District Council.
Critical Assets	Assets for which the financial, business or service levels consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.
Current Replacement Cost	The cost of replacing the service potential of an existing asset, by reference to some measure of capacity, with an appropriate modern equivalent asset.
Depreciated Replacement Cost (DRC)	The replacement cost of an existing asset after deducting an allowance for wear or consumption to reflect the remaining economic life of the existing asset.

Depreciation	The wearing out, consumption or other loss of value of an asset whether arising from use, passing of time or obsolescence through technological and market changes. It is accounted for by the allocation of the historical cost (or revalued amount) of the asset less its residual value over its useful life.
Disposal	Activities necessary to dispose of decommissioned assets.
Economic Life	The period from the acquisition of the asset to the time when the asset, while physically able to provide a service, ceases to be the lowest cost alternative to satisfy a particular Level of Service. Economic life is at the maximum when equal to the physical life however obsolescence will often ensure that the economic life is less than the physical life.
Facility	A complex comprising many assets (e.g. a hospital, wastewater treatment plant, recreation complex, etc) which represents a single management unit for financial, operational, maintenance or other purposes.
Infrastructure Assets	Stationary systems forming a network and serving whole communities, where the system as a whole is intended to be maintained indefinitely at a particular Level of Service potential by the continuing replacement and refurbishment of its components. The network may include normally recognised 'ordinary' assets as components.
Level of Service (LOS)	The defined service quality for a particular activity (e.g. Parks and Reserves) or service area (e.g. playgrounds) against which service performance may be measured. LOS usually relate to quality, quantity, reliability, responsiveness, environmental acceptability and cost.
Life	A measure of the anticipated life of an asset or component; such as time, number of cycles, distance intervals etc.
Life Cycle	Life cycle has two meanings: a) The cycle of activities that an asset (or facility) goes through while it retains an identity as a particular asset i.e. from planning and design to decommissioning or disposal. b) The period of time between a selected date and the last year over which the criteria (e.g. costs) relating to a decision or alternative under study will be assessed.
Life Cycle Cost	The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
Long Term Plan (LTP)	The LTP provides a formal and public statement of Council's intentions regarding the parks and reserves activity over a period of not less than 10 consecutive financial years and provides for more community vision for the District.
Maintenance	All actions necessary for retaining an asset as near as practicable to its original condition, but excluding rehabilitation or renewal.
Maintenance Standards	The standards set for the maintenance service, usually contained in preventive maintenance schedules and specifications, operation and maintenance manuals, codes of practice, estimating criteria, statutory regulations and mandatory requirements, in accordance with maintenance quality objectives.
NAMS	The National Asset Management steering Group responsible for the International Infrastructure Management Manual (IIMM). Also known as the NAMS manual
New Work	Works, which create new assets or increase the capacity of existing assets beyond their original design capacity or service potential. New Work increases the value of the asset.
Objective	An objective is a general statement of intention relating to a specific output or activity. They are generally longer-term aims and are not necessarily outcomes that managers can control.
Operation	The active process of utilising an asset that will consume resources such as manpower, energy, chemicals and materials. Operation costs are part of the life cycle costs of an asset.
ODRC	Optimised Depreciated Replacement Cost – the depreciated value of the optimised replacement cost – used in determining optimised depreciated value.
ORC	Optimised Replacement Cost – the cost of replacing an existing asset with a more appropriate less expensive alternative – used in determining replacement value.

Redundant	A system is redundant if it has a component, which, if it fails does not result in a complete loss of service, e.g. if one of two swings breaks, the service remains operational but at a 'reduced capacity.'
Renewal	Works to upgrade, refurbish, rehabilitate or replace existing facilities with facilities of equivalent capacity or performance capability.
Replacement	The complete replacement of an asset that has reached the end of its life, so as to provide a similar, or agreed alternative, Level of Service.
Risk Management	The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.
Strategic Plan	Strategic planning involves making decisions about the long term goals and strategies of an organisation. Strategic plans have a strong external focus, cover major portions of the organisation and identify major targets, actions and resource allocations relating to the long term survival, value and growth of the organisation.
Upgrading	The replacement of an asset or addition/replacement of an asset component, which materially improves the original service potential of the asset.
Valuation	Estimated asset value, which may depend on the purpose for which the valuation is required, i.e. replacement value for determining maintenance levels or market value for life cycle costing.

APPENDIX 1: ACTIVITY RISK REGISTER

Wairoa District Council - Waste Management Services Activity Risk Register for 2018 AMP

Covers Wairoa landfill, closed landfills, diversion facility weighbridge (as at 28/11/17)

Asset Management Area	Risk	Cause	Gross Risk Analysis				Controls (any existing policy, procedures, etc)	
			Likelihood	Impact/Consequences	Gross Risk	Risk Assessment		
General	Fines due to consent breach	Inadequate implementation of controls	3	3	9	Moderate	Landfill Management Plan (LMP) and resource consent compliance auditing	
H&S practices (landfill)	Public or personnel incident resulting in ill health, injury or death	Explosion due to combustible atmosphere	3	5	15	High	LMP and contractor's confined space procedure	
	Public or personnel incident resulting in ill health, injury or death	Contact with contaminated material	3	5	15	High	Staff inoculations Asbestos handling procedures	
	Public or personnel incident resulting in ill health, injury or death	Exclusion zones improperly enforced resulting in fall from height or interface between pedestrians and heavy machinery	3	5	15	High	Contractor's health and safety plan including traffic management plan	
Management practices (landfill)	Cost of landfill operation becomes unaffordable	One or more best practice landfill management practices currently not being undertaken are enforced. For example daily cover installment. Wairoa's population declines	3	4	12	High	The current consent conditions are being followed and these do not include the requirement for cover installation	
Site practices (landfill)	Public complaints due to increased odour or vermin	Controls implemented to manage risk are inadequate	3	3	9	Moderate	Controls in place under existing contract to control risks including bait stations and waste acceptance criteria	
	Consent breach at Wairoa landfill due to leachate overload	Change in wastewater treatment plant consent impacts the nutrient load limits. Current stormwater separation at landfill is incapable of mitigating risk.	3	4	12	High	Current separation controls are sufficient for current consent conditions	
	Fire damage to property specifically neighbouring Council owned forestry block	Landfill control operations not sufficient to mitigate the risk	4	4	16	Critical	Contractor and fire service on standby to combat as necessary	
	Alternative means of disposal or storage of recyclables required	Market for recyclables drops off	3	3	9	Moderate	Space at landfill as used previously	
	Landfill becomes unavailable	Fire, flood or other disaster	2	4	8	Moderate	Waste would be sent to alternative location	
Environmental Management practices (closed landfills)	Breach of discharge to land or air consent	Lack of reliable maintenance suppliers for aspects of closed landfill operations; asset maintenance limited to adhoc repairs leading to asset failure	3	3	9	Moderate	Contractor engaged to undertake routine maintenance (CONFIRM)	
Management practices (closed landfills)	Environmental or health and safety incident	Inadequate monitoring of sites to assess risk and respond to changing conditions for example weather events or new activities	3	3	9	Moderate	Contractor engaged to undertake routine maintenance (CONFIRM)	

	Mitigation Strategies	Status Update	Overall Residual Risk Analysis				How will risk and Control be Monitored			Date updated
			Likelihood	Impact	Residual Risk	Risk Assessment	Department	Owner	Frequency of Review	
	Respond to feedback resulting from audits and reviews. Update LMP to accurately reflect site practices	Update LMP by 31/10/2018 Several proposals have been made for example cover installation, gas monitoring and stormwater control which would reduce the risk of consent breach	3	3	9	Moderate	Engineering	Property Manager	Biannually	9-Oct-17
	Review Confined Space Entry procedure and policy. Ensure all confined spaces are recorded and clearly labeled.	Current confined space procedures to be reviewed by 31/10/2018	2	5	10	Moderate	Engineering	Property Manager	Biannually	9-Oct-17
	Reviewing asbestos handling procedures to ensure immediate burial of asbestos-containing material	Current immunisation status and asbestos handling procedures to be reviewed by 31/03/2018	2	5	10	Moderate	Engineering	Property Manager	Quarterly	9-Oct-17
	Review exclusion zone procedures to ensure they are appropriate for protecting the public and staff from the significant hazards that exist at the tipping wall and as a result of moving machinery	Current exclusion zone procedures to be reviewed by 31/03/2018	2	5	10	Moderate	Engineering	Property Manager	Quarterly	9-Oct-17
	Regular review of the level of control in place to manage the risk	Review of controls scheduled for completion by 31/03/2018	3	4	12	High	Engineering	Property Manager	Quarterly	9-Oct-17
	Regular review of the level of control in place to manage the risks	Review of controls scheduled for completion by 31/03/2018	3	2	6	Moderate	Engineering	Property Manager	Biannually	9-Oct-17
	Quantify the volume and composition of the current leachate. Work towards greater separation when appropriate and develop a plan form improvement.	Wairoa WWTP consents is due for renewal. Monitor status of consent update. Quantify volume and composition of leachate by 31/10/2018	3	4	12	High	Engineering	Property Manager	Quarterly	9-Oct-17
	Regular review of the level of control in place to manage the risk of fire	Review of controls scheduled for completion by 31/03/2018	2	4	8	High	Engineering	Property Manager	Quarterly	
	Regular review of the level of control in place to manage the risk of excess recyclables for disposal or storage	Review of alternative storage facilities to be carried out by 31/10/2018	2	2	4	Low	Engineering	Property Manager	Biannually	9-Oct-17
	Formalise agreement with alternative disposal site e.g. Omarunui or other landfill	Agreement with alternative site to be finalised by 31/10/2018	2	3	6	Moderate	Engineering	Property Manager	Biannually	9-Oct-17
	Regular site inspections (e.g. pre and post winter) Maintenance contractor on standby to respond if required	Review applicability or current arrangement by 31/10/2018	2	2	4	Low	Engineering	Property Manager	Biannually	9-Oct-17
	Regular site inspections (e.g. pre and post winter) Maintenance contractor on standby to respond if required	Review applicability or current arrangement by 31/10/2018	2	2	4	Low	Engineering	Property Manager	Biannually	9-Oct-17

