

Solid Waste Asset Management Plan



Ōpōtiki District Council
STRONG COMMUNITY STRONG FUTURE

1. Introduction

1.1 Council Overview

Ōpōtiki district is bounded on one long side by the eastern half of the Bay of Plenty embayment of the Pacific Ocean and on the other long side by the Raukumara mountain range which rises to 1754 m at Mt. Hikurangi. The largest town in the district is Ōpōtiki and the largest river is the Motu river. The economy is driven primarily by agriculture with over 400 farms amounting to a total area of 75,660 hectares.



- Ōpōtiki District encompasses an area of **310,100** hectares.
- 3 major waterways** (Motu River, Otara River and the Waioeka River).
- 10,400** (estimated population at 30 June 2022).

1.2 Community Outcomes

The draft vision for waste management and minimisation in the Ōpōtiki Region is:

“Taking action towards a circular economy”

The draft goals for waste management and minimisation in the Ōpōtiki district are :

- 1. Collective responsibility for our resources and where they end up
- 2. Enabling systems to support the reuse, reduction and recycling of materials
- 3. Collaborate and innovate for a circular economy

1.3 Challenges

- 1. Resources, including recruitment of skilled staff has been a challenge, especially in asset management, project management, and operations.
- 2. Each of the RRC’s are undergoing resource consenting at the time of publishing. Obtaining new consents in a timely manner is a constraint on project delivery and is also a key risk to overall service provision.
- 3. Council has a relatively small population and therefore rates base, which makes funding Solid Waste services difficult.
- 4. Lack of basic asset data and condition assessments along with embedded asset management process for Solid Waste has meant that historically investment into the activity (particularly proactive renewals) has been below what is required. Understanding our assets better, how to manage them more effectively and make more informed decisions is a key challenge and opportunity for Solid Waste.

1.4 Key Facts and Figures

	Area	3,089 km ²
	Population	10,550 - (2023)
	Residential properties	4,239 - (2018)
	Non-residential properties	0 - (2018)

Waste per capita	
Total waste to Class 1 landfill (tonnes 2022/23 year), note: Council operations only	2,424
Tonnes / capita / annum of waste to Class 1 landfills	0.230

1.5 Data Confidence and Reliability

Dataset	Asset Register	Asset Valuations	Asset Condition	Asset Criticality	LOS	Performance measures	Resource Consents	Demand Projections	Risk and Resilience	CAPEX Forecast	OPEX Forecast	Renewals
Solid Waste	E	E	D	E	D	C	C	D	D	C	C	D
A - Very HighB - HighC - MediumD- LowE - Very Low												

Overall Rating for ODC is D (Low) - Data based on uncertain records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolation from a limited sample for which A or B data is available. The activity has an out of date and incomplete asset register with little to no supporting condition assessments. Most of the expenditure forecasting has been developed based on staff experience and knowledge of the service and associated assets.

2. Partnerships and stakeholders

2.1 Mana Whenua Engagement

Ōpōtiki District Council recognises mana whenua and the important role Māori play in Council’s decision-making processes and aim to build and grow mutually beneficial, positive relationships with iwi and hapū situated within the Ōpōtiki District.

On 27 May 2023 the signing of Te Whakatōhea’s deed settlement occurred. Te Whānau a Apanui also initialled a deed of settlement in late 2023, and Ngai Tai have begun their treaty settlement process also. These are historic milestones for the rohe and Council looks forward to playing a supporting role for our district’s Iwi.

The aspirations of our local iwi and opportunities enabled by settlement will play a significant role in the development and growth of the Ōpōtiki district over the next ten years. Currently we engage with iwi on an as required basis as there is no formalised partnership yet between Council and iwi.

2.2 Key Customers and Stakeholders

The Solid Waste activity exists to meet the needs and requirements of customers, partners and key stakeholders. The table below identifies the areas of interests, expectations and involvement of the various groups.

Customers / Stakeholders	Area of Interest	Expectations
Domestic customers	Kerbside collection	Regular on time kerbside collection
	RRCs	Availability of RRC service and opening hours
	Public litter	
Commercial and industrial customers	RRCs	Availability of RRC service and opening hours Resource recovery material types accepted
Iwi	Kaitiakitanga and mauri Iwi & Hapū cultural heritage	Land and environment to be respected and mauri of the land to be protected and enhanced
Bay of Plenty Regional Council	RRCs and other consented services	Administers and enforces effective resource management in the Bay of Plenty region. Applications are processed through Bay of Plenty Regional Council.
Ministry for the Environment	Compliance with broader waste legislation	Sets standards for waste management and minimisation in New Zealand
	Collection of waste levy	
Ministry of Health	Compliance with relevant health legislation	Waste management and minimisation plans to be approved by Medical Officer of Health
Audit New Zealand	Compliance and financial regulation	Carries out annual audits of Council on the Auditor-General’s behalf to give ratepayers assurance that Council is appropriately reporting on how they spend public money and on the services they have provided.
Elected Members; Committees; CEO, Management and Staff	Performance and management of services	Key internal stakeholders responsible for the management and operation of the Three Waters system.

3. Our services and assets we manage

3.1.1 Ōpōtiki Town RRC

The Resource Recovery Centre (RRC) located at 38 Wellington Street in Ōpōtiki township provides the following services:

- A wide range of recyclable and recoverable materials,
- Residual waste,
- Household hazardous waste,
- Green waste.

The main assets on site are:

- Main sorting building
- New weighbridge
- Building facilities
- Bailer / compactor building
- Bailer / compactor – general
- Bailer – tin and can
- Conveyor / sorter
- Hoists
- Storage bays
- Greenwaste bays
- Hardstand pavement
- Hardstand gravel
- Fencing and security system



3.1.2 Te Kaha RRC

The Resource Recovery Centre (RRC) located on Copenhagen Road in Te Kaha provides the following services:

- Recyclable and recoverable materials,
- Residual waste,
- Household hazardous waste,
- Green waste.

The main assets on site are:

- Main sorting building
- Building facilities
- Sorting tables and small bins
- Portable bins
- Storage bays
- Hardstand pavement
- Fencing



3.1.3 Waihou Bay RRC

The Resource Recovery Centre (RRC) located on Orete Forest Road in Waihou Bay provides the following services:

- Recyclable and recoverable materials,
- Residual waste,
- Household hazardous waste,
- Green waste.

The main assets on site are:

- Main sorting building
- Building facilities
- Sorting tables and small bins
- Portable bins
- Storage bays
- Hardstand gravel
- Fencing



3.2 State of the assets

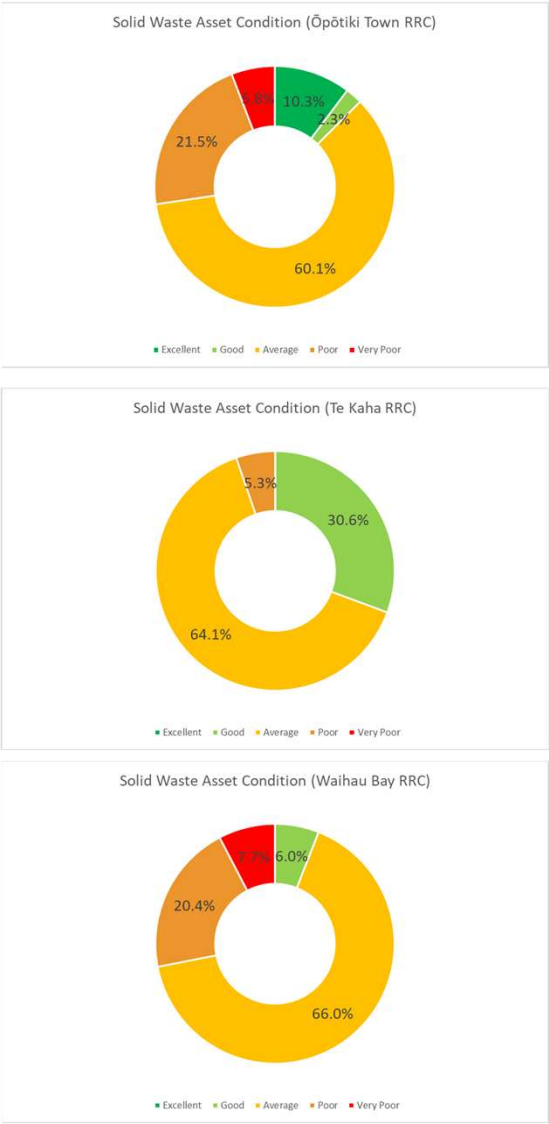
Asset Quantity and Values

Location	Asset	Replacement Value
Ōpōtiki Town RRC	Bailer - tin and can	\$120,000
Ōpōtiki Town RRC	Bailer / compactor - general	\$280,000
Ōpōtiki Town RRC	Storage bays (existing)	\$360,000
Ōpōtiki Town RRC	Fencing	\$190,000
Ōpōtiki Town RRC	Hardstand (pavement for existing bays)	\$590,000
Ōpōtiki Town RRC	Hoist (glass)	\$90,000
Ōpōtiki Town RRC	Miscellaneous	\$105,000
Ōpōtiki Town RRC	Security system	\$35,000
Ōpōtiki Town RRC	Bailer / compactor building	\$55,000
Ōpōtiki Town RRC	Building facilities	\$100,000
Ōpōtiki Town RRC	Main building	\$3,000,000
Ōpōtiki Town RRC	Conveyor/sorter	\$45,000
Ōpōtiki Town RRC	Stormwater drainage	\$100,000
Ōpōtiki Town RRC	Hardstand (gravel)	\$80,000
Ōpōtiki Town RRC	Hardstand (pavement for entrance and turning areas)	\$485,000
Ōpōtiki Town RRC	Hoist (plastics)	\$90,000
Ōpōtiki Town RRC	Greenwaste bays	\$115,000
Ōpōtiki Town RRC	Hardstand (greenwaste gravel pavement)	\$40,000
Ōpōtiki Town RRC	Roller doors	\$140,000
Ōpōtiki Town RRC	Weighbridge	\$150,000
Te Kaha RRC	Hardstand (pavement for existing bays)	\$120,000
Te Kaha RRC	Miscellaneous	\$79,500
Te Kaha RRC	Storage bays (existing)	\$95,000
Te Kaha RRC	Building facilities	\$70,000
Te Kaha RRC	Main building	\$1,000,000
Te Kaha RRC	Fencing	\$50,000
Te Kaha RRC	Hardstand (pavement for entrance and turning areas)	\$310,000
Te Kaha RRC	Roller doors	\$70,000
Waihau Bay RRC	Fencing	\$45,000
Waihau Bay RRC	Miscellaneous	\$45,000
Waihau Bay RRC	Storage bays (existing)	\$90,000
Waihau Bay RRC	Building facilities	\$50,000
Waihau Bay RRC	Main building	\$500,000
Waihau Bay RRC	Hardstand (pavement for entrance and turning areas)	\$230,000
Waihau Bay RRC	Hardstand (pavement for existing bays)	\$145,000
Waihau Bay RRC	Roller doors	\$70,000
All sites	TOTAL	\$9,139,500

Condition of Critical Assets

There is currently no or limited data on the condition of critical assets at each RRC. An allowance for investment in collecting reliable data as well as a criticality assessment is included in operational projects. In general, the most critical assets are the buildings themselves and the key plant involved in sorting and compaction of the material.

Asset Condition



List of Critical Assets

1. Main building, Ōpōtiki Town RRC
2. Main building, Te Kaha RRC
3. Main building, Waihau Bay RRC
4. Tin and can bailer, Ōpōtiki Town RRC
5. General bailer / compactor, Ōpōtiki Town RRC
6. Conveyor / sorter, Ōpōtiki Town RRC

Commentary

We recognise that we are at the beginning of our asset management journey for Solid Waste. As such, our first objective is to gather good data on the assets we currently have and formally assess the condition of all our assets. Our interim desktop assessment of asset condition shows that much of the asset base is in an average to poor condition, with some key operational assets such as storage bays in a very poor condition. This builds on what staff already know, that ongoing investment is required to keep the activity operational and to meet minimum levels of service.

Historically we have not maintained a robust asset register and have lacked condition data for our assets. As a result, our service to the community relies heavily on staff operator knowledge and experience. The current asset register has been estimated based on an informal snapshot of assets at each RRC and the associated estimated renewal cost. Without readily available asset data the activity has previously operated on a reactive renewals approach. Programming of maintenance and replacement of assets has been difficult given the lack of asset data and asset management processes in the Solid Waste activity.

With investment into data collection and asset management improvements, the Solid Waste activity will be able to continue to deliver a key service to the community into the future – driving better outcomes for the community and ratepayers.

4. Current Level of Service and Performance

- Council currently provides the following services to the community, the performance of which are measured by three KPIs as part of annual reporting:
- Kerbside collection (weekly) within the urban area of the Ōpōtiki township
 - Operation of three Resource Recovery Centres (RRC's) within the wider Ōpōtiki district, which provides facilities for public and commercial operators to dispose of waste and recoverable materials. These are located in:
 - Ōpōtiki township
 - Te kaha
 - Waihau Bay
 - Transport and disposal. Transport from the coastal RRC's to Ōpōtiki township, and final transport to landfill and recycling markets.
 - Waste education and minimisation programmes. In conjunction with the services outlined above, Council funds from time to time an in-school education programme aimed at minimising waste within the community.
 - Public place litter bins. Council own 19 street litter bins within Ōpōtiki CBD area.
 - Litter and illegal dumping monitoring and enforcement.

Council generally achieve the performance targets set out below with the exception that in 2022/23 customer satisfaction rating of the RRC's was below 80%. This is likely reflective of the deteriorating condition of many of the assets at each RRC and matches anecdotal evidence from staff who operate at each location.

Outcome or priority for action	Measure of success	Performance achieved	Performance targets	Performance targets	Performance targets	Performance targets
		2022/23	2024/25	2025/26	2026/2027	2027-2034
Solid Waste facilities and services that meet current and future needs.	Number of justified complaints received about kerbside refuse and recycling collection service. (Note: service conditions outlined on brochure delivered annually)	7	<20	<20	<20	<18
	Customer satisfaction rating of waste transfer stations good or better.	77%	>80%	>80%	>80%	>80%
	Percentage of actions identified in the Waste Management and Minimisation Plan for the year that have been completed. This identifies the total annual actions required. Actions are required within specification and budget.	75%	75%	75%	75%	75%

4. Current Level of Service and Performance

Areas of concern and mitigation options

While the activity generally meets the targets set out in annual reporting, there are areas that have been identified as requiring improvement. These improvements are most likely to be achieved by appropriate investment in timely renewal of aging, poor condition assets as opposed to new level of service improvements. Below is summary of key areas of concern and the proposed mitigation options to either maintain the desired level of service to the community and in some cases, improve this level of service.

Ōpōtiki Town RRC

- Most of the storage bays on site are in a very poor condition leading to spilling of materials into the hardstand / work area, loss of material to the environment through improper containment and cross-contamination of different recyclable materials (particularly glass which results in the end recycler rejecting some glass). The proposed mitigation is to renew the current storage bays and in the long-term future expand the number of, and configuration of, all the storage bays on site. The latter project will be implemented in conjunction with a proposed layout upgrade to the site.
- The main building is in an average condition and based on estimates of its age, is due for replacement in the next 15 years. Any new building presents the opportunity to implement level of service improvements to the layout and operation of the recycling work area.
- The gravel and pavement hardstand area for drop off and loader operation is in a poor condition. The pavement is rutted and cracking, leading to stormwater runoff ponding and general degradation of the site work area. Periodic replacement over the first 10 years of the LTP has been programmed to manage the renewal of work areas over time.
- The RRC was recently affected by flooding in 2023 which highlighted some operational stormwater issues as well as raising the long-term fitness of the site as an RRC. To mitigate this, stormwater drainage renewals are proposed, as well as specific budget to implement compliance with new resource consents and budget to investigate the long-term suitability fit of the current RRC location.

Te Kaha RRC

- The site does not have a dedicated loader machine and therefore has had to borrow/lease this from a local resident. This is less than ideal and presents issues around health and safety and the use of fit for purpose equipment. The purchase of a new loader will mean that the site can effectively perform as required, and secure an asset that will be available in the long term
- All of the storage bays are either undersized or in a very poor condition. These need to be replaced which will in of itself increase the storage capacity of site (as material will be able to be better stacked) and will keep the site clean and tidy, reducing cross-contamination of different recyclable materials.

Waihau Bay RRC

- The site currently only has a gravel hardstand area as a working area for the storage bays. This is in a poor condition and has been scheduled for replacement.
- The RRC building is undersized for the required sorting workstations and covered storage of recyclable materials. A building expansion and associated concrete / pavement hardstand area for portable bins is proposed to provide more working space and a hard-wearing surface for where the steel bins are loaded and unloaded.
- All of the storage bays are either undersized or in a very poor condition. These need to be replaced which will in of itself increase the storage capacity of site (as material will be able to be better stacked) and will keep the site clean and tidy, reducing cross-contamination of different recyclable materials.

5. Planning for the future

5.1 Relevant Strategic Documents

- 1. Waste Assessment 2024 (WA): The Waste Assessment describes the current waste situation, sets the vision, goals, objectives and targets for the districts, and develops options for meeting future demand. The Waste Assessment is reviewed every 10 years and feeds into the development of the WMMP.
- 2. Waste Management and Minimisation Plan 2024 (WMMP): This document outlines how Council will work with residents, homeowners, and businesses to achieve Ōpōtiki’s waste management and minimisation goals and objectives.
- 3. The Regional Waste and Resource Efficiency Strategy (2013 – 2023): This a regional position on managing waste, hazardous substances, hazardous waste and contaminated sites in the Bay of Plenty.



5.2 Demand Drivers

- 1. Landfill costs have risen in the past due to higher environmental standards under the RMA and increasing construction and operation costs. Costs will continue to rise with increases in the Waste Disposal Levy (currently \$20 per tonne, moving to \$60 per tonne in 2024) and costs for landfills associated with the New Zealand Emissions Trading Scheme.
- 2. The Te Rautaki Para Waste Strategy (2023) has provided an increased focus on the circular economy and emission reduction, with an ambitious 2050 roadmap. For the district, this may require funding infrastructure to manage specific material streams, implementing national standardisation of collections, a focus on organic waste, increased data collection and reporting requirements and continuing efforts on developing product stewardship schemes.
- 3. Statutory requirements in the Waste Minimisation Act 2008 to encourage waste minimisation and decrease waste disposal – with a specific duty for TAs to promote effective and efficient waste management and minimisation and to consider the waste hierarchy in formulating their WMMPs. Updates planned to the WMA to support the implementation of the Te Rautaki Para Waste Strategy may affect the approaches driven within Ōpōtiki.
- 4. New regulations surrounding forestry (National Environmental Standards for Commercial Forestry) include new requirements to remove slash from erosion-prone land. This may increase the amount of forestry slash requiring disposal in Ōpōtiki, where previously this was left on forests to break down.
- 5. Waste industry capabilities. As the nature of the waste sector continues to evolve, the waste industry is changing to reflect a greater emphasis on recovery and is developing models and ways of working that will help enable effective waste minimisation in cost effective ways. This will likely open up new markets for recoverable materials. Recycling and recovered materials markets – many materials collected for recycling rely on downstream processing in New Zealand or off shore. Increasingly there is a focus on collecting materials that can be processed in New Zealand (paper, cardboard, PET, HDPE, glass) or that are traded internationally at good prices (steel, aluminium).
- 6. Local policy, including actions and targets in the WMMP, bylaws and licensing.
- 7. Collection systems. In brief, more convenient systems encourage the presentation of material for recycling or disposal. An increase in the numbers of large wheeled bins used for rubbish collection, for example, drives an increase in the quantities of material disposed of through them. Conversely, more convenient recycling systems with more capacity help drive an increase in the amount of recycling recovered.
- 8. Ōpōtiki’s growing tourism industry is likely to increase the volume of waste generated in public place bins. This waste generation may fluctuate, for example, increasing in large centres around the summertime when holiday makers in the district visit beaches and reserves.

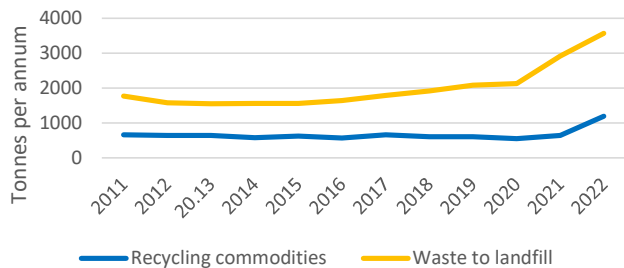
5 Planning for the future (Continued)

5.3 Demand Projections

The historic demand of waste and recycling is shown below (up to 2022). The graph shows a comparison of waste to Class 1 landfill and recycling over time and suggests that the proportion of waste recovered is reducing over time or that the recovery of waste is in line with population growth. The figure also shows an increase in the amount of waste and recyclables being produced in the district since 2020. This could be attributed to post-COVID related behaviour change, population changes, harbour development or more materials coming from the rural sector however this is unclear from the data available.

Future demand is expected to proportionally increase in line with population growth and at a similar rate as the 2021 – 2022 years. However, collected data is sparse and therefore there is moderate uncertainty in this projection. There are several factors which create significant uncertainty in the forecasts and these need to be considered in any decisions made based on the forecast demands. These factors include:

- The management of waste on individual properties e.g. burning household waste, farm dumps and burning farm waste.
- The impact of the current (regional and national) focus on rural waste. It is possible there will be a resultant significant increase in commercial quantities of rural waste such as plastic wrap, chemical containers and treated timber (fencing/construction) making their way to the RRC with a greater focus of rural wastes.
- The impact of alignment with kerbside standardisation requirements and proposals.
- The impact of varying economic activity.



5.4 Meeting Existing Demands

Our current understanding of demand is limited. We do not adequately measure all materials collected at RRC's or produced within the district. The Ōpōtiki township now has a weighbridge installed which will aid in collecting more accurate data on the demand on the service for some waste and recyclable materials but not all.

Current estimates and anecdotal evidence from staff suggests that the Ōpōtiki township RRC is coping with demand while the two coastal RRC's at Te Kaha and Waihou Bay are not coping with demand to an extent (primarily during peak season times over summer). It is however noted that general renewal and replacement of aging and dilapidated assets is likely to correspond to an increase in demand capacity at each site. For instance, most of the storage bays are in a poor condition across all three RRC's. Replacement of these bays will enable more efficient storage and stacking of recyclables (as the bays will actually contain the materials as opposed to currently where for many storage bays the material slumps outwards) and therefore a modest increase in capacity will be realised.

Council also periodically undertakes local school waste management and minimisation education initiatives to educate our children and wider community about recycling and reuse. This helps to shape behaviour around demand on the activity.

Council do operate a monitoring and enforcement service to combat illegal dumping but is limited in scope.

5.5 Meeting Future Demands

Demand for services in the future will be managed through a combination of better management of existing assets (better asset data and condition assessment to inform replacement and maintenance), some limited level of service improvements and in the instance of green waste, a new dedicated green waste collection and composting service at Ōpōtiki township RRC.

In conjunction with these, a wide range of waste management and minimisation initiatives are proposed as operational projects. These include:

- General - Education and behaviour change
- General - Design and develop food waste collection system
- General - Illegal dumping work
- General - Resource Recovery Community Initiatives
- General - Solid Waste Review of Services and Delivery
- General - Supporting businesses on circular opportunities and investigation into funding opportunities
- General - Waste Compliance Monitoring and Enforcement

The main challenge to meeting future demand is the ever-changing legislation and regulatory backdrop that often sees new services implemented as mandatory requirements for local government. As a result, having regularly reviewed and updated Waste Management and Minimisation Plans, implementing better asset management practices and keeping informed of changes will best allow us to understand and then appropriately respond to future demands.

6 Risk Management

6.1 Risk Management Approach and Key Risks

Council adopted a Risk Management Policy and a Risk Management Framework in 2015. The Risk Management Framework provides detailed guidance on how to describe, identify and manage risk. It uses a well established approach derived from AS/NZS ISO 31000:2009. Risks are informed by key strategic issues and consideration of existing assets and current operations, as well as levels of service performance indicators.

However, due to the relatively immature level of asset management of the Solid Waste activity, use of this risk management approach and identification of key risks is undertaken by utilising staff experience and judgement and may not be fully compliant with current guidance. In development of this first Asset Management Plan, key risks have been identified as follows:

High Level Risk/Issue Title	Caused by	Impacts	Current Controls and Mitigation	Proposed further response
Risk: Non-compliance of RRC consent conditions and/or failure to obtain new resource consents for RRC operations	- Breach of current resource consent conditions - Services do not demonstrate ability to achieve conditions as set out in new resource consents	- Environmental concerns - Infringement notices - Ability of RRC service to operate	External consultants are currently engaged to produce wider Waste Assessment, Waste Management and Minimisation Plan in conjunction with applying for new consents	- Finalise current work on applying for new resource consents. - Continue to monitor resource consents and regulatory environment to respond to changes as required.
Issue: Resourcing of Solid Waste activity	- Funding allocation - Employee pool in the District	Reduced level of service, possible partial closure of RRCs	- Raise awareness of funding allocation with Council - Seek alternative (central government) funding sources - Corporate level initiatives to recruit suitable staff	- Continue to seek alternative (central government) funding sources - Build on corporate level initiatives to recruit suitable staff
Risk: Asset Management Practice	- Poor internal controls - Undeveloped processes - Inadequate maintenance contracts - Improper data population - Absence or loss of records - Loss of institutional knowledge - Inaccurate population Predictions	- Poor audit reviews - Fraud - Poor value for money - Unbudgeted expenditure - Poor planning - Inadequate cost recovery - Possible damage unrecorded and unrectified - Increased cost of repairs	- Reliance on staff knowledge and experience to manage the assets - Incorporate practices of other Council activities to help improve Solid Waste practices	- Develop a Council wide asset management Strategic plan with district planners and councillors (with Solid Waste included). - Continue to improve AM practices in Solid Waste activity by adopting the processes of the more mature activities (Three Waters and Transport) - Undertake a baseline collection of asset data and establish an assets register for all three RRC's. - Undertake condition assessments of key assets, and then for all assets. - Include Solid Waste in the development of an asset management policy and framework.

6.2 Building Resilience

Council has developed a Waste Management and Minimisation Plan and associated Waste Assessment. These are currently being reviewed and updated with 2024 draft versions produced. This planning touches on resilience of the service in the face of ongoing weather related events, and how this effects the services.

As small a Council, ODC collaborates on a cross-regional basis within the Bay of Plenty and Waikato regional council domain. This collaboration across different planning, operation and future waste stream response allows for a level of resilience in provision of services that ODC would not be able to achieve by itself.

7 Asset Operations and Maintenance

7.1 Operations and Maintenance Requirements (WHY)

Council is responsible for how the asset will be operated and maintained on a day-to-day basis to:

- Achieve adequate level of service performance targets
- Meet resource consent conditions requirements
- Ensure Solid Waste assets are operated and maintained so as to support achieving levels of service
- Deliver Solid Waste services at the required level

Council delivers Solid Waste services mainly through external contracts for:

- Kerbside and coastal RRC collection services
- Transport of waste to landfill
- Transport of glass and tyres

Physical works are addressed on as needed basis usually in a reactive manner. The service delivery model is presented below.

Service Delivery Function	Internal Service Delivery Team	Internal Capabilities	External Service Delivery
Design	Solid Waste	Minor projects	Consultants/Contractors
Construct	Solid Waste	Operational works only	All projects to contractors
Operate	Solid Waste	General RRC site operations only	Mechanical and electrical repairs. Kerbside collection and waste transportation service delivered by external contractor
Maintenance	Solid Waste		All external through local service providers

7.2 Key Operational Processes and Asset Maintenance (WHAT)

Operations processes and asset maintenance of the activity can be split into each of the key services provided:

Kerbside collection

• Contract management

Kerbside refuse and recycling collection is operated by a contractor (Handee Can Services – Whakatāne), who undertakes the collection service on behalf of Council. Council staff manage the contract and there are no assets to maintain.

Resource recovery centres

• Site routine operations

• Reactive maintenance and repairs

Operation of each RRC is managed by the Solid Waste activity staff with a team employed at each site.

Maintenance is currently undertaken on an as needed basis for much of the activity. Much of the operational plant at Ōpōtiki Town RRC, such as the conveyor / sorter and bailers are maintained by external contractors. Given the age of some of the assets, the frequency of required repairs and maintenance is well above what may be acceptable to the manufacturer.

As the activity asset management matures over time, better asset and condition data will allow for more preventive and proactive maintenance programming.

Transport and disposal

• Contract management

This service is the transport of material from coastal RRC's to Ōpōtiki township, and the final transport and disposal to landfill and recycling markets. A variety of contractors are used to operate the various streams of refuse and recycling that go to different end recycling markets. Council staff manage the associated contracts for this service.

7.3 Operations and Maintenance Plan (HOW)

Operational and maintenance expenditure is monitored against set budgets throughout the year. Currently expenditure for Solid Waste is predicted using high level annual trends, with a high level of unplanned budget required for repairs and maintenance of aging assets. The ideal method for managing expenditure would be via proactive maintenance schedules and detailed operational budgets. As the activity asset management maturity improves over time, the operational management and setting of budgets will become more sophisticated and accurate as well.

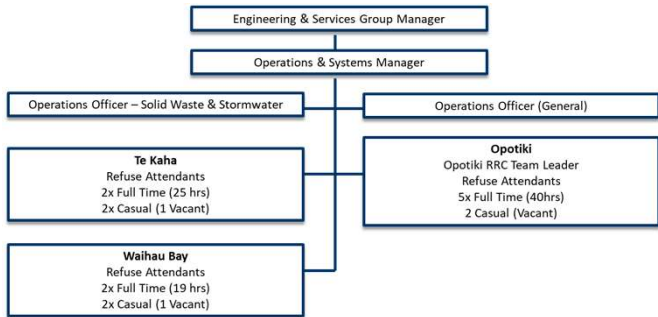
For each of the key services provided, the following operations and maintenance plan is implemented:

Kerbside collection

Rubbish is collected weekly, with the materials collected for recycling alternating each week. Handee Can Services – Whakatāne currently operate this service on behalf of Council.

Resource recovery centres

The following team is employed across each of the three RRC sites generally:



External contractors are used for building services, mechanical and electrical repairs.

Transport and disposal

A variety of contractors are used to operate the various streams of refuse and recycling that go to different end recycling markets.

8. Asset Renewals

8.1 Renewal Approach

Asset renewals within the Solid Waste activity have historically been based on reactive replacement of an asset as it reaches the end of its life. Many assets have been sweated beyond their original asset life, however, without reliable asset data and assessment of the condition, it has historically been difficult to programme when to replace many of the assets, even those in poor condition. Therefore, with limited visibility of the required renewals profile, historically investment into the activity has been below what is required.

Going forward Council’s approach to renewals across all activity areas is to adopt a Long Run Average Renewal Approach. This relies on having accurate and complete asset data, backed by condition assessments and robust asset management practices that allow for the best estimate of what a Long Run Average is for renewing assets. For Solid Waste this means that the average of renewals will be significantly increased compared to previous LTP periods as Council recognises that this activity has been historically under invested in for a long period of time.

For this AMP, the renewal programme has been based on staff judgement and experience working with the assets, and is our best estimate of when renewals are likely to be required. This assumption and approach has inherent risks and limitations given that there is little to no data to base the programme on. As such, any changes to this assumption may have material difference on the overall renewals programme including timings. However, given that we will be adopting an average of required asset renewals, we will be able to prioritise those assets most needing of replacement in the first 5 years and then as asset and condition data improves, the timing of renewals will become more accurate and less likely that ‘surprises’ are to occur.

8.2 Renewal Plan

The renewals plan for Solid Waste is based primarily on staff knowledge and experience of the assets, with a desktop exercise undertaken to estimate replacement costs (based on industry unit rates) and assign a basic level condition rating for the identified main assets. Given the lack of asset data and information related to asset age, condition or criticality, this method was deemed acceptable as a starting point, on the understanding that as asset data information and processes improves over time, the renewals profile will be refined and become more accurate over time.

Prioritisation of assets has therefore been given to those assets deemed to be more critical to the operation of each RRC or are in a very poor condition, which in turn has been applied to the assets to give our best estimate of a renewals profile. Given current financial constraints on Council, the timing of some of this investment has been moved to allow for a more deliverable annual capital expenditure profile. This in effect means that many of the assets will continue to be sweated, meaning that there is an increased risk of loss of levels of service to the community and increased risk of unplanned expenditure in any given year.

Many of the earlier renewals in years 1 to 5 have been prioritised on the basis of the assets that are either the most critical to the function of the immediate service or on the condition of the assets. An example of this are the storage bays at each site. These are uniformly in a very poor condition with cross contamination of material types occurring, often resulting in some recyclables such as glass, being rejected by end recyclers. The renewal of these assets is key to the level of service provided at each site.

8.3 Renewals across each RRC

The projected renewals profile across each RRC location is shown in the chart below. Given Ōpōtiki Town RRCs relative size and asset base, the majority of renewals on a dollar basis are for this site. However, there is consistent investment at each site over the first 10 years recognising the general uniform degradation of asset condition at all three locations.

The first 10 years sees the renewal of the aforementioned storage bays and other key operational assets such as hardstand areas for the storage bays and entrance/exits areas of each site. For Ōpōtiki Town RRC there is an emphasis on upgrades for resource consent compliance as a result of gaining a new consent for the site. These are expected to be relatively major.

The other notable investment over the 10-to-30-year time horizon is replacement of the buildings at each site. The condition of the main sorting buildings at each location has not been formally assessed. However, based on site observations and estimated age of the assets, the Ōpōtiki Town building is likely to require replacement first. This has been tentatively scheduled for 2037 but is subject to a structural assessment to be undertaken before this date (which may bring the replacement date forward). Similarly, replacement of the Te Kaha and Waihou Bay buildings are scheduled for 2042 and 2044 and therefore these renewals ‘dominate’ the overall projected renewals profile.

Projected Renewals by RRC 2024 - 2054

Year	Ōpōtiki Town (\$ millions)	Te Kaha (\$ millions)	Waihou Bay (\$ millions)
2025	0.5	0.2	0.1
2026	0.2	0.1	0.1
2027	0.7	0.3	0.2
2028	0.4	0.2	0.1
2029	0.6	0.3	0.2
2030	0.5	0.2	0.1
2031	0.6	0.3	0.2
2032	0.5	0.2	0.1
2033	0.4	0.2	0.1
2034	0.3	0.1	0.1
2035	0.4	0.2	0.1
2036	0.8	0.3	0.2
2037	2.1	0.4	0.2
2038	0.1	0.1	0.1
2039	0.1	0.1	0.1
2040	0.1	0.1	0.1
2041	0.2	0.2	0.1
2042	0.5	0.4	0.2
2043	0.3	0.2	0.1
2044	0.9	0.5	0.2
2045	0.4	0.3	0.1
2046	0.1	0.1	0.1
2047	0.1	0.1	0.1
2048	0.1	0.1	0.1
2049	0.1	0.1	0.1
2050	0.1	0.1	0.1
2051	0.1	0.1	0.1
2052	0.1	0.1	0.1
2053	0.2	0.1	0.1

9. Asset Improvements and Disposals

9.1 Asset Improvements

As discussed under renewals section, much of the proposed investment for the activity is renewals driven. However, inherently for some of the assets there is a component of levels of service or improvements to the assets that drive these investments. In many cases this is to maintain the level of service or improve the service in response to regulatory drivers or government legislation. There are no plans to improve assets over and above what has already been allowed for. There are, however, planned improvements to asset management planning processes that will lead to general improvements in delivery of the Solid Waste activity.

Asset Management Policy and Framework

Council has plans to develop an asset management policy to set the Council’s asset management framework for managing infrastructure assets in a structured, integrated, cost-effective and sustainable manner. The Policy will cover three waters assets and other infrastructure assets (including Solid Waste). The Asset Management Framework provides a management structure within which requirements, goals, objectives, strategies, and tactics are brought together to enable a balanced and consistent approach to asset management and improvement of infrastructure services provision, including three waters services.

9.2 Asset Disposals

Disposal is the retirement or sale of assets whether surplus or replaced by new or improved systems. Assets may need to be disposed of for a number of reasons, particularly if they fall under some criteria, including those identified below:

- Underutilisation
- Obsolescence
- Cost inefficiency
- Policy change
- Provision exceeds required Levels of Service
- Service provided by other means (e.g. private sector involvement)
- Potential risk of ownership (financial, environmental, legal, social).

As part of the lifecycle asset management process, Council considers the costs of asset disposal in the long-term financial forecasts. These costs are generally incorporated in the capital cost of level of service increases or asset renewals. While there are assets that fit under one or more of the above criteria, the Local Government Act provides clear instances when assets can be disposed of.

Council has no plans to dispose of any Solid Waste assets other than those that become obsolete as a result of renewal or upgrading works. As the asset data for the activity improves over time with proposed investment in data collection and processes, then asset disposal decisions can be made in a more informed manner.

10. Investment Forecasts

10.1 Total Investment

Summary of Total Investment (CAPEX + OPEX)

The total investment in the Solid Waste activity for Years 1 to 3 of the LTP is \$2.49 million, with the net operational expenditure projected at \$1.04 million (net cost of service) and capital expenditure at \$1.45 million (total capital spend). On average the operational investment is \$347k per year and capital spend is \$485k per year for the first 3 years. This budget focusses on what is deliverable and affordable for the activity. We note however that the total investment is significantly above previous spend in the Solid Waste activity. This is not necessarily a result of not being able to deliver this level of capital programme, but more so that a detailed capital programme has not previously been developed and implemented for the activity. The overall Council proposed budgets have targeted previous annual deliverability levels and therefore at an organisation level, the proposed capital spend for Solid Waste is achievable (but will need to be managed within overall Council resource availability).

Detailed tables for each area of spending are included in our LTP.



10.2 Capital Investment

Summary of Capital Investment (CAPEX)

Capital investment is required for the Solid Waste activity to achieve Councils' desired outcomes as highlighted in the Introduction section. The majority of the proposed capital investment supports the following outcomes:

1. Collective responsibility for our resources and where they end up
2. Enabling systems to support the reuse, reduction and recycling of materials

The proposed capital investment is primarily renewals based, in keeping with an aging asset portfolio that has had historic under investment.

The below figure shows the overall capital investment profile being \$1.45 million over Years 1 to 3 of the LTP. The estimated investment for the 10-year period out to 2034 is \$6 million, averaging approximately \$600k per annum.



10.3 Operational Investment

Summary of Operational Investment (OPEX)

The proposed operational investment aims to help better understand our assets, improve our asset management practices and operations, respond to legislation changes and implement waste minimisation initiatives.

The below figure shows a relatively consistent investment in operational projects, with an initial higher upfront investment in Year 1 to better understand our assets, develop better asset management processes, obtain resource consents and undertake much needed waste management and minimisation studies and community initiatives. The operational investment over Years 1 to 3 is \$1.04 million with an estimated average investment for the 10-year period of \$410k per annum.



11. Key Projects

11.1 Key Ōpōtiki Town RRC Projects (including inflation)

##	Project	Primary Driver	Year/s	Costs	Financial Data Confidence	Description and Objectives of the project	Benefits/Justification of the project	Project Stage
1	New bins for organics collection	LOS	2027-2029	\$270k	Staff and external consultant estimates	Implement an organics collection service including required bins for the urban kerbside collection area	This project responds to increased LOS requirement signalled in Te Rautaki Para to make kerbside organics collection services available to households in all urban areas by 2030	Planning
2	Ōpōtiki Town - RRC upgrades for resource consent compliance	LOS	2025-2027	\$156k	Staff estimates	Site wide upgrades to stormwater and other systems to comply with resource consents	Mandatory requirement to operate the RRC site	Planning
3	Ōpōtiki Town - RRC bailer - tin and can	Renewal	2028	\$130k	Recent industry unit rates	Renew aging and key asset	More efficient operation of plant and less maintenance and down time of the asset	Planning
4	Ōpōtiki Town - RRC bailer / compactor	Renewal	2027	\$298k	Recent industry unit rates	Renew aging and key asset	More efficient operation of plant and less maintenance and down time of the asset	Planning
5	Ōpōtiki Town - RRC bays (existing)	Renewal	2024-2035	\$402k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of storage bays over time	The bays are currently in a very poor condition and barely provide the function desired. The benefit will be operational efficiencies from improved site workflow and less contamination of materials between bay areas.	Planning
6	Ōpōtiki Town - RRC hardstand (pavement for existing bays)	Renewal	2024-2032	\$653k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of hardstand areas over time	The hardstand areas are in a very poor condition with multiple potholes and therefore ponding areas in the work area. Benefits will be operational efficiencies from improved site workflow and general site health and safety improvements.	Planning
7	Ōpōtiki Town - RRC Future Green Waste	Growth	2036-2039	\$1,123k	Staff estimates based on industry unit rates	A new dedicated green waste expansion of the current site.	Expansion of green waste collection service as the existing area will become insufficient in the future. Provides an additional revenue collection stream with green waste composting proposed.	Planning

11. Key Projects

11.2 Key Te Kaha RRC Projects (including inflation)

##	Project	Primary Driver	Year/s	Costs	Financial Data Confidence	Description and Objectives of the project	Benefits/Justification of the project	Project Stage
1	Te Kaha - RRC upgrades for resource consent compliance	LOS	2025-2027	\$47k	Staff estimates	Site wide upgrades to stormwater and other systems to comply with resource consents	Mandatory requirement to operate the RRC site	Planning
2	Te Kaha - RRC Loader	LOS	2027	\$85k	Recent industry unit rates	A new dedicated loader for moving bins and materials around site	The site currently leases/borrows a loader from a local resident. This is not an ideal long term solution and there is a need for Council to own the asset from a reliability and resilience perspective.	Planning
3	Te Kaha - RRC bays (existing)	Renewals	2024-2027	\$98k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of storage bays over time	The bays are currently in a very poor condition and barely provide the function desired. The benefit will be operational efficiencies from improved site workflow and less contamination of materials between bay areas.	Planning
4	Te Kaha - RRC hardstand (pavement for existing bays)	Renewals	2024-2035	\$134k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of storage bays over time	The hardstand areas are in a very poor condition with multiple potholes and therefore ponding areas in the work area. Benefits will be operational efficiencies from improved site workflow and general site health and safety improvements.	Planning
5	Te Kaha - RRC additional glass bins	LOS	2025	\$15k	Staff estimates	Additional glass bins to cope with volume of glass material deposited at the RRC	Additional storage capacity leading to less cross material contamination (more reliable product for end user). Health and safety benefits for a more tidy and safe site.	Planning

11. Key Projects

11.3 Key Waihau Bay RRC Projects (including inflation)

##	Project	Primary Driver	Year/s	Costs	Financial Data Confidence	Description and Objectives of the project	Benefits/Justification of the project	Project Stage
1	Waihau Bay - RRC upgrades for resource consent compliance	LOS	2025-2027	\$47k	Staff estimates	Site wide upgrades to stormwater and other systems to comply with resource consents	Mandatory requirement to operate the RRC site	Planning
2	Waihau Bay - Hardstand and building expansion	LOS	2024-2029	\$316k	Staff estimates based on industry unit rates	Expansion of the existing building to provide more space for sorting operations and hardstand area for existing portable bins and future storage bays	Better operational workflow and health and safety improvements for staff on site. Better access to portable bins.	Planning
3	Waihau Bay - RRC bays (existing)	Renewal	2024-2029	\$95k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of storage bays over time	The bays are currently in a very poor condition and barely provide the function desired. The benefit will be operational efficiencies from improved site workflow and less contamination of materials between bay areas.	Planning
4	Waihau Bay - RRC hardstand (pavement for existing bays)	Renewal	2024-2030	\$154k	Staff estimates based on industry unit rates	Renew aging and key asset. Progressive replacement of storage bays over time	The hardstand areas are in a very poor condition with multiple potholes and therefore ponding areas in the work area. Benefits will be operational efficiencies from improved site workflow and general site health and safety improvements.	Planning

12. All Projects

12.1 Capital Investment (CAPEX) Projects (including inflation)

Key projects and programmes	Total estimated cost	Year 1-3	Year 4-10	Year 11-30
LOS				
New bins for organics collection	\$269,613	\$-	\$269,613	\$-
Ōpōtiki Town - RRC improved workstation flow	\$81,814	\$81,814	\$-	\$-
Ōpōtiki Town - RRC security system	\$38,091	\$-	\$38,091	\$-
Ōpōtiki Town - RRC upgrades for resource consent compliance	\$156,355	\$103,180	\$53,175	\$-
Ōpōtiki Town - RRC layout upgrade (existing greenwaste bays)	\$123,504	\$-	\$123,504	\$-
Ōpōtiki Town - RRC layout upgrade (existing greenwaste gravel pavement)	\$41,271	\$30,636	\$10,635	\$-
Te Kaha - RRC additional glass bins	\$15,314	\$15,314	\$-	\$-
Te Kaha - RRC improved workstation flow	\$10,319	\$10,319	\$-	\$-
Te Kaha - RRC Loader	\$85,080	\$-	\$85,080	\$-
Te Kaha - RRC upgrades for resource consent compliance	\$46,908	\$30,955	\$15,953	\$-
Te Kaha - RRC additional hardstand for bays	\$93,192	\$-	\$93,192	\$-
Te Kaha - RRC bays (additional)	\$87,368	\$-	\$87,368	\$-
Waihau Bay - RRC improved workstation flow	\$10,635	\$-	\$10,635	\$-
Waihau Bay - RRC upgrades for resource consent compliance	\$46,908	\$30,955	\$15,953	\$-
Waihau Bay - Hardstand and building expansion	\$315,790	\$153,180	\$162,610	\$-
Waihau Bay - RRC bays (additional)	\$69,894	\$-	\$69,894	\$-
Renewals				
Ōpōtiki Town - RRC bailer - tin and can	\$130,128	\$-	\$130,128	\$-
Ōpōtiki Town - RRC bailer / compactor	\$297,780	\$-	\$297,780	\$-
Ōpōtiki Town - RRC bays (existing)	\$401,587	\$91,908	\$236,133	\$73,546
Ōpōtiki Town - RRC fencing replacement	\$251,679	\$30,636	\$61,039	\$160,004
Ōpōtiki Town - RRC hardstand (pavement for existing bays)	\$652,670	\$30,636	\$622,034	\$-
Ōpōtiki Town - RRC hoist (glass)	\$116,229	\$30,621	\$-	\$85,608
Ōpōtiki Town - RRC renewals	\$1,447,263	\$107,237	\$278,126	\$1,061,900
Ōpōtiki Town - RRC bailer / compactor building	\$60,737	\$-	\$60,737	\$-
Ōpōtiki Town - RRC building facilities	\$110,430	\$-	\$110,430	\$-
Ōpōtiki Town - RRC building replacement	\$3,769,149	\$-	\$-	\$3,769,149
Ōpōtiki Town - RRC conveyor/sorter	\$53,316	\$-	\$53,316	\$-
Ōpōtiki Town - RRC drainage renewals	\$114,473	\$-	\$114,473	\$-
Ōpōtiki Town - RRC hardstand (gravel)	\$85,080	\$-	\$85,080	\$-
Ōpōtiki Town - RRC hardstand (pavement for entrance and turning areas)	\$647,086	\$-	\$251,565	\$395,521
Ōpōtiki Town - RRC hoist (plastics)	\$121,496	\$-	\$31,905	\$89,591
Ōpōtiki Town - RRC replace roller doors x 4	\$158,844	\$-	\$158,844	\$-
Ōpōtiki Town - RRC weighbridge renewal	\$271,982	\$-	\$-	\$271,982
Te Kaha - RRC hardstand (pavement for existing bays)	\$133,862	\$30,636	\$78,711	\$24,515
Te Kaha - RRC renewals	\$1,077,823	\$122,544	\$196,779	\$758,500
Te Kaha - RRC bays (existing)	\$97,850	\$60,627	\$37,223	\$-
Te Kaha - RRC building facilities	\$78,694	\$-	\$78,694	\$-
Te Kaha - RRC building replacement	\$1,480,347	\$-	\$-	\$1,480,347
Te Kaha - RRC fencing replacement	\$57,250	\$-	\$57,250	\$-
Te Kaha - RRC hardstand (pavement for entrance and turning areas)	\$366,293	\$-	\$366,293	\$-
Te Kaha - RRC replace roller doors x 2	\$80,150	\$-	\$80,150	\$-
Waihau Bay - RRC fencing replacement	\$46,298	\$46,298	\$-	\$-
Waihau Bay - RRC renewals	\$619,123	\$45,955	\$118,068	\$455,100
Waihau Bay - RRC bays (existing)	\$94,739	\$45,955	\$48,784	\$-
Waihau Bay - RRC building facilities	\$56,210	\$-	\$56,210	\$-
Waihau Bay - RRC building replacement	\$707,265	\$-	\$-	\$707,265
Waihau Bay - RRC hardstand (pavement for entrance and turning areas)	\$255,944	\$-	\$255,944	\$-
Waihau Bay - RRC hardstand (pavement for existing bays)	\$153,585	\$76,607	\$76,978	\$-
Waihau Bay - RRC replace roller doors x 2	\$78,694	\$-	\$78,694	\$-
Ōpōtiki Town - Resource Consent	\$165,311	\$165,311	\$-	\$-
Te Kaha - Resource Consent	\$70,207	\$70,207	\$-	\$-
Waihau Bay - Resource Consent	\$70,207	\$70,207	\$-	\$-
Growth				
Ōpōtiki Town - RRC Future Green Waste	\$1,123,660	\$-	\$-	\$1,123,660

13 Continual Improvement

13.1 Asset Management Maturity	13.2 Asset Management Improvement Plan
In 2022 an asset management maturity assessment was conducted for Three Waters and Transport activities. This assessed these activities to be at a 'Basic to Core' maturity level. Without undertaking a formal assessment for Solid Waste, we estimate that the activity sits at an 'Aware to Basic' level. Therefore, as already recognised, asset management improvements are necessary for the activity to better function. Our aspiration is to have the activity at a 'Basic' asset management maturity level within three years in time for the next 2027 LTP process. To do this there are a variety of improvements and operational asset management investments to be made in the activity. As noted previously, we particularly lack a complete asset register and associated basic data, as well as any reliable condition information. These are seen as the first improvements required to increasing our asset management maturity.	An asset management improvement plan focusses on what Council will be working on over the next 12 to 24 months to continuously improve the Solid Waste activity. As previously noted, there are many areas within the activity that require improvement projects to better manage the overall service. However, given resource constraints, and our starting asset management maturity level, we have focussed on the very basics to give us a good start on our long-term asset management journey. Below are the key proposed improvement projects: • Asset database – establish an asset register by undertaking a survey of all assets • Asset data collection – improve the understanding of all assets by progressively undertaking condition assessments of the assets starting with the more critical assets such as RRC buildings and the plant and equipment used for sorting and collating rubbish and recycling • Processes – Establish basic level asset management processes (SoP's, periodic inspections of assets and develop reporting formats for recording and capturing data). • Audit/Review - Internal audit processes in place to ensure continuous improvement program is effectively followed. This can utilise more established processes used for the Three Waters activity. The above improvement plan represents the core improvements desired to start the journey of better management of the Solid Waste activity assets. As data is collected and our assets are better understood, further improvement projects may be required. In this way, the improvement plan is to be periodically reviewed.