

# ASSET MANAGEMENT PLAN

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## RESOURCE RECOVERY



# OVERVIEW

## ASSET MANAGEMENT PLAN EXECUTIVE SUMMARY **RESOURCE RECOVERY**

Manaaki whenua, manaaki tangata, haere whakamua.  
Tihei mauri ora!

No reira, e te haukainga Rangitāne, nei rā te mihi nui ki a koutou e pupuri nei i te mauri o te whenua me ngā wai e rere atu e rere mai.

Tēnā koutou, tēnā koutou, tēnā tātou katoa.

Most of the things we do, buy, and consume generates some form of waste. This not only costs money when we throw things away but, if we do not manage the waste properly, it can cause problems with the environment and with people’s health.

We provide rubbish collection and recycling services for the City in order to:

- Ensure the city’s solid waste is adequately and affordably managed;
- Maximise the amount of waste diverted from landfill (such as through recycling and composting); and
- Manage hazardous waste in an environmentally responsible manner.

### Our waste management and minimisation plan guides our work

We are required by the Waste Minimisation Act 2008 to adopt a Waste Management and Minimisation Plan (WMMP) that sets out our objectives, policies and methods for achieving effective and efficient waste management and minimisation, and how the plan is to be funded. We reviewed and updated the WMMP in December 2019 and identified four priority actions, three of which are likely to require infrastructure.

We also receive funds from the national waste disposal levy to spend on promoting or achieving the waste minimisation activities set out in our WMMP.

We are also guided by the Resource Recovery Plan which is our tactical response to the Goal 4: An Eco City and the Eco City Strategy.

**This Asset Management Plan outlines how we manage our Resource recovery activity, what our challenges are and our investment plan for the next 30 years.**

### We can be a leader in waste diversion

In 2017, Palmerston North sent just over 45,000 tonnes of waste to landfill. Nearly half of this was potentially divertible. While we cannot be directly responsible for all the City’s waste, we can promote effective and efficient waste management and minimisation.

There are opportunities for us to invest in new services to increase the proportion of waste diverted from landfill from 38 percent to 48 percent by 2025 as identified in our WMMP .

**We could save nearly 20,000 tonnes of material from going into the landfill each year.**

### Scope of this plan

This Plan informs our 10 Year Plan, Financial Strategy and 30 Year Infrastructure Strategy. It supports us in the management of our Resource recovery activity to:

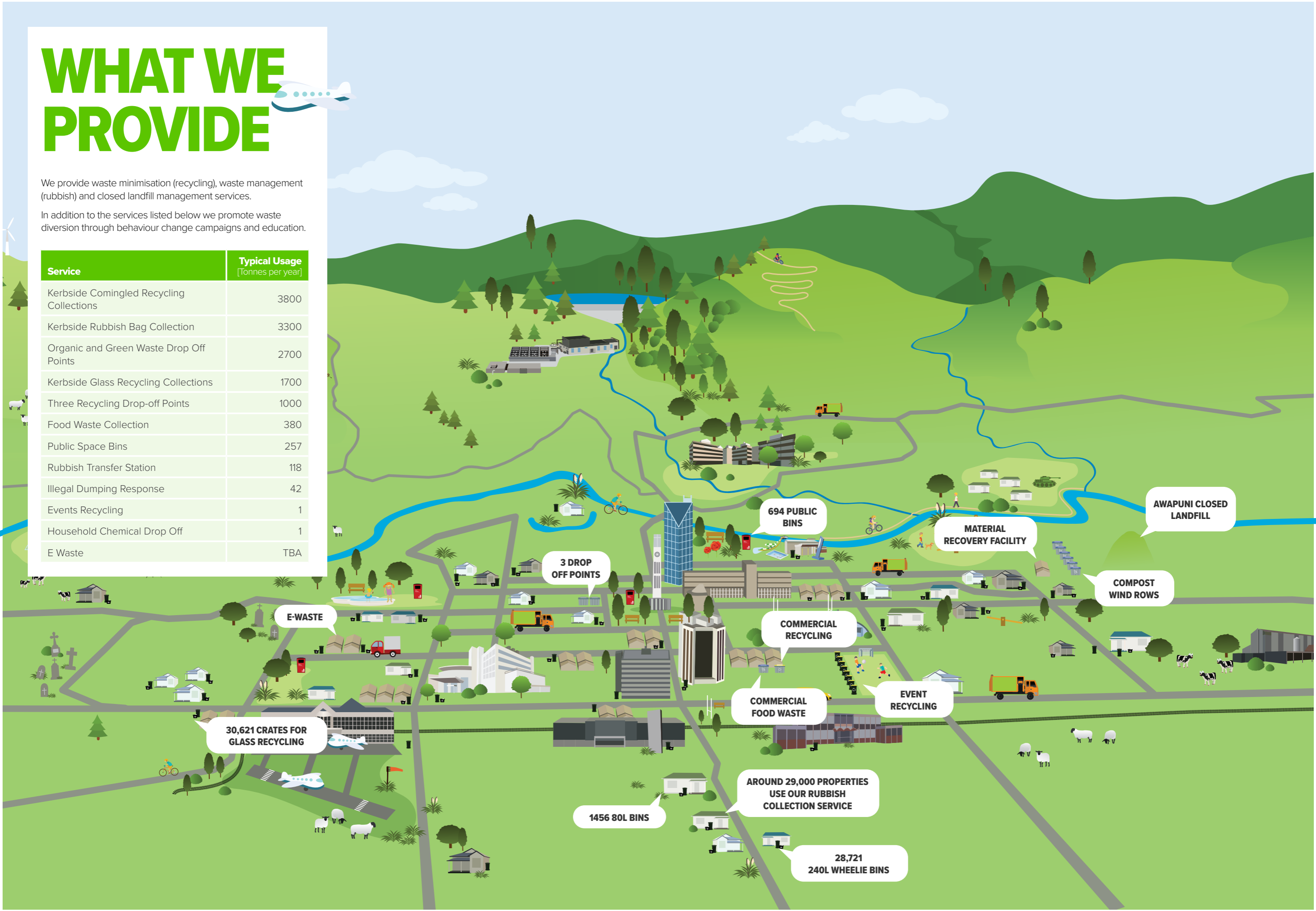
- Achieve our strategic outcomes as set by Goal 4: An Eco City and the Eco City Strategy
- Meet the levels of service we have committed to;
- Plan for growth and adjust to other drivers such as climate change and new legislation;
- Improve asset knowledge and monitor performance;
- Minimise risk; and
- Plan operations.

# WHAT WE PROVIDE

We provide waste minimisation (recycling), waste management (rubbish) and closed landfill management services.

In addition to the services listed below we promote waste diversion through behaviour change campaigns and education.

Service	Typical Usage [Tonnes per year]
Kerbside Comingled Recycling Collections	3800
Kerbside Rubbish Bag Collection	3300
Organic and Green Waste Drop Off Points	2700
Kerbside Glass Recycling Collections	1700
Three Recycling Drop-off Points	1000
Food Waste Collection	380
Public Space Bins	257
Rubbish Transfer Station	118
Illegal Dumping Response	42
Events Recycling	1
Household Chemical Drop Off	1
E Waste	TBA



# EVERYONE IS A CUSTOMER



## RESIDENTS



## FAMILIES



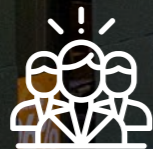
## RURAL



## EDUCATION



## COMMUNITY GROUPS



## COUNCIL



## EVENT/SPORT ORGANISERS



## COMMERCIAL

About a third of residents use our rubbish bag service. These customers are less likely to throw out material that could be recycled.

10 percent of recyclable materials are dropped off. The use of the Ferguson Street Recycling Drop Off Point has tripled in the last five years.

Waste from the CBD has doubled, and we are seeing growth in our commercial food waste, glass and recycling services.

We are collecting less waste from our public space bins, but illegal dumping has increased.

We have worked hard to educate residents on keeping rubbish out of recycling bins but Covid-19 has set us back.

We have supported over 40 events with recycling services – the biggest being the Festival of Cultures.

The 2020 Annual Residents survey found that our residents are generally happy with all aspects of waste management, particularly with kerbside rubbish and recycling collection.

**Our stakeholders include: Ministry for the Environment, Ministry of Health, Horizons Regional Council, Neighbouring Local Authorities, Other Waste Collection Providers, Environmental Groups**

# WE HAVE SOME CHALLENGES + RISKS

## We can do better in sorting our waste

The 2017 Waste Assessment provided data on nearly all waste streams for Palmy. This data was analysed and identified the main areas where we could improve our effectiveness in waste diversion. The WMMP was updated to include three priority issues that require new services and infrastructure:

- A significant proportion of waste going to landfill is organic waste, with food waste present across all kerbside rubbish collection systems.
- Lack of facilities to recycle or otherwise divert construction and demolition waste, in particular with a predicted increase in construction activity.
- More recyclables could be diverted from commercial properties.

## Waste minimisation mitigates climate change

The government has further incentivised waste reduction by including landfills in the New Zealand Emissions Trading Scheme so the more we can divert from landfill, the greater part we play in reducing green-house gases.

## Law changes are imminent but uncertain

Waste management is also a national concern and hence, a key driver of change is new legislation and standards. Central Government has a New Zealand Waste Strategy and is consulting on phasing out some types of unrecyclable (including some polystyrene packaging) and single use plastics. Other changes are more advanced, such as a Container Return Scheme (CRS), increased waste disposal levy and kerbside collection standards (due 2021).

## A beverage container return scheme is on the cards

A major benefit of having our own Material Recovery Centre (MRF) is the ability to separate out high-value commodities. Our MRF also has processing capacity to accommodate growth.

Government has funded the design of a CRS for New Zealand and is now considering next steps. A CRS would not be implemented until 2023 at the earliest. As a result of the CRS, high value plastics and glass could be removed from kerbside collections. Therefore, it is in our interest to investigate how we can be involved in running a CRS locally.

## Rubbish disposal will cost us more

It is expected that from July 2021 to 2024, the Waste Disposal Levy will increase from \$10 a tonne to \$50-\$60 a tonne for Class 1 landfills. We will have to pay more for disposing of rubbish in the Bony Glen landfill. Assuming we will continue with the kerbside rubbish collection as a ring-fenced, cost-neutral, user pays service this may result in an increase in the cost of rubbish bags.

## Kerbside collections may become standardized

A national review is currently underway into how collections differ around country. The most likely change to impact our services would be the standardisation of products that can be collected in the mixed recycling service. We already collect glass separately which is the other major change expected.

## Covid-19 changed behaviour

In 2020 Covid-19 became a significant issue for contamination of waste in our mixed recycling residential wheelie bin service.

In recent years we have worked hard to reduce contamination, but this work was undermined when people started to use the recycling service for disposing waste during Level 4 when we were unable to process the material and had to send it to landfill it for health reasons. Since our normal service has resumed, recycling contamination levels have not returned to previous levels, costing us more to dispose of this waste.

## Limited markets for commodities

Another major driver is the change in commodity markets impacting on our ability to divert materials. Since China's "National Sword" policy in 2018 that banned importing of "waste" there has been a dramatic decline in markets willing to pay for recovered materials. We are now paying to supply some commodities instead of selling them. This is increasing our operating costs.

## Our closed landfill will continue to play a role

From 1950 to 2007, 2.5 million tonnes of rubbish were deposited at the Awapuni Landfill. Now closed, we have the ongoing responsibility to maintain its integrity. The current consent expires in 2029 and will need to start the process of consenting it a couple of years ahead of this.

# WHAT'S OUR PLAN?

### We plan to provide new services to divert more waste from landfill

Our target is to increase the proportion of waste diverted from landfill from 38 percent to 48 percent by 2025. This will mean a reduction in waste being sent to the landfill and an increase in material being diverted.

#### Kerbside food waste service (+ 4 percent diversion rate)

We have currently put on hold implementation of a city wide weekly kerbside food waste collection service to households. However we are continuing with an investigation and trial for this service. A tailored service will continue to be offered to those that have larger quantities of food waste such as restaurants, hostels, and cafeterias.

#### Citywide Recycling Services to Non-Residential Properties (+ 2 percent Diversion Rate)

Provide additional recycling collection services to non-residential customers to accommodate their needs; such as variety in containers, types of materials, frequency of collection and location of collection. These would be provided on a user-pays basis.

#### Diversion of New Materials from Landfill (+ 2.7 percent Diversion Rate)

This would include investigating the establishment of a construction and demolition waste processing service (with associated collections), aiming to divert at least one third of this waste currently going to landfill. Implementation would be subject to investigation and detailed financial analysis.

### Our response to growth

The city has grown further away from our existing recycling drop-off points. We need to investigate establishing a new drop off site for recycling and green waste in the north east of the city to better service this growth.

#### We will continue to investigate and pilot new services

We will continually adapt to the changing markets and legislative environment and to do this we plan to be:

- Investigating the possibility of recycling difficult materials like polystyrene.
- Continuing education to change behaviour and promote awareness.
- Continuing to take enforcement action against those that dump rubbish illegally, and work in partnership with community group to identify and address problem spots.
- Continuing to support a community led Zero Waste Action Group; and
- Applying our new Bylaw to influence and reduce the amount of materials going to landfill that could have been diverted.

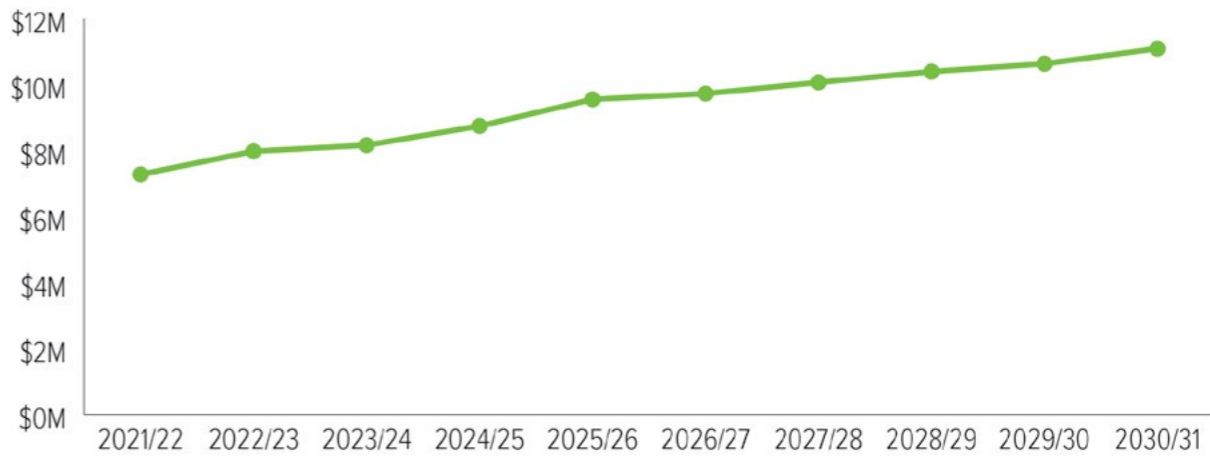
#### Maintain existing levels of services

We plan to keep operating the existing services at the same level and continue to look for ways to improve operational efficiency.

# HOW MUCH WILL IT COST?

The Resource recovery activity is service heavy. With very few assets, this means that most of the expenditure is operational and associated with the collection of rubbish and recycling from around the city.

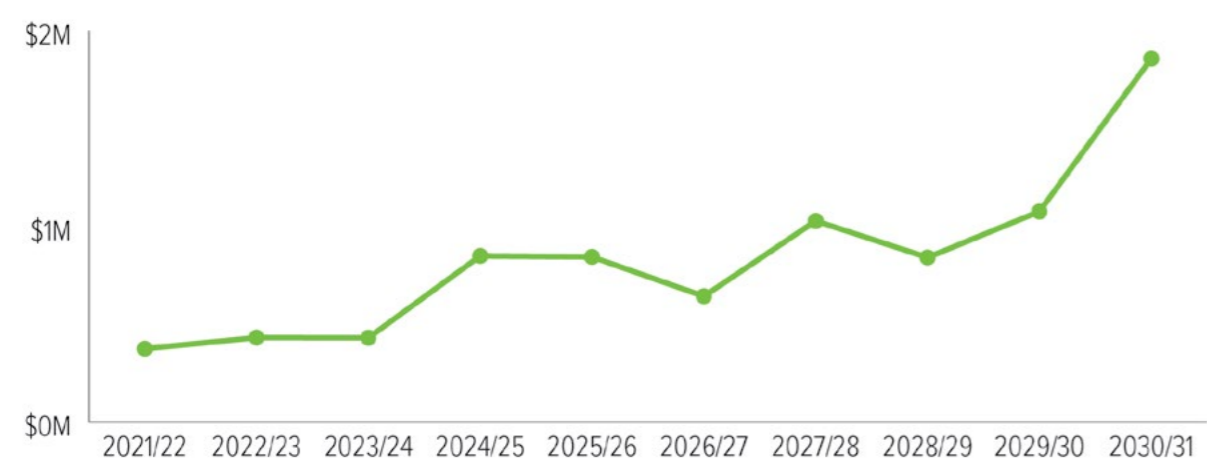
## OPERATIONS + MAINTENANCE RESOURCE RECOVERY ACTIVITY



Operations and maintenance costs are forecast to rise over the coming years as the city grows. It is also becoming more challenging to generate revenue from our recovered materials (not shown in the figure). We have included allowances in our future budgets for these, however the long-term view remains uncertain and these will likely need to be reconsidered in the future.

Approximately half of the \$7 million per year spent on operations and maintenance is on the collection and processing of recycling around the city. The next most significant areas of expenditure are in rubbish collection, green waste management and emptying bins in public areas. The remainder of our waste minimisation activities make up only a small portion of the overall operations and maintenance expenditure with approximately \$0.1 million spent per year.

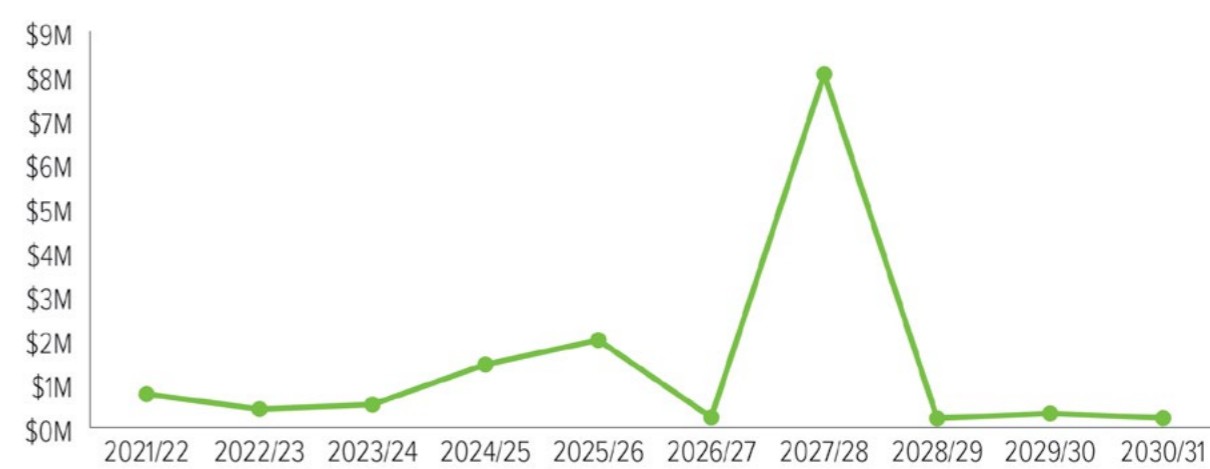
RENEWAL  
RESOURCE RECOVERY ACTIVITY



Renewals for the Resource recovery activity are mostly minor renewals at the MRF, recycling drop off points and closed landfill sites. There are also renewals associated with residential bin and crates and public space rubbish and recycling bins. Asset renewals are going to steadily increase over the next 10-years.

The significant increase in later years is primarily associated with an anticipated need to renew residential wheelie bins and crates. There will be many of these assets that are coming towards the end of their expected life. We will continue to reassess the performance of these assets and may adjust the renewal budget should their current condition start to change.

CAPITAL NEW EXPENDITURE  
RESOURCE RECOVERY ACTIVITY



There is typically a low level of capital new investment (between \$0.2 and \$0.6 million) associated with the Resource recovery activity. This is to cover things such as new crates and bins within growth areas of the city, minor development of the Materials Recovery Facility and improvements at our closed landfills.

There are two large projects planned which result in a significant increase in annual expenditure. There is a new Recycling Drop Off Facility planned to be developed in 2024-26 in the Whakarongo and Kelvin Grove area. It is planned to spend \$2 million constructing this facility. It is proposed to undertake a significant development at the Materials Recovery Facility in 2027-28 at a cost of \$7 million. The project would enable us to utilise the most recent technology to optimise efficiency of the recovery of materials presented for diversion at the Materials Recovery Facility.

