tasman district council | Te Kaunihera o te tai o Aorere

Waste Management and Minimisation Activity Management Plan 2021-2051

Quality Assurance Statement		
Tasman District Council **189 Queens Street** **Private Bag 4** **Richmond 7050** **Telephone: (03) 543 8400** **Fax: (03) 5439524**	Version:	February 2021
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	Activity Managers:	Robert Workman Graham Poxon
	Prepared by: AMP Author	David Stephenson
	Approved for issue by: Engineering Manager	Richard Kirby

Contents

1 Executive Summary

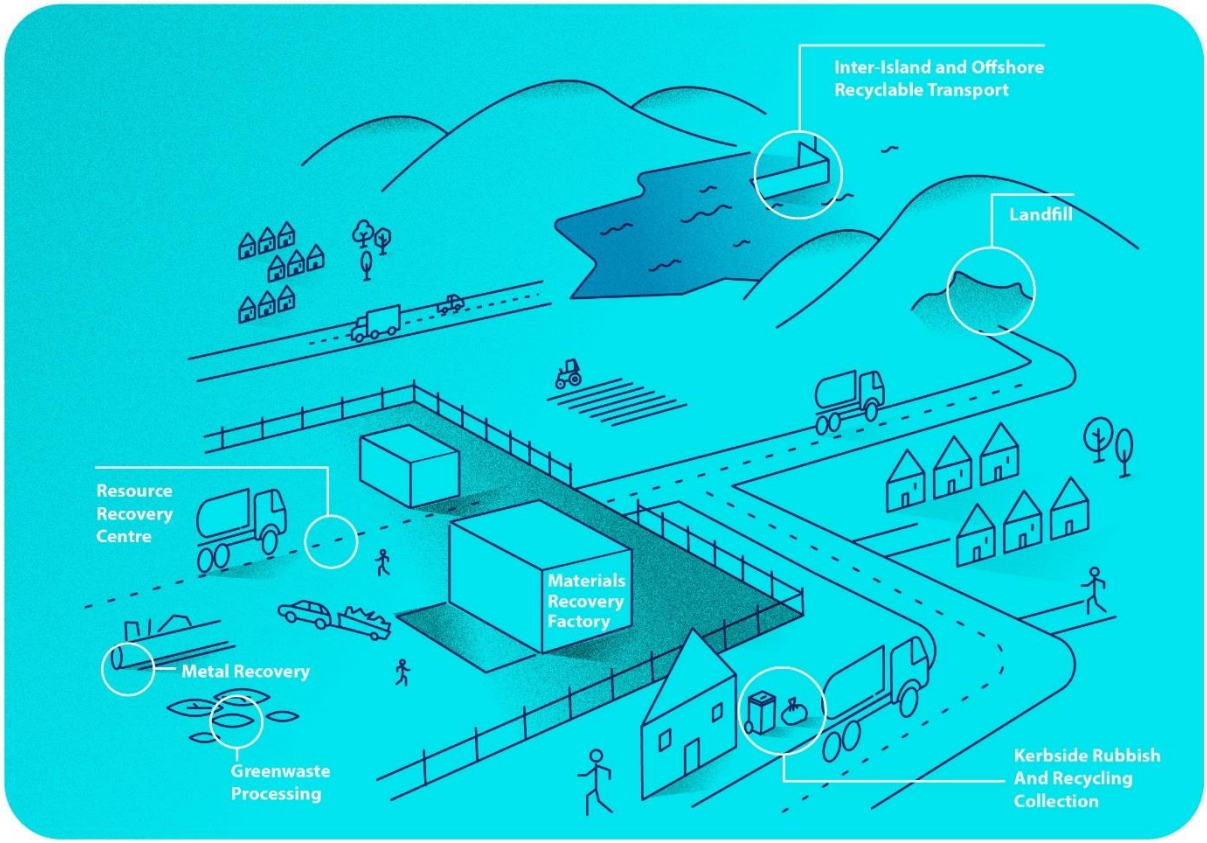
The purpose of this activity management plan is to outline and summarise in one place one group of activities, namely the Council's Waste Management and Minimisation functions and responsibilities.

1.1 What We Do

The Council's waste management functions provide and promote the following waste management and minimisation services:

- Kerbside recycling and waste collection services.
- A Materials Recovery Facility (MRF) in Richmond to process recycling.
- Four other Resource Recovery Centres (RRCs), which receive waste, recyclables, cleanfill, greenwaste and some hazardous materials are located at Māriri, Tākaka, Collingwood and Murchison.
- Drop off facilities for greenwaste and processing, through a contracted service.
- Transport services to move these materials around our District, and
- A range of waste minimisation initiatives with schools, businesses, and the wider community, to reduce the production of waste and minimise harm.

These services operate alongside commercial services across the Nelson-Tasman region.



Most public and commercial waste disposal is through the Council's Resource Recovery Centres (RRCs). From the RRCs waste is transferred to landfill. Other materials such as recyclable materials, greenwaste, and cleanfill are diverted away from the landfill. Where possible the Council's contractors process and sell the recyclable material. We also recover hazardous materials at the RRCs and ensure that they are processed safely.

The Nelson-Tasman Regional Landfill Business Unit provides operational landfills in our Region. The business unit is a joint committee of Nelson City Council and Tasman District Council, operates a regional landfill at York Valley, in Nelson, and manages the Eves Valley Landfill, near Brightwater, which closed in 2017. We maintain a further 22 closed landfills around our District.

In the coming years, together with Nelson City Council, we plan to reduce waste to landfill by increasing diversion of dry waste and organic materials, and promote waste reduction. This diversion could be delivered by the Councils directly or through commercial partnerships.

1.2 Why We Do It

We provide waste management and minimisation services to protect our public's health and our natural environment from waste generated by people. These waste minimisation activities promote efficient use of resources, reduce waste for businesses and households and extend the life of our Region's landfills.

The Waste Minimisation Act (2008) requires us to promote effective and efficient waste management and minimisation within our District. Under this legislation, we are required to prepare a Waste Management and Minimisation Plan. This plan sets our strategic direction for waste management.

We elected to adopt a joint plan, with Nelson City Council, because waste management issues cross council boundaries. The most recent Nelson Tasman Waste Management and Minimisation Plan was adopted in September 2019.

The goals of the Councils' Waste Management and Minimisation Plan are shown below.

Activity Goal

Council's long-term goals for waste management and minimisation management are contained in the Nelson Tasman Waste Management and Minimisation Plan (2019). The plan presents an ambition to eliminate unnecessary waste to landfill and with a target to reduce waste to landfill by 10% per person by 2030.

The three goals in the Waste Management and Minimisation Plan and in this activity are:

1. To avoid the creation of waste.
2. Improve the efficiency of resource use.
3. Reduce the harmful effects of waste.

1.3 Levels of Service

The Council aims to provide the following levels of service for this activity:

"We enable effective waste minimisation activities and services."	"Our kerbside services are reliable and easy to use."	"Our resource recovery centres are easy to use and operated in a reliable manner."

Providing safe and secure infrastructure services is a priority for Council. Over the next 10 years the Council are planning to make improvements at our resource recovery centres to make them safer, more convenient and reduce their environmental impact. We will focus on the Māriri Resource Recovery Centre in the first three years, improving traffic flows and proving weight-based charging. We are also proposing to upgrading our recycling processing capacity and build additional waste minimisation infrastructure from year four. This could include facilities to divert organic or dry waste. In the short term the Council will make low cost investments to trial dry waste diversion.

A key consideration in the first year of this plan will be the range of kerbside services that should be provided by the Council in the future. Central government is expected to propose a standard kerbside collection specification for councils in 2021, and this may recommend a food waste collection service. Central government is also likely decide at this time whether a container return scheme should be introduced in New Zealand. The Council will be reviewing any policy decisions by government in 2021 and then engage with the community to understand what kerbside services it should deliver.

We will suspend further investment in public place recycling until we have more information on central government's consideration of product stewardship proposals for beverage containers.

1.4 Key Issues

The most important issues relating to the waste management and minimisation activity and our proposed responses are shown below in Table 1.

Table 1: Key Issues

Key Issue	Discussion	How we are responding
Changes in central government waste management regulation and policy	Since early 2019, central government has introduced a series of initiatives to improve waste management within New Zealand. These initiatives include phase-out of some plastic bags, regulated product stewardship, an increase in the scale and reach of the waste disposal levy (the 'landfill levy'), new environmental standards, restrictions on recycling exports and proposed phase-out of problematic plastics. Further changes are expected in the coming year, including a review of the New Zealand Waste Strategy, decisions on a container deposit scheme and consideration of a standard kerbside recycling methodology for councils. While these changes have the potential to improve waste minimisation, they could significantly affect the range of services that we provide (including kerbside collections). The uncertainty that they bring make it difficult to plan ahead.	We will take a cautious approach to our capital programme. We will also work with Nelson City Council and seek funding for regional waste minimisation infrastructure where available. Our current contract for kerbside recycling and rubbish bag collections ends in June 2023. We'll be reviewing any decisions by government this year and then engage with the community to understand what services we should deliver. We continue to engage with central government and advocate for product stewardship and waste policy that works for our region.
Uncertainty of waste minimisation funding from central government	We receive a proportion of the waste disposal levy collected by central government to fund waste minimisation activities. This funding is expected to gradually increase from 2021/2022 to 2024/2025. It is uncertain whether we will continue to receive the same share of this funding over time. This delay of funding will limit the level of waste minimisation work that we can deliver before 2024/2025, unless additional funding is found.	We will moderately increase waste minimisation expenditure in Years 1-3, drawing on reserves accumulated from existing government funding. We will prioritise work that is more likely to attract additional funding from others. We do not proposed to increase further waste minimisation activity in the short term. The government has also announced proposals for significant investment in recycling infrastructure. Working with Nelson City Council and the Nelson Tasman Regional Landfill Business Unit we will seek funding opportunities.

Key Issue	Discussion	How we are responding
Rapidly changing markets for the sale of recyclable materials	In recent years, the commodity markets for plastic and paper have contracted significantly and changes to government regulations will limit export of plastics from January 2021. We decided to stop export of plastics; some plastics are no longer being commercially recycled. It's unclear where paper and cardboard recycling markets will be in the medium and long term. These factors may increase kerbside recycling services costs and limit the ability of our community to divert increasing volumes of material for recycling.	We will continue to monitor recycling commodity markets and make allowance for price variances in our budgets. We will continue to engage with industry and central government to advocate for additional recycling capacity in New Zealand.
Need to review our kerbside services	With changes to recycling markets, and possible changes like container return systems signaled by government the Council may need to review the range of kerbside services they provide. This could include changing the frequency of some services or stopping some services, adding some services or changing the areas that we collect from.	Our current contract for kerbside recycling and rubbish bag collections ends in June 2023. The Council will be reviewing any decisions by government this year and then engage with the community to understand what services we should deliver.
Increased cost of waste disposal in the next three years	We expect landfill disposal fees to increase significantly in the first three years of this plan. These increases are due to expected increases in the landfill levy, increased landfill emissions costs, additional work at the regional landfill and our desire to recover operating costs from disposal fees rather than general rates. This increase could significantly improve the attractiveness of waste reduction and waste diversion (such as recycling and composting) but may be unpopular and lead to increased illegal disposal of waste.	We will be moving to weight based charging at most Resource Recovery Centres, which allow fairer pricing and give people a better opportunity to save costs. We will also keep recycling, scrap metal and greenwaste services available at no cost or low cost for residential customers at Resource Recovery Centres. We will also be carefully monitoring illegal dumping activity, to check whether increasing charges lead to increased dumping.

Key Issue	Discussion	How we are responding
Further work to determine how we can achieve our waste minimisation targets	Included in our Waste Management and Minimisation Plan is a target to reduce waste to landfill by 10% per person by 2030. We have identified scope to potentially reduce organic waste and dry materials from landfill, this work will require significant investment. We are proposing modest investment in the first three years of this plan, while detailed business cases are prepared to inform investment decisions.	We will work with Nelson City Council to trial diversion of dry waste at selected Resource Recovery Centres and monitor Nelson's food waste collection trial. Working with Nelson City Council and the Nelson Tasman Regional Landfill Business Unit we will prepare detailed business plans for diversion of dry waste and organic waste from landfill.

1.5 Operational Programme

The operational programme covers all day to day activities that are required to manage this activity. It includes the cost of providing services (such as kerbside recycling) and the cost of maintaining our infrastructure (such as our resource recovery centres).

The operational programme includes direct costs (e.g. payments to suppliers and contractors) and indirect costs (e.g. staff costs, interest costs and depreciation).

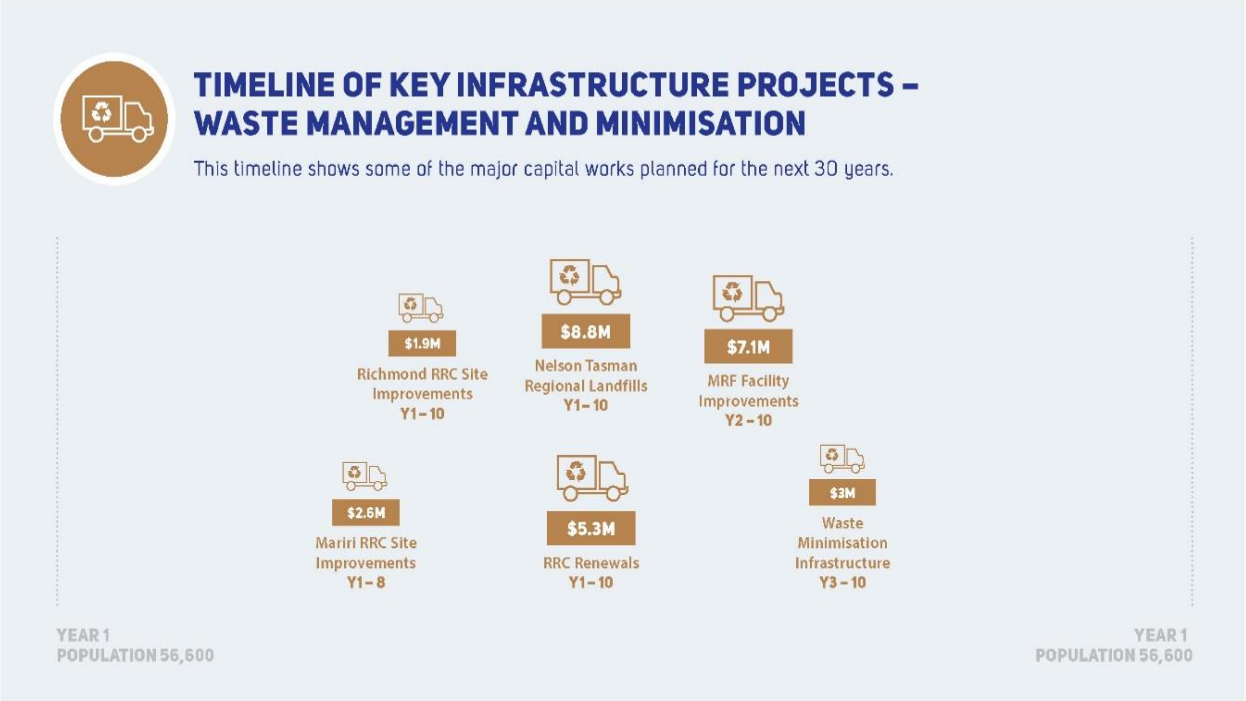
Over the next 10 years the Council plan to spend $111m of direct expenditure in the following areas:

- Kerbside recycling and rubbish collection $24m
- Resource Recovery Centres – operations and maintenance $16.2m
- Resource Recovery Centres – waste transport $4.5m
- Resource Recovery Centres – waste disposal $58.2m
- Waste minimisation (funded by central government) $5.4m
- Waste management policy $0.3m
- Insurance $0.6m
- Hazardous waste $0.4m
- Clearance of Illegal dumping $0.4m
- Closed landfill management $0.8m

1.6 Capital Programme

We plan to invest approximately $18.6m to renew, upgrade and provide additional assets to respond to the key issues. Of the $18.6m, $4.7m will be to renew assets and $13.9m will be used to improve the level of service.

We are planning the following key capital projects over the next ten years:



1.7 Key Changes

Table 2 summarises the key changes for the management of this activity since the 2018 Activity Management Plan.

Table 2: Key Changes

Key Change	Reason for Change
Increase in waste disposal costs in 2021/2022 to 2024/2025.	Increases in the waste disposal levy and landfill emissions costs are expected in 2021/2022 to 2024/2025. These will flow through into waste disposal costs at the Nelson Tasman Regional Landfill Business Unit, which will be passed on to Council. We have also requested additional funding from the business unit to reduce the general rate for this activity, and this will flow through into increased disposal costs.
Projected increases in waste disposal levy income and waste minimisation activity	The proposed increase in the waste disposal levy from 2021/2022 to 2024/2025 is expected to increase income from $200,000 to $1 million per annum. We will invest in additional waste minimisation activities and facilities as this occurs.
Reduced spending on public place recycling facilities	These sites are less cost effective than originally expected and central government is considering introduction of a container deposit scheme, which would reduce the need for public place recycling. We will consider further investment following central government decisions.

1.8 Key Assumptions and Uncertainties

We have made a number of assumptions in preparing the Activity Management Plan. The most significant assumptions for the Waste Management and Minimisation activity are:

- Landfill disposal prices will be as indicated in the Draft Nelson Tasman Regional Landfill Business Unit 10-year budget (dated 7 September 2020).
- We will receive $2.7 million from the Local Disposal Levy from the Nelson Tasman Regional Landfill Business Unit in 2021/2022, gradually rising to $3.8 million in 2030/31.
- We will receive a local government share of waste disposal levy of $200,000 in 2021/2022, rising to $650,000 in 2023/24, and approximately $1 million per annum in subsequent years.
- There will be no significant change to kerbside services or Resource Recovery Centre activities over the period of the waste management and minimisation plan.
- Waste to landfill will decrease by 10% in 2030, with an equivalent reduction in income and some reduction in costs.

The following are the key uncertainties in this activity. The majority of these are related to government proposals to regulate some waste production and waste minimisation activities.

- Central government has not confirmed the timing of changes to the waste disposal levy; it is currently indicated to increase in July 2021. Delays to levy changes already signalled would affect our income and cost of landfill disposal.
- Central government has indicated that it will review the Waste Minimisation Act (2008) in 2021. This could decrease the our share of central government's waste disposal levy.
- A container deposit scheme could significantly affect the volume and value of materials collected and accepted in kerbside collections and Resource Recovery Centres. It may require investment in additional facilities, but could also provide a significant revenue stream.
- Product stewardship proposals for items such as tyres could require additional investment, but could also provide us with additional income.
- The government has also announced that it proposes significant investment in recycling infrastructure, but the specifics of this investment have not been announced. This could provide additional on-shore processing capacity and make recycling activities more affordable.
- Other central government initiatives, such as standardising kerbside services, regulating products and reviewing the New Zealand Waste Strategy could require significant changes to the Council activities.
- Most contracts for this activity expire in June 2023 (kerbside services, waste transport, Resource Recovery Centre operations, greenwaste processing). The scope and bundling of these contracts could change and affect the cost to Council.
- The Council has identified key areas for waste reduction initiatives: organic waste and dry waste, but has not identified a preferred option or prepared detailed business cases. This work could identify that significant investment is required.

2 Introduction

The purpose of this Activity Management Plan (AMP) is to outline and to summarise in one place, Council's strategic management and long-term approach for the provision and maintenance of its Waste Management and Minimisation activity.

2.1 Rationale for Council Involvement

Council's involvement in waste management and minimisation activities is mandated by two key pieces of legislation:

- The Local Government Act (2002).
- The Waste Minimisation Act (2008).

Waste management and minimisation services have been provided by the Council and its predecessors for a substantial period of time, and are expected to continue as core services for the foreseeable future.

2.2 Description of Assets and Services

We provide comprehensive waste management and minimisation services through provision of kerbside recycling and waste collection services, and five resource recovery centres – at Richmond, Mariri, Takaka, Collingwood and Murchison.

All public and commercial waste disposal is through the resource recovery centres. Waste from these sites is transferred to landfill and recyclable material is processed and on-sold by Council's contractor.

The Council promotes waste minimisation through kerbside collection of recyclable materials, on-going educational programmes, public place recycling bins and provides drop off facilities at resource recovery centres for green waste, reusable and recyclable materials.

Operational landfills in the region are provided regionally, through the Nelson-Tasman Regional Landfill Business Unit, which is a joint committee of the Nelson City Council and Tasman District Council. This business unit commenced operations on 1 July 2017. From this date the Eves Valley Landfill stopped receiving waste and all waste is now directed to the York Valley Landfill (located in Nelson City). Regional landfill operations are outlined in a separate Activity Management Plan of the business unit.

The Council also maintains 22 closed landfills around the district, provides hazardous waste services and clears illegal dumping of refuse and litter.

The transportation and reserves and facilities activities of the Council also provide litter bins and clearance of litter and detritus from roads and reserves. Enforcement of littering and illegal dumping activities is performed through the public health and safety activity of Council.

2.2.1 Kerbside Services

In October 2014 the Council entered into an eight year contract with Smart Environmental Ltd for kerbside collection services (and operation of four of Council's five RRCs).

Key components of the collection service are:

- Fortnightly collection of mixed recyclable materials in 240 litre wheelie bins and glass in 55 litre recycling crates from around 18,600 properties.
- Weekly Council rubbish bag collections, with Smart Environmental responsible for the sale, supply, distribution and marketing of rubbish bags.
- Operation of a materials recovery facility ("MRF") at the Richmond RRC for sorting recyclable materials.
- Management and sale of all recyclable material collected at the kerbside and RRCs.

2.2.1.1 Kerbside Rubbish Bag Collection

Services

The Council offers, through Smart Environmental, a rubbish bag collection to approximately 19,600 properties within the Refuse Recycling rating area (Figure 1 below). The coverage of the district is reasonably widespread, with the exception of the Murchison area, Motueka Valley, Dovedale and parts of the Moutere Valley. The service covers approximate 89% of the district population.

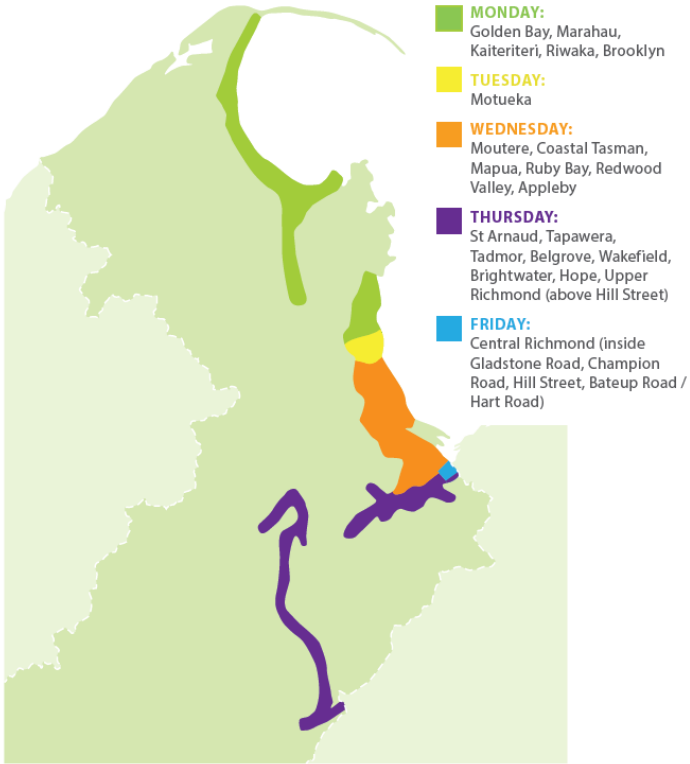


Figure 1: Extent of Kerbside Collections

The Council contracted service includes 45 and 60 litre pre-paid rubbish bags. These bags are available from the Council offices and supermarkets and other stores throughout the district. The revenue from bag sales and disposal costs for rubbish collected lie with Smart Environmental.

Within the District, there are also a significant number of private companies offering residential rubbish collection in strong competition with Council. These companies hold a significant share of the residential market and offer a variety of bin and bag options. Private collection companies generally deliver collected solid waste to Council's RRC sites, although some dispose outside of the district.

The private solid waste collection services are extremely competitive in the urban areas of the district and the majority of services contracted wheelie bin collections. Private contractors generally focus on offering a 'lowest cost mixed solid waste' service and this may discourage recycling in favour of convenience.

Assets

The Council does not own any assets associated with this service. This AMP considers just the services provided under contract for Council.

2.2.1.2 Kerbside Recyclable Collection

Services

The Council offers Kerbside recycling collection to approximately 19,600 properties in the Refuse Recycling rating area (

Figure 1). The coverage of the district is reasonably widespread, with the exception of the Murchison area, Motueka Valley, Dovedale and parts of the Moutere Valley. The service is funded by Refuse Recycling targeted rate and covers approximate 89% of the district population.

This service expands continuously with in-fill and subdivision within the targeted rating area. From time to time, and normally at the time of the Long Term Plan review, the Council considers extensions to the rating area.

Assets

The assets associated with the kerbside recycling service include the blue glass recycling crates and black wheelie bins ("mobile recycling bins", or "MRBs"), public place recycling bins, collection vehicles and buildings and equipment for processing of recyclable materials at the Richmond RRC. The majority of these assets are owned by the contractor.

The MRBs and processing facility (Figure 2) are owned by Smart Environmental until the end of the contract term when they will be purchased by the Council at an agreed depreciated value. For this AMP it has been assumed that ownership of these assets will transfer to a new contractor in 2023 and that no net payment will be made by Council.

Additional MRBs and glass collection crates are supplied by the Council, but are not regarded as fixed assets as they are of low value and difficult to secure.

Figure 2: Exterior Photo of Richmond RRC

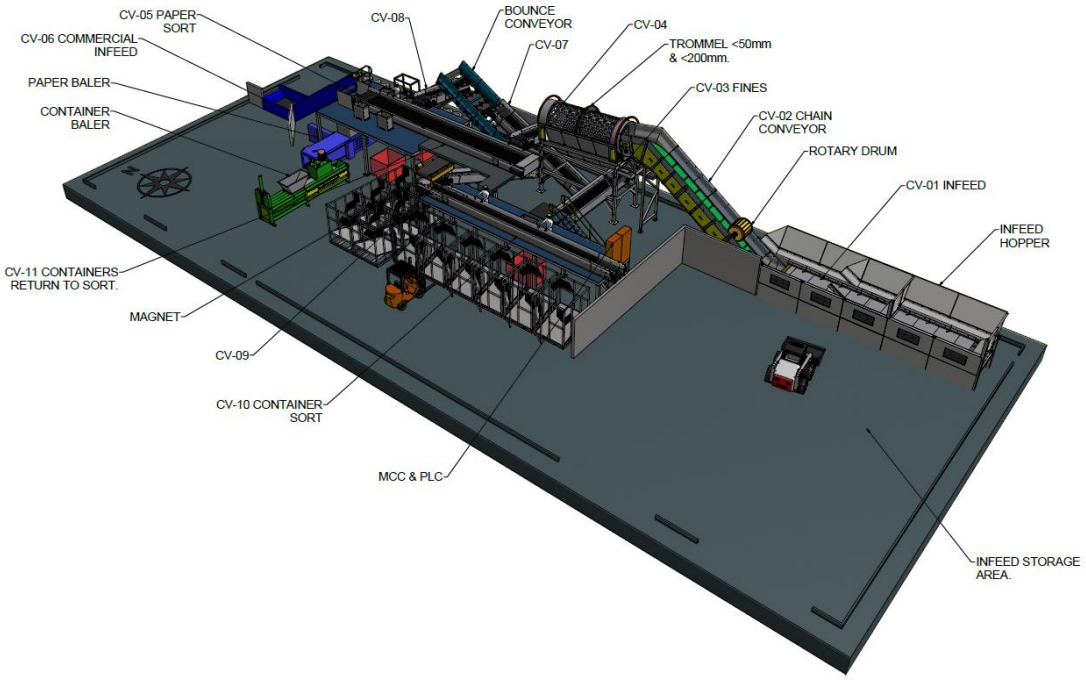


Figure 3: Materials Recovery Facility (MRF) at Richmond

The Council has provided a new 1000 m^2 building at the Richmond RRC in which the MRF is housed and new pavement areas around the building. The value of these assets is approximately $1.4m.

Collection vehicles (Figure 4) for the services under Contract 1020 are owned by the contractor and the contractor's owner-drivers.

Figure 4: New Vehicles for Recycling Services

As the majority of these assets are not owned by the Council this AMP focuses on the services provided under contract for the Council.

2.2.2 Resource Recovery Centres

The Council currently owns five Resource Recovery Centres (RRCs) located in Richmond, Mariri (Motueka), Takaka, Collingwood and Murchison.

Waste from each of these RRCs is transported to landfill for disposal and recyclable materials are dispatched direct to market or via the Richmond RRC.

The Council currently contracts out the day-to-day operation and maintenance of its RRC's. Each RRC varies in size and capacity and provides varying degrees of service.

The operation and maintenance of the Richmond, Mariri, Takaka, and Collingwood RRCs is managed under Contract 1020 by Smart Environmental Ltd. Waste from these four RRCs is transported to landfill by Fulton Hogan through Contract 1092.

The service provided at the larger RRCs (Richmond, Mariri and Takaka) includes loading waste into the hopper of compactor units, removing full bins from the compactor, and positioning them for collection by the haulage contractor. It also includes movement of empty bins into position at the compactor or loading point.

At Collingwood RRC the contractor provides skip bins for collecting waste. When the bins are full they are hauled to Takaka RRC by Smart Environmental Ltd where the waste is tipped into the hopper on site and transferred to compactor bins for onward haulage to landfill.

The Murchison RRC and waste haulage operation is managed by Fulton Hogan under Contracts 1160. Under this contract Fulton Hogan Ltd is responsible for the day to day operation and management of the Murchison RRC site, maximising recycling and recovery of materials and ensuring the site is kept clean and tidy. Waste is emptied into a short-term storage pit and transferred to open top bins for haulage and disposal at landfill.

2.2.2.1 Richmond Resource Recovery Centre

The Richmond RRC was commissioned in 1989 and is located at 14 Fittal Street (off Beach Road), Richmond. It is the largest of the five RRCs and handles around 63% of all municipal waste in the Tasman District. It is also a key hub for the processing and dispatch of recyclable materials from around the District.

Figure 5: Richmond RRC – Recycling Drop Off with Kiosk and Waste Pit in Background

The Richmond RRC serves Richmond, Brightwater, Wakefield and the wider Waimea Plains area. It provides the following services:

- Receipt of solid waste, recyclables, hardfill, car bodies, whiteware and scrap metal etc from the general public and commercial operators.
- Collection of disposal and handling fees on behalf of the Council.
- Handling, compaction and loading of solid waste for transportation to disposal at landfill.
- Handling, stockpiling, compaction of recyclables, car bodies, whiteware and scrap metal. These materials become the property of the contractor and are disposed of at markets at their discretion.
- Management and disposal of tyres (currently quartered and disposed of at landfill).
- Acceptance of items for product stewardship schemes (currently paint and empty agricultural chemical containers).
- Acceptance of waste oil which is collected by a separate contractor as part of a nationwide scheme.
- Acceptance of car and household batteries, which are recycled.
- Acceptance of LPG cylinders, which are recycled.

2.2.2.2 Mariri Resource Recovery Centre

The Mariri RRC was commissioned in 1992 and is located at 93 Robinson Road, Mariri, south of Motueka. The site is partly formed over a closed landfill, which operated on site until 1992.

Figure 6: Mariri RRC – Entrance from Robinson Road

Mariri RRC serves the Motueka Plains and Valley, Moutere, Coastal Tasman and Dovedale areas. It provides the following services:

- Receipt of solid waste, greenwaste, recyclables, hard fill, car bodies, whiteware and scrap metal etc from the general public and commercial operators.
- Collection of disposal and handling fees on behalf of Council.
- Handling, compaction and loading of solid waste for transportation to disposal at landfill.
- Handling of greenwaste for removal by another contractor.
- Handling, stockpiling, compaction of recyclables, car bodies, whiteware, and scrap metal. These materials become the property of the contractor and are disposed of at markets at their discretion.
- Management and disposal of tyres (currently quartered and disposed of at landfill).
- Acceptance of items for product stewardship schemes (currently empty agricultural chemical containers).
- Acceptance of waste oil, which is collected by a separate contractor as part of a nationwide scheme.
- Acceptance of car and household batteries, which are recycled.
- Acceptance of LPG cylinders, which are recycled.

2.2.2.3 Takaka Resource Recovery Centre

The Takaka RRC was commissioned in 1994 and is located at 45 Scott Road, Takaka in Golden Bay. The site was commissioned in 1995, replacing a solid waste tip in Rototai Road, Waitapu. The Takaka Resource Recovery Centre was upgraded in 2019-20, with a new waste pit and refurbished waste compactor installed on the lower level. A new kiosk and weighbridge installed on the upper level, which has been reconfigured to manage only recycling and reuse. The former waste compactor has been repurposed to accept recycling.

Figure 7: Takaka RRC – recycling drop off and reuse shop in foreground, with waste compactor, scrap metal and greenwaste drop-off in background

The RRC provides the following services:

- Receipt of solid waste, greenwaste, recyclables, hardfill, car bodies, whiteware and scrap metal etc. from the general public.
- Collection of disposal and handling fees on behalf of Council.
- Handling and loading of solid waste (excluding greenwaste, car bodies, whiteware and scrap metal), for transportation to landfill for disposal.
- Handling of greenwaste, for removal by another contractor.
- Handling, stockpiling, compaction of recyclables, car bodies, whiteware, and scrap metal. These materials become the property of the contractor and are disposed of two markets at their discretion.
- Management and disposal of tyres (currently quartered and disposed of at landfill).
- Acceptance of items for product stewardship schemes (currently empty agricultural chemical containers).
- Acceptance of waste oil which is collected by a separate contractor as part of a nation-wide scheme.
- Acceptance of car batteries which are recycled for lead content.
- Acceptance of LPG cylinders which are recycled for scrap metal content, and
- Operation of a reuse shop on site.

2.2.2.4 Collingwood Resource Recovery Centre

The Collingwood RRC is located at 97 Collingwood-Bainham Road, south of Collingwood in Golden Bay. The site was commissioned in 1999 replacing a solid waste tip which operated on the same site.

Figure 8: Collingwood RRC – Entrance from Collingwood-Bainham Road

The Collingwood RRC serves Collingwood, the Aorere Valley and many of the small nearby coastal settlements. It provides the following services:

- Receipt of solid waste, greenwaste, recyclables, hardfill, car bodies, whiteware and scrap metal etc. from the general public.
- Collection of disposal and handling fees on behalf of the Council.
- Handling and loading of solid waste for transportation to the Takaka RRC and then to Landfill.
- Handling of greenwaste for removal by another contractor.
- Handling, stockpiling, compaction of recyclables, car bodies, whiteware and scrap metal. These materials become the property of the contractor and are disposed of two markets at their discretion.
- Management and disposal of tyres (currently quartered and disposed of at landfill).
- Acceptance of items for product stewardship schemes (currently paint).
- Acceptance of waste oil.
- Acceptance of car and household batteries, which are recycled.
- Acceptance of LPG cylinders which are recycled for scrap metal content.
- Operation of a reuse container on site.

2.2.2.5 Murchison Resource Recovery Centre

The Murchison RRC was constructed on the landfill site on Matakitaki West Bank Road in Murchison in 2008. It replaces a landfill that operated on the same site from 1990 to 2009.

Figure 9: Murchison RRC – Recycling Shed on Left Background and Closed Landfill to the Right

The Murchison RRC services the township of Murchison and the surrounding area. The RRC provides the following services:

- Receipt of solid waste, greenwaste, recyclables, hardfill, car bodies, whiteware and scrap metal etc. from the general public.
- Collection of disposal and handling fees on behalf of the Council.
- Handling, loading and transport of solid waste (excluding greenwaste, car bodies, whiteware and scrap metal), for transportation to landfill for disposal.

- Handling of greenwaste for disposal.
- Handling, stockpiling, and compaction of car bodies, whiteware, and scrap metal. These materials become the property of the contractor and are disposed of at markets at their discretion.
- Acceptance of waste oil, which is collected by a separate contractor as part of a nation-wide scheme.
- Acceptance of car batteries, which are recycled.
- Acceptance of LPG cylinders, which are recycled for scrap metal content.
- Operation of a reuse shop on site.

2.2.3 Hazardous Waste

Some of the materials and chemicals that are routinely used in our homes, farms, towns and workplaces may themselves be hazardous or may contain hazardous chemicals.

When these products are no longer needed it is necessary that they are disposed of in an appropriate manner to ensure that the environment is not contaminated and that there is no risk to people's health.

The RRCs offer hazardous waste facilities for the following hazardous materials:

- Batteries
- Paint
- LPG cylinder gas bottles
- Oil
- Fuels
- Agri-chemicals containers
- Household batteries.

For the safe disposal of other household hazardous waste Tasman District Council provides a drop off service in conjunction with Nelson City Council. There is a nominal fee to be paid at the Nelson City Council Transfer Station for use of the service.

2.2.3.1 Redundant Farm Agrichemicals

Numerous chemicals and substances have been historically used for agriculture and horticulture in the Tasman district. Some are still in current use. Such waste needs to be disposed of safely to protect human and animal health as well as the environment.

The agrichemical industry assists with the disposal of unwanted agrichemicals and their containers from farming activities. The Agrecovery Rural Recycling Programme coordinates this disposal service. Refer to their website for more details, http://www.agrecovery.co.nz/.

Collection and acceptance of redundant farm agrichemicals will fall within this activity, although progress has been limited to date and more work is scheduled for 2021. This will include supporting annual or bi-annual on-farm collections. The Council is also monitoring other pilot recycling schemes for rural properties.

2.2.3.2 Commercial Hazardous Waste

Commercial premises are responsible for the correct disposal of hazardous waste that they produce. There are a number of companies that specialise in the disposal of commercial hazardous waste. The Council plans to investigate options to improve support of commercial hazardous waste services from 1 July 2021.

2.2.4 Closed Landfills

2.2.4.1 Services and Assets

Within the Tasman District Council area there are 19 known locations which have historically been used to dispose of various materials including domestic waste, rubble, farm waste, scrap metal etc. Some of these locations have been natural low points in the topography and have been filled by previous landowners or used as community tips, others have been historic fly tipping locations and at some sites the material has been deposited above the natural ground level. Since the disposal of material at these sites has ceased, each of the sites have been covered and restored to varying degrees. Many of the sites are now overgrown with vegetation.

These 19 sites are classified as "closed landfills" and have been named as follows for identification purposes:

- Appleby
- Cobb Valley (Ernies Flat)
- Collingwood
- Kaiteriteri
- Lodders Lane
- Mariri RRC
- Mariri old
- Murchison RRC
- Murchison
- Ngatimoti
- Old Wharf Road
- Pah Point
- Richmond RRC
- Rototai St Arnaud
- Tapawera
- Waiwhero

There are three privately owned closed landfills:

- Hoult Valley
- Upper Moutere
- Upper Takaka

The Council has arranged biennial inspections on each of the sites over the past 16 years. These inspections are based on visual observations of each of the sites and surrounding areas, as well as sampling of any potential contamination identified at the time of assessment. Some remedial works have been carried out following these inspections.

Section 10.3.2 details the resource consents held and designations that affect the closed landfills within the district.

Site characteristics of each closed landfill are summarised in Table 3.

Table 3: Current Site Characteristics of Each of the Closed Landfills in the District

Site	Landfill Characteristics						Vegetation				Nearby Environment			Management4		Ownership		
	Years closed1	Size2	Capped	Lined	Waste burned	Contains hazardous waste	No vegetation	Grassed	Overgrown	Re-vegetated	Downstream drinking water bore3	Coastal environment	River	Actively managed	Passively managed	Tasman District Council	Crown land	Private Land
Appleby	15-40	☒	☒		☒			☒			☒		☒	☒		☒		
Cobb Valley (Ernie's Flat)	15-40	☒				?			☒		☒		☒		☒		☒	
Collingwood (RRC)	5-15	☒	☒			?	☒				☒			☒		☒		
Hoult Valley *	15-40	☒	☒		☒	☒		☒			☒				☒			☒
Kaiteriteri	15-40	☒	☒			?	☒	☒			☒			☒			☒	
Lodders Lane	15-40	☒	☒		☒	?		☒		☒	☒	☒		☒		☒		
Mariri (old)	15-40	☒	☒		☒	☒			☒		☒	☒			☒			
Mariri (RRC)	15-40	☒	☒		☒	☒	☒				?	☒		☒		☒		
Murchison (old)	15-40	☒	☒		☒	?		☒			☒		☒	☒		☒		

Site	Landfill Characteristics						Vegetation				Nearby Environment			Management4		Ownership		
	Years closed1	Size2	Capped	Lined	Waste burned	Contains hazardous waste	No vegetation	Grassed	Overgrown	Re-vegetated	Downstream drinking water bore3	Coastal environment	River	Actively managed	Passively managed	Tasman District Council	Crown land	Private Land
Murchison (RRC)	<5	☒	☒	☒			☒		☒		☒		☒	☒		☒		
Ngatimoti	15-40	☒	p		?	☒			☒		☒		☒		☒	☒		
Old Wharf Rd	15-40	☒	☒		☒	?	☒	☒			☒	☒		☒		☒		
Pah Point	15-40	☒	☒		☒	?				☒	☒		☒	☒				
Richmond (RRC)	15-40	☒	☒		☒	☒	☒				☒	☒		☒		☒		
Rototai	5-15	☒	p	p	☒	?			☒		☒	☒		☒		☒		
St Arnaud	5-15	☒	☒		☒	?		☒			☒				☒	☒		
Tapawera	15-40	☒	☒		☒	☒	☒				☒		☒		☒	☒		
Tasman/Highway	15-40	☒	☒			☒				☒	☒	☒			☒	☒		
Tasman/Kina	15-40	☒	☒		☒	?				☒	☒	☒			☒	☒		

Site	Landfill Characteristics						Vegetation				Nearby Environment			Management4		Ownership		
	Years closed1	Size2	Capped	Lined	Waste burned	Contains hazardous waste	No vegetation	Grassed	Overgrown	Re-vegetated	Downstream drinking water bore3	Coastal environment	River	Actively managed	Passively managed	Tasman District Council	Crown land	Private Land
Upper Moutere *	15-40	☒	☒	☒	☒	?		☒			☒				☒			☒
Upper Takaka *	15-40	☒			?	☒			☒		☒		☒		☒			☒
Waiwhero	15-40	☒	☒	p	☒	?					☒			☒		☒		

1 Years since closure: MfE guideline ranges regarding need for monitoring.

2 Size: ☒ <15,000m^3 ☒ 15,000-100,000m^3.

3 Downstream drinking water bores identified using Explore Tasman (GIS system used by Tasman District Council).

4 Managed by Tasman District Council ☒= yes ☒= no p = partially capped/lined ? = unknown.

* Privately owned.

2.2.5 Waste Minimisation Activities

The most significant drivers for waste minimisation is the Nelson Tasman Joint Waste Management and Minimisation Plan (the "joint WMMP"). This plan was last amended in 2019.

One of the three goals of the Council in the joint WMMP and in the waste management and minimisation activity is "to avoid the creation of waste". Method 1.2.1.1 of the joint WMMP states:

"The Councils will identify opportunities to develop, implement and promote activities, events and programmes that engage the community, in waste reduction. These programmes will be directed by the Council priorities around waste stream reduction."

The Council works towards this goal through the implementation of waste minimisation initiatives. Waste minimisation covers all those initiatives that either seek to reduce the amount of waste being produced or divert waste from being disposed of in a landfill where it will effectively be lost as a resource.

To achieve this goal the Council can:

- Provide services and facilities.
- Manage or create demand.
- Enable positive changes in the community.

The bulk of Council activity in the waste management and minimisation area involves providing services (like RRCs and kerbside recycling) and managing or creating demand (by setting disposal prices or regulating activities).

The Council's other waste minimisation activities largely aim to enable positive change. The Council seeks to do this by:

- Collecting and disseminating information and advice.
- Part funding or supporting waste minimisation activities (through grants, contracting for services or other support).
- Working with business and communities to identify and remove barriers to waste minimisation.
- Promoting and recognising successful initiatives.

The Council's waste minimisation activities are mainly delivered by:

- Promoting waste minimisation through the Enviroschools programme and initiatives led by Community Development staff.
- A range of small initiatives that fund or promote waste minimisation.

These smaller waste minimisation initiatives include the following activities:

- Waste minimisation publicity.
- Compost bin incentive scheme and other composting initiatives.
- Promoting and supporting event recycling.
- Support of the Paintwise and Agrecovery programmes.
- Support of product stewardship initiatives as they arise.
- Provision of grants or other funding support for initiatives.

All of these activities are coordinated (and in some instances jointly delivered with) Nelson City Council.

3 Strategic Direction

Strategic direction provides overall guidance to the council and involves specifying the organisation's objectives, developing policies and plans designed to achieve these objectives, and then allocating resources to implement the plans. The strategic direction for this activity is set by the Nelson Tasman Waste Management and Minimisation Plan.

3.1 Our Goals

The goals for this activity are set by the Nelson Tasman Waste Management and Minimisation Plan (2019). This plan presents an ambition to 'eliminate unnecessary waste to landfill' and with a target to 'reduce waste to landfill by 10% per person by 2030'.

Table 4: Activity Goal

Activity Goal
The goals for this activity are to: • Avoid the creation of waste; • Improve the efficiency of resource use; and • Reduce the harmful effects of waste.

Table 5: Activity Target

Activity Target
Included in the Waste Management and Minimisation Plan is a target of **10% reduction in waste per person by 2030**, using 2017/18 as a baseline. This is articulated in the Waste Management and Minimisation Plan as a target of less than 557kg of waste per person, excluding special wastes[1]. This target has been incorporated into this Activity Management Plan as a Level of Service Performance Measure, but there is some uncertainty whether we can meet this target. Further work is programed in the first two years of this plan to assess the feasibility of meeting this target.

[1] Special waste is any waste that requires special handling, pre-treatment or testing prior to disposal to ensure environmental and personnel protection. This could be a result of their quantity, concentration, composition or physical properties or hazardous nature (such as asbestos or chemical contaminated soil or waste). Examples of special waste are asbestos waste, contaminated soil, biosolids from wastewater treatment, treated sawdust and wood processing waste, animal carcasses, offal, industrial wastes). Special waste is excluded from the target because quantities of special waste are often highly variable and affected by factors outside of the council's control.

3.2 Contribution to Community Outcomes

Table 6 summarises how this activity contributes to the achievement of the Council's Community Outcomes.

Table 6: Community Outcomes

Community Outcomes	Does Our Activity Contribute to the Community Outcome?	How Our Activity Contributes to the Community Outcomes
Our unique natural environment is healthy, protected and sustainably managed.	Yes	We protect our natural environment by providing comprehensive waste disposal services for our community. We reduce the impact of landfill disposal by providing a wide range of other services to divert waste from landfill and reduce waste production. Our facilities comply with resource consents, and we ensure that we have operational plans for our services and site management plans for the facilities we operate.
Our urban and rural environments are people-friendly, well-planned, accessible and sustainably managed.	Yes	Rubbish and recycling collection services ensure our built urban and rural environments are functional, pleasant and safe. Our Resource Recovery Centre facilities are convenient, clean and safe. We promote the sustainable use of resources and provide sustainable alternatives to landfill disposal.
Our infrastructure is efficient, resilient, cost effective and meets current and future needs.	Yes	We operate our facilities and services safely and efficiently. We have contingency plans and design our facilities so that essential services are able to continue during emergency events. We plan to provide waste and recycling services that our community is satisfied with, now and for the future.
Our communities are healthy, safe, inclusive and resilient.	No	
Our communities have opportunities to celebrate and explore their heritage, identity and creativity.	No	

Community Outcomes	Does Our Activity Contribute to the Community Outcome?	How Our Activity Contributes to the Community Outcomes
Our communities have access to a range of social, cultural, educational and recreational facilities and activities.	No	
Our Council provides leadership and fosters partnerships, a regional perspective, and community engagement	Yes	We work with Nelson City Council to promote waste minimisation and to provide regional services. We advocate to central government for more sustainable waste management practices. Waste reduction and effective resource recovery shows good kaitiakitanga (stewardship) of our natural resources. We plan to improve our engagement with iwi and with businesses.
Our region is supported by an innovative and sustainable economy.	Yes	Our Resource Recovery Centres provide sustainable waste disposal options for our Region. We plan to partner with businesses to provide waste minimisation services.

3.3 Infrastructure Strategy

Council's Infrastructure Strategy covers the provision of the Council's water supply, stormwater, wastewater, rivers and flood control, and transportation services. The purpose of the Strategy is to identify the significant infrastructure issues for Tasman over the next 30 years, and to identify the principal options for managing those issues and the implications of those options.

The key infrastructure priorities included in the Strategy are:

- Providing infrastructure services that meet the needs of our changing population.
- Planning, developing and maintaining resilient communities .
- Providing safe and secure infrastructure and services.
- Prudent management of our existing assets and environment.

While the Waste Management and Minimisation Activity is not include in the Council's Infrastructure Strategy, the principles and priorities of the Strategy are broadly applied in this activity.

3.4 Financial Strategy

The Financial Strategy outlines the Council's financial vision for the next 10 to 20 years and the impacts on rates, debt, levels of service and investments. It guides the Council's future funding decisions and, along with the Infrastructure Strategy, informs the capital and operational spending for the Long Term Plan 2021-2031.

3.5 Tasman Climate Action Plan

In 2019, the Council adopted the 'Tasman Climate Action Plan' (Action Plan). The Action Plan is the Council's initial response to the urgent need to take action on climate change, to build climate resilience and reduce greenhouse gas emissions.

The Action Plan sets out goals, targets and actions relating to three key themes:

- Mitigation – how we can reduce greenhouse gas emissions from the Council's activities.
- Adaptation – ways we can respond to our changing environment, including positive opportunities.
- Leadership – how we can lead by example, advocate and encourage others to take action.

The following goals are the long-term aspirations of the Council. They represent the first step towards a cohesive package of activities that address climate change issues: The Council contributes to New Zealand's efforts to reduce greenhouse gas emissions (including net carbon emissions).

1. Tasman District becomes more resilient to the impacts of climate change.
2. The Tasman Community is informed of climate change actions and options for response.
3. The Council shows clear leadership on climate change issues.

Goals will be measured against targets and achieved by implementing the actions set out in the Action Plan. Targets and actions of direct relevance to this activity are in the table below. Several other actions are also relevant (e.g. those relating to information provision and leadership goals) - see the online version of the Action Plan for details: www.tasman.govt.nz/climate-change.

While Tasman District Council's emissions have not yet been formally measured, results from similar Councils indicate that landfill emissions are likely to comprise a large proportion of the Council emissions. These emissions will arise from active landfill activities and from closed landfills.

For Tasman District Council the largest landfill emissions will be from the active landfill, at York Valley, and the recently closed landfill, at Eves Valley. Both of these landfills are managed by the Nelson Tasman Regional Landfill Business Unit. While these landfills and the emissions from them are attributed to the business unit, the emissions from the landfills are ultimately attributed to Tasman District Council and Nelson City Council through their shared ownership of the business unit. The cost of active landfill emissions accrues to the business unit through Emissions Trading Scheme (ETS) liabilities, but these costs are passed through to landfill users (including the Councils).

Reduction of landfill emissions is achieved by a combination of two strategies:

- Improving capture and destruction of landfill gas, and
- Reducing waste to landfill, particularly high emission wastes like organics.

Nelson Tasman Regional Landfill Business Unit is planning to reduce emissions (and ETS costs) by improving gas collection and destruction at the active York Valley landfill. It is also investigating collection and destruction of landfill gas at the recently closed Eves Valley landfill.

The Tasman District Council and Nelson City Councils are best placed to reduce waste to landfill and are working closely with the business unit to identify options to divert organic material from landfill.

Table 7: Relevant targets and actions from the Tasman Climate Action Plan (2019)

Goal	Targets	Actions (short-term) 2019 - 2021	Actions (medium-term) 2021 - 2024	Actions (long-term) 2024+
1	1(a) Council's emissions* of methane reduce by 10% below 2017 levels by 2030 and 47% by 2050 or earlier. Council's net emissions* of all other greenhouse gases reduce to zero by 2050. *from Council's own activities. Targets are based on Zero Carbon Bill. If necessary, revise targets once enacted.	(vix) Implement the Joint Waste Management and Minimisation Plan, to reduce total waste to landfill. This plan includes new options for achieving overall reduction (e.g. promotion of circular economy, education, service changes etc).	Implement programmes to support waste reduction.	Implement programmes to support waste reduction.
		(x) Investigate options for reducing green waste to landfills.	Implement programmes to support green waste reduction and composting.	Implement programmes to support green waste reduction and composting.
2	2(a) Progressively improve network infrastructure resilience to climate change risks across all Council networks.	(i) Completion of Council's Infrastructure Risk and Resilience project (2018 - 2020). This includes development of an Infrastructure Resilience Strategy, which will identify critical infrastructure (i.e. water supply sources, stormwater, wastewater, transportation and solid waste) and their vulnerability to natural hazards and climate change. It will also identify what infrastructure will become redundant.	Activity Management Plans (AMPs) account for climate change risks, uncertainty and resilience for the entire life of current and future infrastructure (i.e. future proof design). All assets should be assessed for climate change risks at their proposed location, before decisions on siting of a new asset/replacement of existing assets are made. Funding for repair or replacement of network infrastructure incorporates accounting for climate change risks and resilience.	Implementation of AMPs through network development projects. Funding maintained through future plans.

3.6 Key Issues

The most important issues relating to the waste management and minimisation activity and our proposed responses to these issues are shown below in Table 8.

Table 8: Key issues for the Waste Management and Minimisation Activity

Key Issue	Discussion	How we are responding
Changes in central government waste management regulation and policy	Since early 2019, central government has introduced a series of initiatives to improve waste management within New Zealand. These initiatives include phase-out of some plastic bags, regulated product stewardship, an increase in the scale and reach of the waste disposal levy (the 'landfill levy'), new environmental standards, restrictions on recycling exports and proposed phase-out of problematic plastics. Further changes are expected in the coming year, including a review of the New Zealand Waste Strategy, decisions on a container deposit scheme and consideration of a standard kerbside recycling methodology for councils. While these changes have the potential to improve waste minimisation, they could significantly affect the range of services that we provide (including kerbside collections). The uncertainty that they bring make it difficult to plan ahead.	We will take a cautious approach to our capital programme. We will also work with Nelson City Council and seek funding for regional waste minimisation infrastructure where available. Our current contract for kerbside recycling and rubbish bag collections ends in June 2023. We'll be reviewing any decisions by government this year and then engage with the community to understand what services we should deliver. We continue to engage with central government and advocate for product stewardship and waste policy that works for our region.

Key Issue	Discussion	How we are responding
Uncertainty of waste minimisation funding from central government	We receive a proportion of the waste disposal levy collected by central government to fund waste minimisation activities. This funding is expected to gradually increase from 2021/2022 to 2024/2025. It is uncertain whether we will continue to receive the same share of this funding over time. This delay of funding will limit the level of waste minimisation work that we can deliver before 2024/2025, unless additional funding is found.	We will moderately increase waste minimisation expenditure in Years 1-3, drawing on reserves accumulated from existing government funding. We will prioritise work that is more likely to attract additional funding from others. We do not proposed to increase further waste minimisation activity in the short term. The government has also announced proposals for significant investment in recycling infrastructure. Working with Nelson City Council and the Nelson Tasman Regional Landfill Business Unit we will seek funding opportunities.
Rapidly changing markets for the sale of recyclable materials	In recent years, the commodity markets for plastic and paper have contracted significantly and changes to government regulations will limit export of plastics from January 2021. We decided to stop export of plastics; some plastics are no longer being commercially recycled. It's unclear where paper and cardboard recycling markets will be in the medium and long term. These factors may increase kerbside recycling services costs and limit the ability of our community to divert increasing volumes of material for recycling.	We will continue to monitor recycling commodity markets and make allowance for price variances in our budgets. We will continue to engage with industry and central government to advocate for additional recycling capacity in New Zealand.

Key Issue	Discussion	How we are responding
Need to review our kerbside services	With changes to recycling markets, and possible changes like container return systems signaled by government we may need to review the range of kerbside services we provide. This could include changing the frequency of some services or stopping some services, adding some services or changing the areas that we collect from.	Our current contract for kerbside recycling and rubbish bag collections ends in June 2023. We'll be reviewing any decisions by government this year and then engage with the community to understand what services we should deliver.
Increased cost of waste disposal in the next three years	We expect landfill disposal fees to increase significantly in the first three years of this plan. These increases are due to expected increases in the landfill levy, increased landfill emissions costs, additional work at the regional landfill and our desire to recover operating costs from disposal fees rather than general rates. This increase could significantly improve the attractiveness of waste reduction and waste diversion (such as recycling and composting) but may be unpopular and lead to increased illegal disposal of waste.	We will be moving to weight based charging at most Resource Recovery Centres, which allow fairer pricing and give people a better opportunity to save costs. We will also keep recycling, scrap metal and greenwaste services available at no cost or low cost for residential customers at Resource Recovery Centres. We will also be carefully monitoring illegal dumping activity, to check whether increasing charges lead to increased dumping.
Further work to determine how we can achieve our waste minimisation targets	Included in our Waste Management and Minimisation Plan is a target to reduce waste to landfill by 10% per person by 2030. We have identified scope to potentially reduce organic waste and dry materials from landfill, this work will require significant investment. We are proposing modest investment in the first three years of this plan, while detailed business cases are prepared to inform investment decisions.	We will work with Nelson City Council to trial diversion of dry waste at selected Resource Recovery Centres and monitor Nelson's food waste collection trial. Working with Nelson City Council and the Nelson Tasman Regional Landfill Business Unit we will prepare detailed business plans for diversion of dry waste and organic waste from landfill.

3.7 Prioritisation

The Council cannot afford to undertake all work at once due to financial and resource constraints. This means that the Council needs to prioritise what work it undertakes first, and what work can wait until later.

There are multiple factors that affect the priority of individual works. These include:

- The need to protect public health and safety
- Statutory compliance
- Meeting the needs of tomorrow's population
- Readiness to implement works
- Co-funding opportunities
- Enabling pleasant community environments
- Benefits and risks
- District distribution
- Strategic fit

The Council has taken all of the above into consideration when planning its programme of work. Generally, mandatory requirements such as statutory compliance take priority, and discretionary activities have been programmed second to this.

Table 9 summarises our proposed approach to the key issues for this activity. We have generally prioritised risk reduction measures ahead of waste minimisation initiatives. We have done this with the expectation that some waste minimisation services and initiatives will be provided by commercial companies and not-for-profit organisations and that transparency in disposal prices may lead to changes in consumer behaviour.

Table 9: Council's Response to Key Issues

Key Issue	How we are responding
Population and waste growth	Our kerbside services are designed to manage growth and we monitor this continuously. We include growth projections when designing upgrades to our resource recovery centres.
Growing demand for waste diversion	While we expect to see increases in recycling over time, not all recycling services need to be provided by Council. We are proposing to support and partner with third parties to provide waste diversion services in the region. These third parties are often able to provide services more efficiently than Council.
Increasing need for risk reduction measures	We have included budgets to continuously improve the safety of our kerbside services and resource recovery centres. We are planning to increase the range of hazardous waste services in the district.

Key Issue	How we are responding
Cost of landfill disposal	We expect that the cost of landfill disposal will continue to increase over time. We will signal changes early and transparently so that our communities can plan with certainty.
Regional waste management	We operate under a Joint Waste Management and Minimisation Plan with Nelson City Council. It sets the strategic goals and objectives for the Councils and for the Nelson-Tasman Regional Landfill Business Unit. The Joint Waste Management and Minimisation Plan is currently being reviewed and will set the direction for the next six years.

4 Key Linkages

There are multiple factors that influence how the Council manages this activity. They can be internal or external and include legislation, policies, regulations, strategies and standards. This section summarises these key linkages.

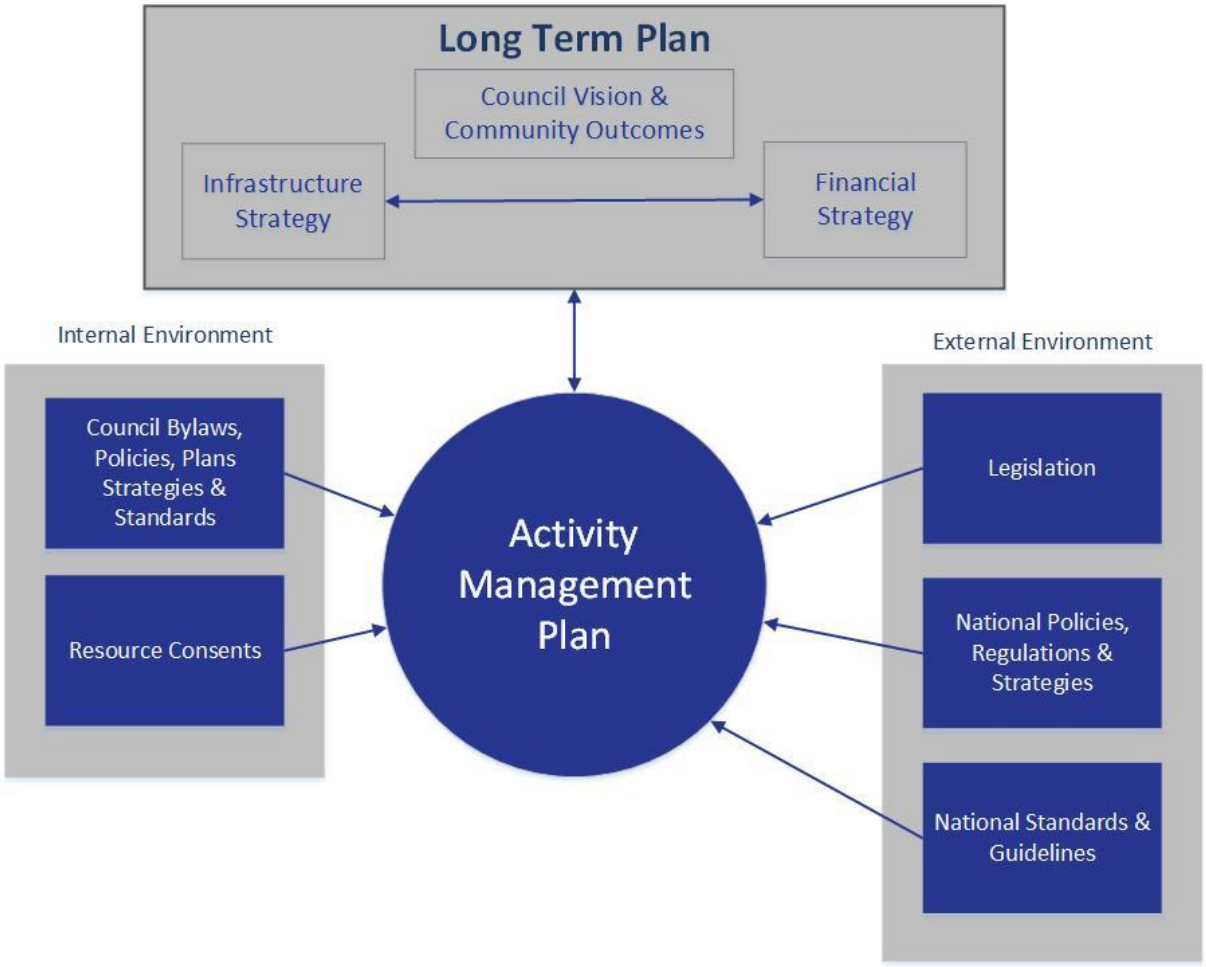


Figure 10: How the Waste Management and Minimisation AMP Relates to Other Documents

In preparing this AMP the project team has taken account of:

- National Drivers – for example the drivers for improving Asset Management through the Local Government Act 2002
- Local Drivers – community desire for increased level of service balanced against the affordability
- Industry Guidelines and Standards
- Linkages – the need to ensure this AMP is consistent with all other relevant plans and policies
- Constraints – the legal constraints and obligations the Council has to comply with in undertaking this activity.

The main drivers, linkages and constraints are described in the following sections.

4.1 Key Legislation

The Acts below are listed by their original title for simplicity however all amendment acts shall be considered in conjunction with the original Act, these have not been detailed in this document. For the latest Act information, refer to http://www.legislation.govt.nz/.

Table 10: Legislative Acts that Influence this Activity

Key Legislation	How it relates to this activity
Waste Minimisation Act 2008	The Waste Minimisation Act 2008 (WMA) is the key legislative driver for the Council's waste management and minimisation activities. Part 4 of the WMA sets out the responsibilities of territorial authorities in relation to waste management and minimisation. Section 42 of the WMA states that the Council "must promote effective and efficient waste management and minimisation within its district". Activities required of the Council by the WMA include: • adoption of a Waste Management and Minimisation Plan (WMMP); • review of the WMMP at least every six years; • preparation of a Waste Assessment prior to review of the WMMP. Central government has indicated that it will commence a review of the WMA in the next two years. This review may change the waste management and minimisation responsibilities of the Council and may amend Council's funding distribution from waste disposal levies.
Local Government Act 2002	The Local Government Act requires local authorities to prepare a ten-year Long Term Plan and 30-year Infrastructure Strategy, which are to be reviewed every three years. The Act requires local authorities to be rigorous in their decision-making by identifying all practicable options and assessing those options by considering the benefits and costs in terms of the present and future well-being of the community. This activity management plan provides information to support the decisions considered in the Long Term Plan. In 2008 some responsibilities of the Council with respect to waste management and minimisation were transferred to and modified in the Waste Management Act. Section 11A of the LGA 2002 indicates that solid waste collection and disposal are core services of a territorial authority and that the Council, in considering its role, "must have particular regard to" the contribution these make to its communities.
Resource Management Act 1991	Sets out obligations to protect New Zealand's natural resources such as land, air, water, plants, ecology, and stream health. Resource consents draw their legal authority from the Resource Management Act 1991.

Key Legislation	How it relates to this activity
	The RMA is administered locally by Tasman District Council, as a unitary authority, through the Tasman Resource Management Plan (TRMP). The following section discusses key consents that the Council holds in order to undertake this activity. A Resource Management Review commissioned by government (Randerson Report, 2020) has recommended significant reform of the environmental management system. Decisions are expected in 2021 on the scope and timing of system reform, Ministerial and cross-government governance arrangements, and working arrangements with Treaty partners and local government. In August 2020 Cabinet approved the policy content and drafting of a National Environmental Standard for the outdoor storage of tyres (NES). When the NES regulations are drafted, they will go back to Cabinet for a final decision. We expect this would happen in March 2020 with the regulations coming into force in mid-2021. The changes proposed will limit the storage and processing of tyres on Resource Recovery Centres. Changes to Resource Management Act or National Environmental Standards could impact on the management of the Councils waste related activities.
Litter Act 1979	Defines the offence of littering on public or private land. Requires the Council (and other landowners) to provide and maintain litterbins in places where litter is likely to be deposited, and to empty these bins at regular intervals. It also gives powers to the Council to appoint Litter Control Officers and Litter Wardens and to enforce the provisions of the Act. Central government has indicated that it will commence a review of the Litter Act in the next two years. This review could involve a repeal of this act and incorporation of all or some of its provisions into the Waste Minimisation Act.
Hazardous Substances and New Organisms Act 1996	The purpose of this Act is to protect the environment, and the health and safety of people and communities, by preventing or managing the adverse effects of hazardous substances and new organisms. The Act places restrictions and controls on the transport and storage of hazardous substances. This places requirements on the Council in the receipt and handling of some materials accepted at Resource Recovery Centres and any collection services.
Climate Change Response Act 2002	The Climate Change Response Act 2002, Climate Change (Waste) Regulations 2010 and Amendments to the Climate Change (Unique Emissions Factors) Regulations are implemented through the New Zealand Emission Trading Scheme (NZ ETS). The NZ ETS requires those emitting greenhouse gases to pay for increases in emissions, whilst rewarding emission reductions. The

Key Legislation	How it relates to this activity
	waste sector is affected by the NZ ETS, as those who operate landfills are required to participate in the scheme, report emissions and surrender emission units (NZU's). The cost of emission units is passed on to customers of landfills through increased prices for waste disposal. Emissions from closed landfills are not captured by the NZ ETS. The Climate Change Response (Zero Carbon) Amendment Act 2019 provides a framework by which New Zealand can develop and implement climate change policies that contribute to the global effort under the Paris Agreement and allow New Zealand to prepare for, and adapt to, the effects of climate change. The original proposal was for a separate piece of legislation called the Zero Carbon Bill to be passed into law. In May 2019, the Government decided to introduce it as an amendment to the Climate Change Response Act 2002. The objective was to ensure that all key climate legislation is within one Act. The changes do four key things. They: • set a new domestic greenhouse gas emissions reduction target for New Zealand to reduce net emissions of all greenhouse gases (except biogenic methane) to zero by 2050 and reduce emissions of biogenic methane to 24–47 per cent below 2017 levels by 2050, including to 10 per cent below 2017 levels by 2030 • establish a system of emissions budgets to act as stepping stones towards the long-term target • require the Government to develop and implement policies for climate change adaptation and mitigation • establish a new, independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals. The Climate Change Commission will issue its first guidance to government in February, proposing three emissions budgets for the emissions budget periods 2022–2025, 2026–2030 and 2031–2035. The government must set budgets in place by the end of 2021. Government has indicated that NZ ETS will be an important tool in delivering emissions reductions and helping New Zealand achieve its emissions budgets and 2050 target. These changes will likely have a significant impact on waste management in the region, particularly in respect to landfill emissions. The Council will need to work closely with the Nelson Tasman Regional Landfill Business Unit and the Nelson City Council to work to reduce the emissions of waste.

Key Legislation	How it relates to this activity
Public Works Act 1981	The Public Works Act provides the statutory authority to acquire land for a public infrastructure.
Health and Safety at Work Act 2015	Health and Safety legislation requires that staff and contractors are kept safe at work. New legislative changes to the act will mean improved health and safety measures will be required. The Health and Safety at Work Act regulations also control how some hazardous materials must be handled and managed.
Te Tiriti o Waitangi – The Treaty of Waitangi	The Treaty of Waitangi is an agreement between Māori and the Crown. Under Section 4 of the Local Government Act 2002 local authorities are required to 'recognise and respect the Crown's responsibility to take appropriate account of the principles of the Treaty of Waitangi and to maintain and improve opportunities for Māori to contribute to local government decision-making processes'. Further sections of the Act, particularly 77 and 81, detail the scale of requirement for local authorities to seek contributions and involvement from Māori in consultation and decision-making processes.

4.2 Key Planning, Policies and Strategies

4.2.1 National Policies and Strategies

The New Zealand Waste Strategy is the primary national strategy document that affects this activity.

Table 11: National Polices, Regulations and Strategies

National Polices, Regulations and Strategies	How it relates to this activity
New Zealand Waste Strategy 2010	The first New Zealand Waste Strategy (NZWS) was launched in 2002, reviewed in 2006 and again in 2010. In contrast to previous strategies the current NZWS does not contain specific targets, but provides a high level direction to guide the use of the tool available to manage and minimise waste in New Zealand. The NZWS's flexible approach also aims to ensure that waste management and minimisation activities are appropriate for different local situations. To achieve these aims the NZWS sets the following two goals. • Goal 1: Reducing the harmful effects of waste; • Goal 2: Improving the efficiency of resource use. The aims of these two goals are to "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".

National Polices, Regulations and Strategies	How it relates to this activity
	The Council's Waste Management and Minimisation Plan must have regard to the Waste Strategy and should guide local spending of the TA's portion of the waste disposal levy. In particular circumstances central government may direct a Council to amend its WMMP, although this provision of the act has not been used to date. The Ministry for the Environment has indicated that it will commence a review of the NZWS in mid-2021. This review could include proposals for more specific targets and objects and would inform the next Waste Management and Minimisation Plan review.

4.2.2 Regional Policies and Strategies

The Council also has several planning policy and/or management documents detailing its responsibilities under the legislative drivers listed above. Those which impact on the provision of this activity are listed in Table 12.

Table 12: Council Policies and Strategies

Council Documents	How it relates to this activity
Nelson – Tasman Joint Waste Assessment 2017	Waste assessments are required to be prepared every six years. These assessments review the provision of services and the Council's proposed response to future demand. The first waste assessment was prepared jointly with Nelson City Council in 2010 and a second waste assessment was prepared in 2017.
Nelson – Tasman Joint Waste Management and Minimisation Plan 2019	The Nelson – Tasman Joint Waste Management and Minimisation Plan was prepared in 2012 and reviewed in 2018-9. An amended plan was adopted in September 2019, and included a target of 10% reduction in waste per capita by 2030. The plan is available at: https://www.tasman.govt.nz/my-council/key-documents/more/environment-reserves-and-open-space/joint-waste-management-and-minimisation-plan/
Tasman District Council District Plan – Tasman Resource Management Plan (TRMP)	A combined regional and district plan with statements of issues, objectives, policies, methods and rules addressing the use of land, water, coastal marine area and discharges into the environment. Part V applies to all uses of water including taking, diverting and damming.
Tasman Regional Policy Statement (TRPS)	An overview of significant resource management issues with general policies and methods to address these. Part 7 Fresh Water Resources outlines the control of land use for the purposes of water management.

Council Documents	How it relates to this activity
Nelson Tasman Land Development Manual	The purpose of the Nelson Tasman Land Development Manual is to outline standards and good practice matters for land development and subdivision in the Nelson and Tasman Districts. The Manual replaces the Tasman District The Council Engineering Standards 2013 and the Nelson Land Development Manual 2010, and provides one set of standards for the Nelson and Tasman region. The manual was adopted in 2019 and amended in 2020.
Tasman District Council Financial Strategy	Sets out the how the Council funds its activities, projected population growth rates, funding expenditure, projected debt levels and management of investments.
Tasman District Council Infrastructure Strategy	Identifies infrastructure issues, principal options for managing issues and implications of those options.
Tasman District Council Procurement Strategy	The procurement strategy dictates the process for all procurement at the Council. The strategy does cater for scale and size of the acquisition.
Long Term Plan	The Local Government Act 2002 requires the Council to produce a Long Term Plan (LTP) every three years. The LTP outlines activities and priorities for ten years, providing a long-term focus for decision-making.

5 Levels of Service

A key objective of this plan is to match the levels of service provided by this activity with the agreed expectations of our customers and their willingness to pay for that level of service. These levels of service provide the basis for the life cycle management strategies and works programmes identified in this Plan.

Levels of service can be strategic, tactical or operational. They should reflect the current industry standards and be based on:

- Customer Research and Expectations: information gained from stakeholders on expected types and quality of service provided.
- Statutory Requirements: Legislation, regulations, environmental standards and Council bylaws that impact on the way assets are managed (e.g. resource consents, building regulations, health and safety legislation). These requirements set the minimum level of service to be provided.
- Strategic and Corporate Goals: Provide guidelines for the scope of current and future services offered and manner of service delivery, and define specific levels of service, which the organisation wishes to achieve.
- Best Practices and Standards: Specify the design and construction requirements to meet the levels of service and needs of stakeholders.

We consult on the levels of service and performance measures as part of the LTP consultation process.

5.1 Our Levels of Service

Table 13 details the levels of service and associated performance measures for this activity. The table sets out Council's current performance and the targets we aim to meet over the next three years, and by the end of the next 10-year period. The light blue shaded rows show those that are included in the Long Term Plan and reported in the Annual Plan. Unshaded white rows are technical measures that are only included in the Activity Management Plan.

Table 13: Performance against Current Levels of Service, and Intended Future Performance

Levels of Service	Performance Measure	Current Performance (2019/20)	Future Performance Targets			
			Year 1	Year 2	Year 3	Year 10
			2021/22	2022/23	2023/24	2030/31
We enable effective waste minimisation activities and services.	There is a reduction in total waste per capita going to Class 1 landfill. As measured by Nelson – Tasman tonnage per capita recorded at landfill.	2017/18: 717kg 2018/19: 760kg 2019/20: 636kg per person* *2019/20 affected by COVID-19 lockdown	<715kg	<710kg	<705kg	<645kg
	There is a reduction in municipal waste per capita going to Class 1 landfill. As measured by Nelson – Tasman tonnage per capita recorded at landfill excluding special waste	2017/18: 617kg 2018/19: 642kg 2019/20: 581kg per person *2019/20 affected by COVID-19 lockdown	<615kg	<610kg	<605kg	<557kg
	There are high levels of participation in our kerbside recycling service As measured through resident survey of those provided with Council's kerbside recycling collection services who use it three times or more per annum.	94%	at least 95%	at least 95%	at least 95%	at least 95%
	Contamination levels in our kerbside recycling are low. as measured by our contractor at the Materials Recovery Facility.	4.9%	<7.5%	<7.5%	<7.5%	<7.5%

Levels of Service	Performance Measure	Current Performance (2019/20)	Future Performance Targets			
			Year 1	Year 2	Year 3	Year 10
			2021/22	2022/23	2023/24	2030/31
Our kerbside services are reliable and easy to use.	% customer satisfaction with kerbside recycling services. As measured through resident survey of those provided with Council's kerbside recycling collection services.	92%	At least 90%	At least 90%	At least 90%	At least 90%
	Customer Service Requests relating to waste management activities are completed on time. Percentage of enquiries to our contractor resolved within contracted timeframes. As measured through Confirm.	93%	At least 95%	At least 95%	At least 95%	At least 95%
Our resource recovery centres are easy to use and operated in a reliable manner.	Percentage of customer satisfaction. As measured by on-site or on-line customer surveys at RRCs who are very satisfied or fairly satisfied.	99%	At least 95%	At least 95%	At least 95%	At least 95%

Levels of Service	Performance Measure	Current Performance (2019/20)	Future Performance Targets			
			Year 1	Year 2	Year 3	Year 10
			2021/22	2022/23	2023/24	2030/31
All Council waste management and minimisation activities, facilities and services comply with the TRMP, site management plans and other appropriate legislative requirements.	No enforcement actions are issued with regard to Council's resource recovery and waste management activities. Enforcement actions are regarded as: (a) abatement notices (b) infringement notices (c) enforcement orders, or (d) convictions.	0	0	0	0	0
Our community can easily access and use services for the safe disposal of waste.	The incidence of illegal dumping does not increase over time. As measured by the number of reports of illegal dumping per annum in parks, rivers and road reserve.	74	less than 100	less than 100	less than 100	less than 100

5.2 Level of Service Changes

The Council reviews its levels of service every three years, as part of the Long Term Plan development.

A key consideration in the first year of this plan will be the range of kerbside services that should be provided by the Council in the future. Central government is expected to propose a standard kerbside collection specification for councils in 2021, and this may recommend a food waste collection service. Central government is also likely decide at this time whether a container return scheme should be introduced in New Zealand.

These changes could lead to a decision by the Council to propose amendments to the kerbside service. These changes could include ending or reducing some services or introducing others. We will need to consult with the community before making any decisions to change the level of service.

This year one level of service has been amended and another added, and several performance measures have been amended. Table 14 below summaries the key changes the Council has made during development of the Long Term Plan 2021-2031.

Table 14: Summary of Areas Where the Council Has Made Changes to Levels of Service

Level of Service or Performance Measure	Summary of change
Level of service: We **enable** effective waste minimisation activities and services.	We have amended this measure from "we provide" to "we enable effective waste minimisation activities and services" to reflect the fact that the Council does not provide all services and that the objective is to enable waste minimisation services.
Performance measure: There is an increase in resources diverted from landfill by Council services.	We have deleted this measure because it does not necessarily measure the overall waste minimisation in the community and some waste minimisation services are provided by other providers. We will continue to monitor this information but will not treat it as a level of service performance measure.
Performance measure: There is a reduction in total waste to landfill per capita.	This measure has been split into two: total waste per capita and municipal waste per capita (total waste excluding special wastes). The performance measures have been amended to reflect the WMMP target of 10% reduction per capita by 2030, using 2017/18 as a baseline. When compared with the last Long Term Plan this is an increased waste per capita in the first three years of the plan, but a reduction per capita by Year 10.

Level of Service or Performance Measure	Summary of change
Performance measure: Contamination levels in our kerbside recycling are low.	We have amended the measurement of this measure to "The quantity of domestic kerbside recycling collected from residential premises that is disposed of to landfill rather than becoming a diverted material." We have previously measured this as contamination from the materials recovery facility, which excluded the glass collection in the calculation and gave a higher apparent contamination level. Amending the measure is consistent with national data reporting and allows better comparison with our peers. While the 2019/20 value for this measure was 4.9% we have amended the target from 5% to 7.5%, as in recent years we have seen more stringent acceptance criteria for recycling buyers. This means more material is rejected at the MRF. Less than 10% is still considered a low level of contamination.
Level of service: Our kerbside services are reliable, easy to use.	We have amended this level of service to allow for future changes in the kerbside service. Prior to the end of the current contract in June 2023 we will engage with the community to consult on the range of materials to collect.
Performance measure:	% customer satisfaction with kerbside bag collection services We have removed this measure because the service is used by less than 50% of residents surveyed. It is possible that this service will not be provided in the next contract so has been removed as a performance measure. The data will continue to be collected as long as the Council continues to provide the service.
Performance measure: Contamination levels in our kerbside recycling are low.	We have removed the kerbside bag collection service from this measure because this service may not be provided in the future by Council.
Level of service: Our community can easily access and use services for the safe disposal of waste. **Performance measure:** The incidence of illegal dumping does not increase over time.	We have added this level of service and technical measure to monitor the incidence of illegal dumping. This performance measure will give an indication of the availability and affordability of kerbside services and any adverse effect from rising disposal charges. This measure is also a waste minimisation measure in the Nelson Tasman Waste Management and Minimisation Plan.

5.3 Levels of Service Performance and Analysis

We have analysed our levels of service performance and summarise our analysis in the following sections addressing each level of service.

5.3.1 Effective waste minimisation activities and services

Level of Service	Performance Measure
We enable effective waste minimisation activities and services.	There is a reduction in total waste per capita going to Class 1 landfill. As measured by Nelson – Tasman tonnage recorded at landfill.
	There is a reduction in municipal waste per capita going to Class 1 landfill. As measured by Nelson – Tasman tonnage per capita recorded at landfill excluding special waste.
	There are high levels of participation in our kerbside recycling service As measured through resident survey of those provided with Council's kerbside recycling collection services who use it three times or more.
	Contamination levels in our kerbside recycling are low Waste and non-recyclable material collected as a fraction of total kerbside recycling, as measured by our contractor at the Materials Recovery Facility

The enabling of effective waste minimisation activities and services is fundamental to this activity, but determining appropriate performance measures for this objective is difficult. Decreasing waste to landfill and increasing diversion from landfill are standard objectives in our sector but they are often influenced by factors outside Council's control and waste diversion and waste avoidance can be difficult to measure.

The Council measures total waste to landfill and municipal waste to landfill per capita as the primary measure of waste minimisation. Participation in kerbside recycling and contamination in kerbside recycling are a secondary measure that indicate the performance of Council's waste minimisation activities.

The Council previously measured waste diversion by Council as a performance measure, but this measure has been removed. There is now significant diversion of materials by commercial and non-commercial organisations, separate from Council, and so this measure is no longer an accurate measure of waste minimisation in the community. We also expect product stewardship in the future to further increase waste diversion by non-Council organisations.

Examples of commercial waste minimisation activities include commercial greenwaste collections, greenwaste drop-off, e-waste recycling by a not-for-profit and commercial recycling collections.

5.3.2 Waste to Landfill per Capita

Waste to landfill per capita is nationally accepted as a waste efficiency indicator. Waste to landfill is measured regionally for Nelson Tasman, at the York Valley landfill. This means that the waste to landfill measurement will reflect activities across the region, rather than for Tasman District Council alone.

There are two waste to landfill performance measures: 'total waste' and 'municipal waste'. 'Municipal waste' is total waste excluding 'special waste', which is any waste that requires special handling, pre-treatment or testing prior to disposal. Examples of special waste are asbestos waste, contaminated soil, biosolids from wastewater treatment, treated sawdust and wood processing waste, animal carcasses, offal, industrial wastes). Because quantities of special waste are often highly variable and affected by large one-off events, municipal waste generally gives a better measure of waste minimisation activity in the community.

Waste to landfill can be influenced both by Council services and initiatives (for example recycling services and promotion of waste minimisation). It is also likely to affected by general regional economic activity and by growth (such as building and development). Large one-off events (such as fire or rainfall events) or development may generate large waste volumes, and these may negate any reductions in waste as a result of the Council initiatives.

In the first three years of this plan we have assumed reductions of around 0.5% per capita per annum, based on a recent assessment of potential waste reduction without investment. We have assumed that Nelson City Council will achieve similar waste reduction.

In the later seven years of the plan we have assumed that a further 8.5% reduction in waste to landfill will be achieved, in line with the waste plan target of 10% reduction per capita by 2030. The most significant reductions are likely to be achieved by further diversion of organic waste and 'dry' wastes.

More detail of demand and demand management is contained Chapter 7 - Current and Future Demand.

Kerbside Recycling Participation and Contamination Rates

These performance measures indicate the effectiveness of the kerbside recycling service. A high participation level indicates that the service is effective because it is being used. The contamination measure indicates the quality of the material being presented by residents, which affects the value and recyclability of the materials collected.

5.3.3 Kerbside Recycling and Bag Collection Services

Level of Service	Performance Measure
Our kerbside recycling services are reliable, easy to use.	Percentage of customer satisfaction with kerbside recycling services. As measured through annual resident survey of those provided with Council's kerbside recycling collection services.
	Customer Service Requests relating to waste management activities are completed on time. Percentage of enquiries to our contractor resolved within contracted timeframes. As measured through Confirm.

Kerbside Service - Customer Satisfaction

We survey customers annually on their satisfaction with kerbside recycling and rubbish collection and treat this as a measure of the reliability and ease of use of the services. We are proposing to remove the bag collection satisfaction measure because of low levels of participation in this service and the potential for this service to be withdrawn from 2023.

We have not changed the performance measures for kerbside recycling (90% satisfied or very satisfied).

Kerbside Service - Reliability

We also measure the resolution rate of our collection contractor as a measure of the reliability of the service. This performance measure (95% resolution within contracted timeframes) is unchanged from the previous activity management plan.

5.3.4 Resource recovery centres

Level of Service	Performance Measure
Our resource recovery centres are easy to use and operated in a reliable manner.	Percentage of customer satisfaction. As measured by annual customer on-site surveys at RRCs who are very satisfied or fairly satisfied.

Resource Recovery Centres - Customer Satisfaction

We conduct on-site customer satisfaction surveys at our resource recovery centres every year and include questions in our annual telephone surveys from time-to-time. We are also proposing to offer on-line surveys to customers in the near future. We use the on-site surveys for reporting purposes, as they reflect the views of users, immediately after using the service and may use the results of on-line surveys to replace these on-site surveys. We have not changed the performance measure for this activity (95% satisfied or very satisfied).

Over the next ten years we are proposing the following capital projects to lift levels of service:

- A new dry waste diversion bunker at the Richmond Resource Recovery Centre (Year 1, $400k) – this will enable a trial of construction waste diversion ahead of further investment and reduce waste to landfill per capita. This project is reliant on receiving external funding.
- A relocated weighbridge and kiosk at the Māriri Resource Recovery Centre, with other roading improvements (Years 1-2, $1.8m) – this will reduce queueing, improve access to the recycling area and enable all customers to pay by weight - increasing customer satisfaction through fairer pricing and more convenient recycling.
- Purchase of the existing Materials Recovery Facility (MRF) from our existing contractor (Year 2, $500k), expansion of the MRF building (Years 2 and 4, $4.2m) and purchase of a new MRF (Year 10, $1.5m). This will increase diversion from landfill and reduce waste to landfill per capita.
- From Year 4 we are proposing to invest $2.5m in waste minimisation infrastructure. This will increase diversion from landfill and reduce waste to landfill per capita. The detail of this

investment will be informed by detailed business cases investigating organic and dry waste diversion and by government policy decisions in the coming years.

- A second weighbridge at the Richmond Resource Recovery Centre (Year 6, $290k) – this will reduce queueing and increase customer satisfaction at this site.
- Small site improvements manage hazardous waste, improve safety and environmental performance (Years 1-10, $605k) – these will improve customer satisfaction and ensure consent compliance

6 Our Customers, Stakeholders and Partners

The Council consults with the public to gain an understanding of customer expectations and preferences. This enables the Council to provide a level of service that better meets the community's needs.

6.1 Iwi Partners

Māori are tangata whenua of Aotearoa / New Zealand. They have a long and rich association with Te Tauihu o te Waka-a-Māui (Te Tauihu) / the Top of the South Island. There are eight iwi that whakapapa and have Statutory Acknowledgements to places within Te Tauihu and Tasman District. They are represented by the following post settlement governance entities:

- Ngāti Apa ki te Rā Tō
- Ngāti Koata Trust
- Te Rūnanga o Ngāti Kuia Trust
- Te Rūnanga a Rangitāne O Wairau
- Te Rūnanga o Ngāti Rārua
- Ngāti Tama ki te Waipounamu Trust
- Te Ātiawa o te Waka-a-Māui
- Te Rūnanga o Toa Rangatira

Tasman District also covers the northern-western part of the Ngāi Tahu takiwā (tribal area/territory). Murchison is within the Ngāi Tahu takiwā and Ngāti Waewae are the Papatipu Rūnanga on this northwestern side. Each iwi has their own unique history and association with places across Tasman District. These areas are not easily defined and do not match or stay entirely within the boundaries of Tasman District.

The Council expect iwi / Māori to have a strong interest in the planning and delivery of the following projects:

- Management of closed landfills, particularly those located near freshwater bodies or the coastal marine area.
- Operation of Resource Recovery Centres near freshwater bodies or the coastal marine area near the coastal marine area (Richmond, Māriri, Collingwood and Murchison).
- Projects that conserve natural resources and use recovered resources to achieve net restorative outcomes (for example food waste recovery and diversion of organic waste from landfill).
- Review of the Nelson Tasman Waste Management and Minimisation Plan.

The Council staff aim to engage with iwi / Māori on matters that are of interest and importance to them. For the above projects, extra care will be taken to consider and apply the principles of the Tiriti o Waitangi / Treaty of Waitangi. The Council acknowledge that it is important to agree the appropriate level of engagement with iwi / Māori at the outset of a project. This may range from informing through to opportunities for co-governance.

More information about iwi of Te Tauihu can be found on Council's website at https://www.tasman.govt.nz/my-region/iwi/ and their own websites and social media channels.

6.2 Stakeholders

There are many individuals and organisations that have an interest in the management and / or operation of Council's assets and services. The Council has a Significance and Engagement Policy which is designed to guide the expectations of the relationship between the Council and the Tasman community. The Council has made a promise to seek out opportunities to ensure the communities and people it represents and provides services to have the opportunity to: be fully informed;

- Provide reasonable time for those participating to come to a view;
- Listen to what they have to say with an open mind
- Acknowledge what we have been told
- Inform contributors how their input influenced the decision the Council made or is contemplating.

Engagement or consultation:

- Is about providing more than information or meeting a legal requirement
- Aids decision-making
- Is about reaching a common understanding of issues
- Is about the quality of contact not the amount
- Is an opportunity for a fully informed community to contribute to decision-making.

The key stakeholders the Council consults with about the waste management and minimisation activity are: elected members (Community Board members);

- Regulatory (consent compliance, Public Health)
- Nelson City Council*;The Nelson Tasman Regional Landfill Business Unit
- Public Health Service* (Medical Officer of Health at NMDHB)
- Key customers and other service suppliers (commercial waste and recycling companies)
- Neighbours of operational sites (landfills and resource recovery centres).

*Representatives of the Nelson City Council and the Public Health Service are normally involved in the review of the Nelson Tasman Waste Management and Minimisation Plan.

6.2.1 Consultation

The Council consults with the public to gain an understanding of customer expectations and preferences. This enables the Council to provide a level of service that better meets the community's needs.

The Council's knowledge of customer expectations and preferences is based on:

- Feedback from residents surveys
- Other customer/user surveys
- Levels of service consultation on specific issues
- Feedback from staff customer contact
- Ongoing staff liaison with community organisations, user groups and individuals
- Feedback from elected members, advisory groups and working parties
- Analysis of customer service requests and complaints
- Consultation via the Annual Plan and Long Term Plan processes; and
- Consultation on the Joint Waste Management and Minimisation Plan.

The Council commissions residents surveys on a regular basis to assess the levels of satisfaction with key services, including provision of community facilities, and the willingness across the community to pay to improve services. Other informal consultation is undertaken with community and stakeholder groups on an issue by issue basis, as required.

6.2.2 Consultation Outcomes

The most recent NRB Communitrak™ survey was undertaken in May 2020. This asked whether residents were satisfied with the District's kerbside services and resource recovery centres.

We also conducted a satisfaction survey at the resource recovery centres in December 2019 – January 2020.

6.2.2.1 Kerbside Recycling

The results from this survey for recycling are shown in Figure 11. Not all residents surveyed are provided with the service and, so we also measure overall satisfaction and satisfaction for residents where the service is provided, and of those that use the service at least three times per annum.

Our most recent survey indicates that over 95% of residents use the service where it is available. This participation level is also a performance measure.

We use the satisfaction of residents that are able to use the service ("receivers of the service") for reporting performance measurement of our levels of service.

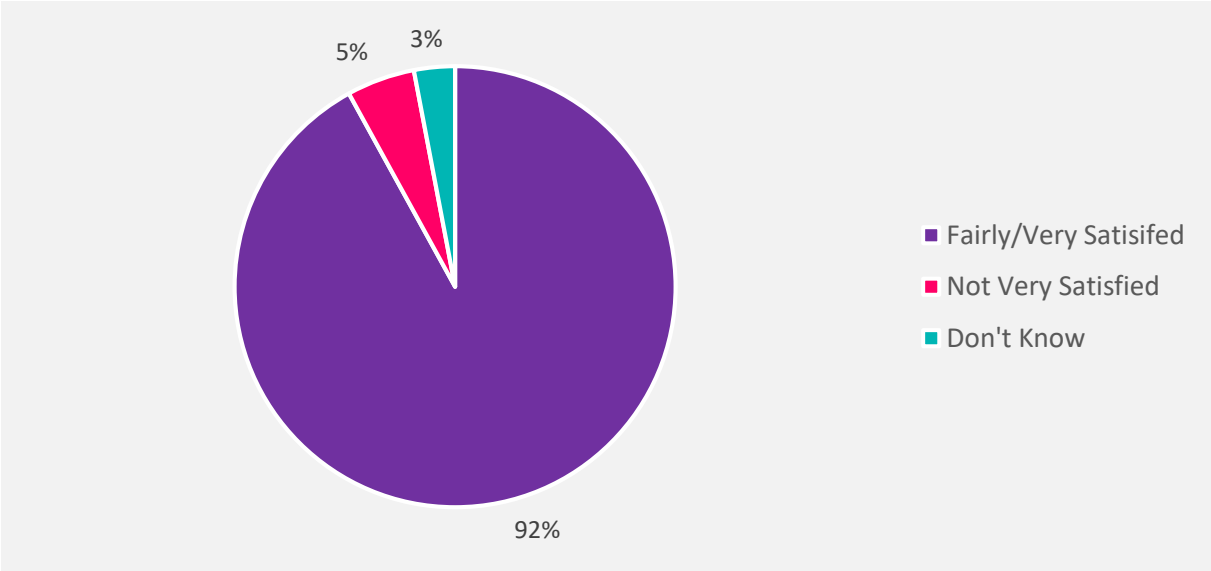


Figure 11: Satisfaction with Kerbside Recycling

The 2020 overall satisfaction score for the service (92%) is higher than the Council's peer group for 2020 (76%) and above the national average (84%). Figure 12 shows the change in satisfaction over time. It shows an increase in satisfaction in 2016, following the introduction of wheelie bins for recycling, and consistently high levels of satisfaction since then.

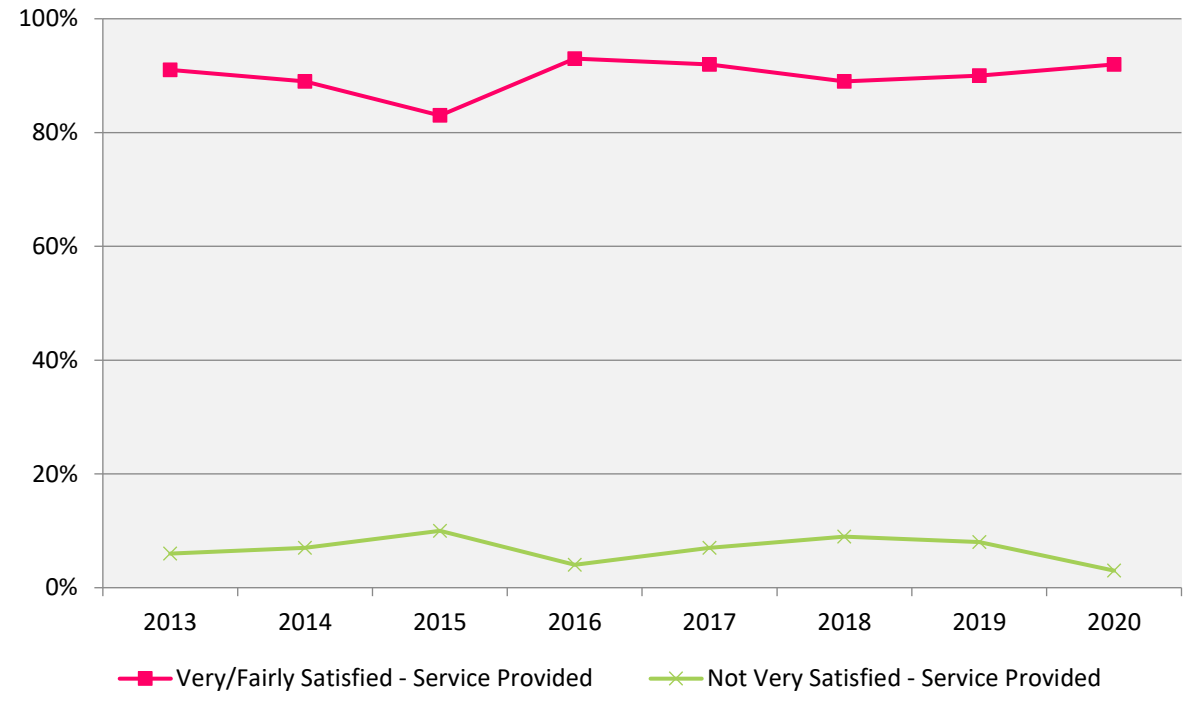


Figure 12: Satisfaction with Kerbside Recycling Services over time – for those that have the service available

The 202017 survey indicated that the most prevalent reason for dissatisfaction with recycling services was that they were not provided with the service where they lived. In response to this we are proposing to roll out drop of recycling options for rural residents. A trial in Murchison and Kaiteriteri has so far indicated good support for this option.

A total of 83% of customers surveyed responded that they wanted us to spend "about the same" on recycling services (slightly down on from 86% in 2017, see Figure 14). Our programme of work reflects this preference.

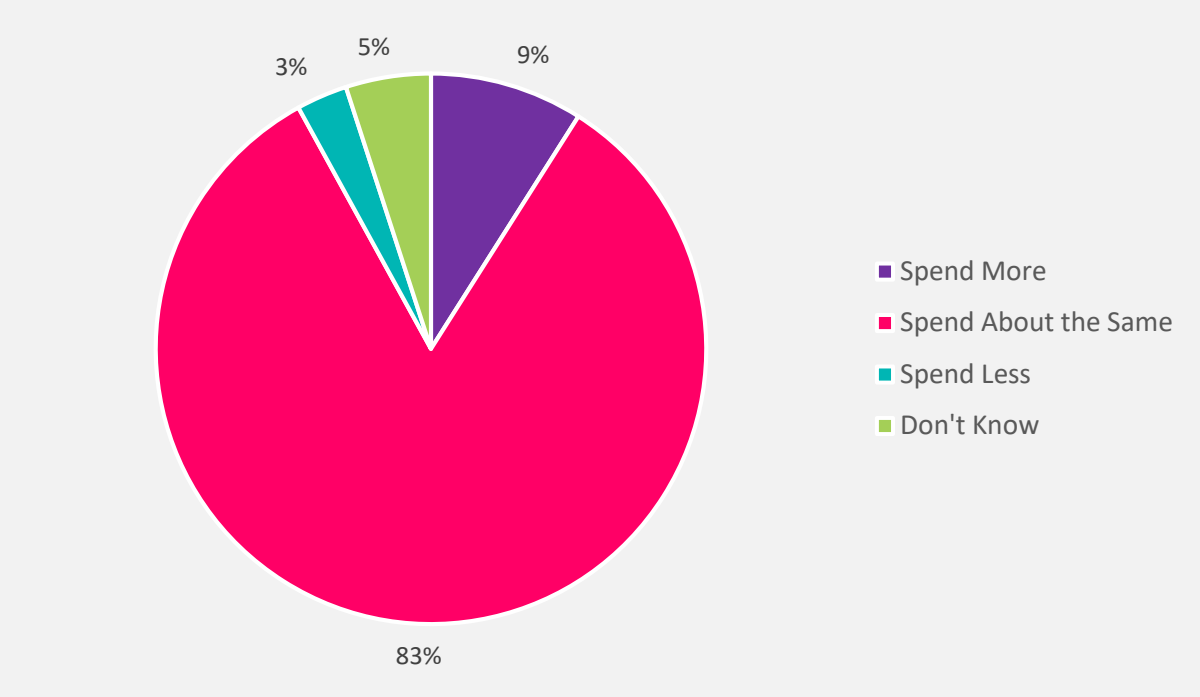


Figure 13: Kerbside Recycling Expenditure - Residents Feedback

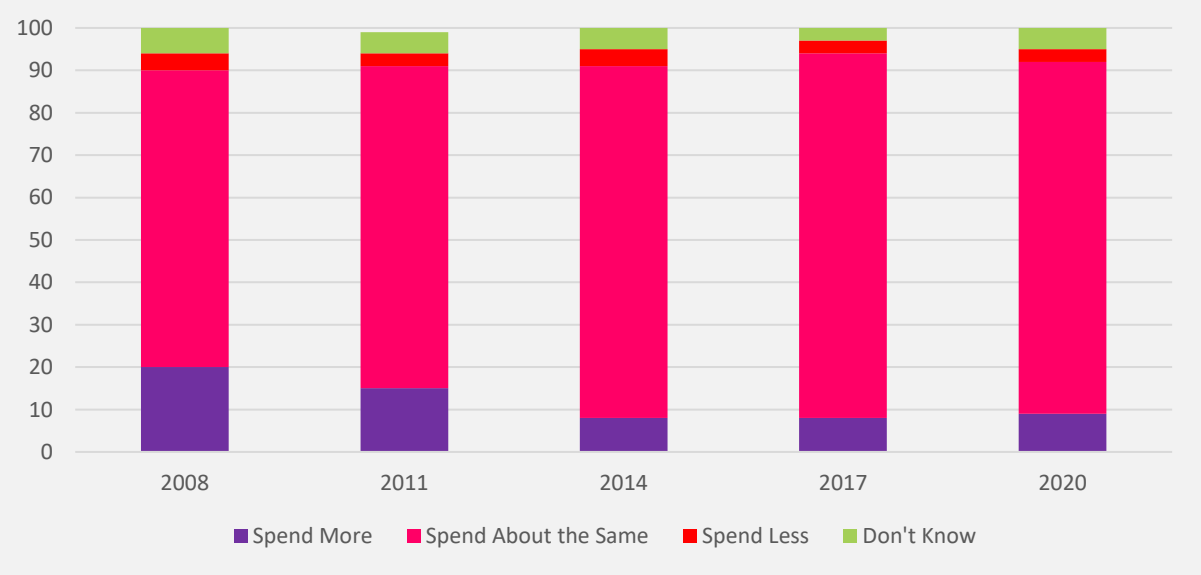


Figure 14: Kerbside Recycling Spend Emphasis - Residents Opinion

6.2.2.2 Rubbish Collection

The results from this survey for rubbish collection are summarised in Figure 15.

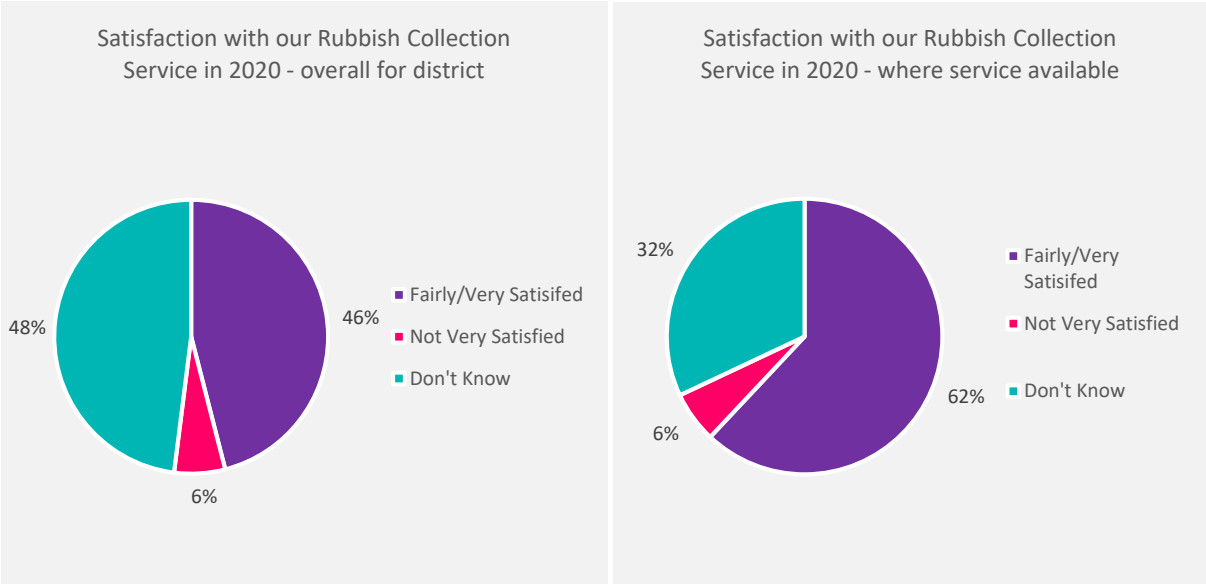


Figure 15: Satisfaction with Rubbish Collection

The 2020 overall satisfaction score for the service (46%) is lower than the Council's peer group for 2017 (71%) and lower than the national average (83%). The satisfaction of residents where the service is available increases to 46% and for users of the service satisfaction increases again to 80%. Of all residents surveyed, 68% said the service was available and 45% said that they used the service at least three times in the previous year.

The dissatisfaction rate is equal across all residents (6%) and is lower than our peer group (10%) and on par with the national average (10%), whereas the "don't know" responses (48%, 32% and 13%) are generally higher than our peers and the national average. Figure 16 shows the change in satisfaction over time. It shows a steady decrease in satisfaction among those that have the service available, but that the dissatisfaction has remained relatively steady.

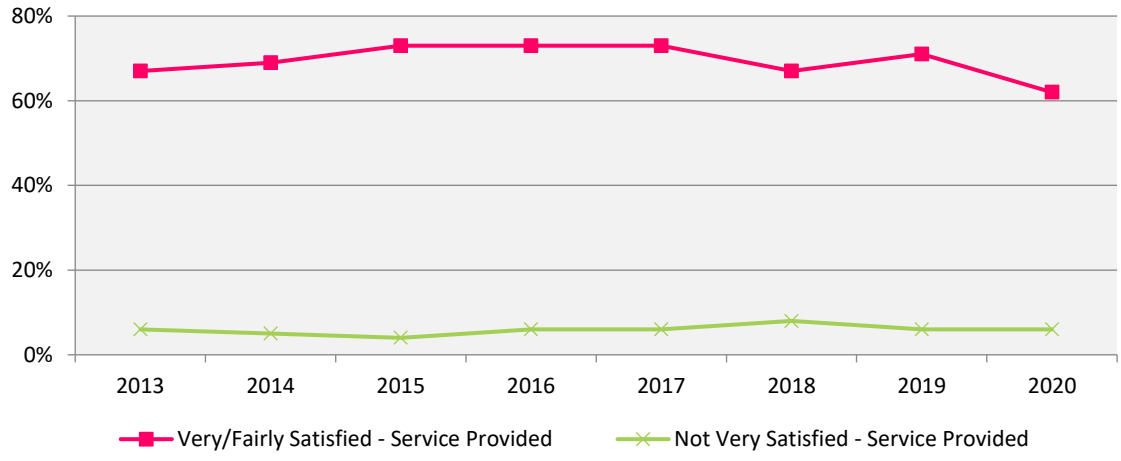


Figure 16: Satisfaction with Rubbish Collection over time – for those that have the service available

The 2020 survey indicated that the most prevalent reason for dissatisfaction with rubbish collection services was the expense of the service or the need to pay, or that that preferred waste bins.

The Council has elected to move towards commercial rubbish collection services by passing the majority of the cost and income of the service to the collection contractor. While we require the contractor to provide the service we may need to better explain to our residents, that little of their targeted or general rate support this service. We will also consider in the coming year whether the Council should continue to offer this service after the current contract expires.

6.2.2.3 Resource recovery centres

The Council surveys customers at the resource recovery centres each year, using contracted Council staff over the December-January period. The sites are generally surveyed on one-week day and one on the weekend. In 2019-2020 just over 600 customers were surveyed. The survey generally focuses on domestic and small commercial customers and also includes questions on suggested site improvements, customers recycling and greenwaste habits and invited suggestions on Council's Kerbside and greenwaste services.

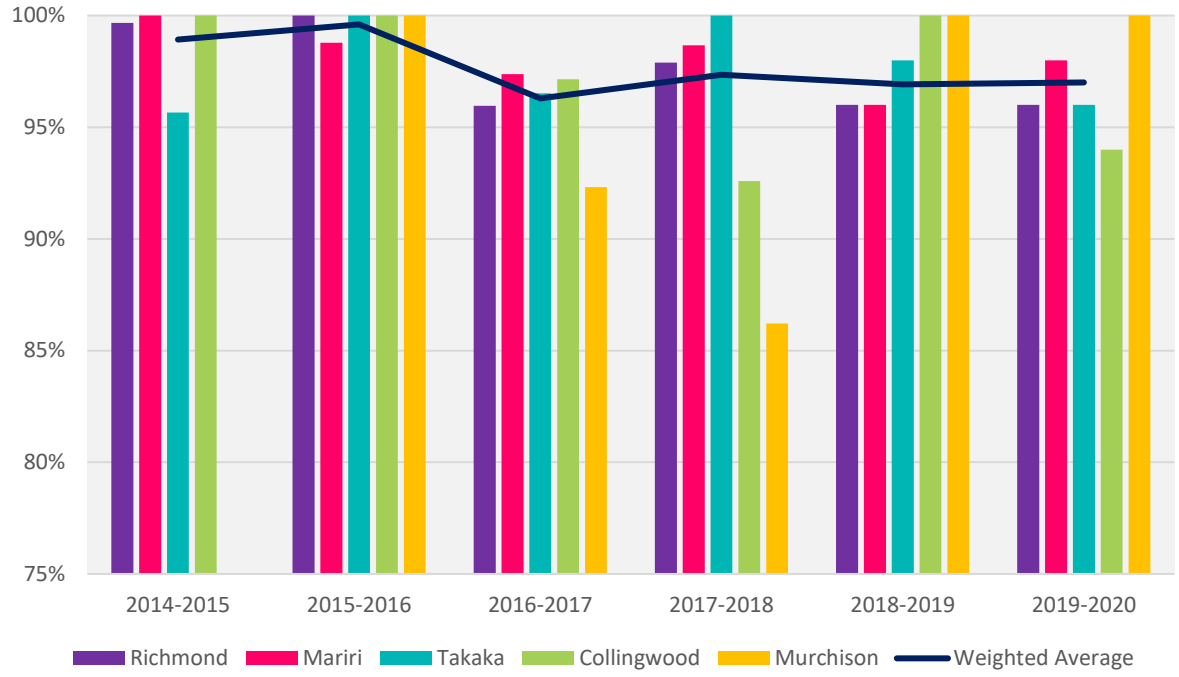


Figure 17: Satisfaction over Time at Resource Recovery Centres

Figure 17 shows that customers that were "very satisfied" or "satisfied "has increased dropped slightly time but remained above 95%.

Overall the on-site customer surveys indicate a high level of satisfaction from users. The sites have been progressively upgraded over this period and this work appears to maintain satisfaction.

6.2.2.4 Activities to encourage waste minimisation

This year, for the first time, a question on 'activities to encourage waste minimisation' was included in the spend emphasis question in the survey. The results of the survey (Figure 18) showed 47% of residents would like to see the Council spend more money on activities to encourage waste minimisation, and only 3% wanted the Council to spend less. This activity was the highest spend emphasis of 30 activities surveyed. It demonstrated strong support for the Council to spend more in the waste minimisation area. The result was highest in the Moutere-Waimea (58%) and lowest in Murchison and Golden Bay. This could suggest that residents in Moutere-Waimea would prefer better kerbside services; some areas in this ward are not provided with kerbside recycling.

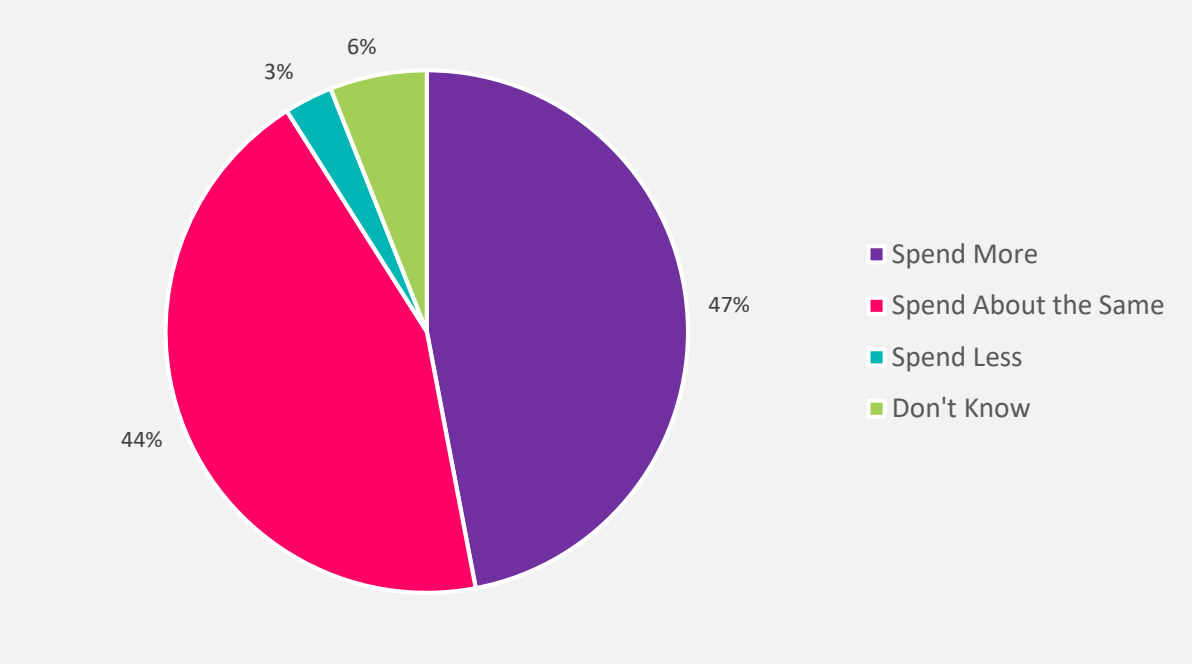


Figure 18 : Spend emphasis – waste minimisation – Residents feedback

6.2.2.5 Survey conclusions

It is concluded from this survey that:

- Residents would like the Council to spend more money on activities to encourage waste minimisation
- The majority of residents are satisfied with the kerbside recycling service provided by council, but satisfaction with the service is no longer increasing
- Satisfaction with the council's rubbish collection service is dropping slowly, but dissatisfaction is on a par with our peers and "don't know" responses are increasing
- There is a high level of participation in the council kerbside recycling scheme and recycling drop-off at resource recovery centres
- There is a high level of satisfaction with resource recovery centres
- Demands to spend more on kerbside recycling have dropped away and remain low.

7 Current and Future Demand

The ability to predict future demand for services enables the Council to plan ahead and identify the best way of meeting that demand. That may be through a combination of demand management and investing in improvements. This section provides and overview of key drivers of demand and what demand management measures the Council has planned to implement.

7.1 Demand Drivers

Demand considers who is currently using the District's resource recovery centres, kerbside recycling and rubbish services, greenwaste and recycling services and waste minimisation advice and education, and who else wants to use them. We look at current levels of use, patterns of use, the profile of use, and the desired level of use.

Key factors driving demand for waste management and minimisation facilities and services include:

- Population growth
- On-going development activity in the district
- Economic growth and waste production
- Changes in central government management regulation and policy
- A growing demand for us to divert an increasing range of products and materials from landfill
- Markets for recyclable materials, and
- Cost of landfill disposal and the relative cost of alternative options.

7.2 Assessing Demand

7.2.1 Population growth

The Council has estimated future population growth using a district specific growth model. The purpose of the growth model is to provide predictive information (demand and supply) for future physical development, to inform the programming of a range of services, such as network infrastructure and facilities, and district plan reviews. The model generates residential and business projections for 17 settlement areas and 5 ward remainder areas.

The key demographic assumptions affecting future demand are:

- Ongoing population growth over the next 30 years, driven by net migration gains, with the rate of growth slowing over time.
- An ageing population, with population increases in residents aged 65 years and over.
- a decline in average household size, mainly due to the ageing population, with an increasing number of people at older ages who are more likely to live in one or two person households.

The overall population of Tasman is expected to increase by 7,700 residents between 2021 and 2031, to reach 64,300 (assuming the medium scenario). The Council has planned for 4,300 new dwellings over the next ten years, and a further 7,500 dwellings between 2031 and 2051. The Council has planned for 160 new business properties (retail, commercial or industrial) over the next ten years, and a further 335 new properties between 2031 and 2051.

7.2.2 Waste production

The Tasman District and Nelson City Council, through the Nelson Tasman Regional Landfill Business Unit, operate the only Class 1 landfill in the region. With this projected population growth we expect to see increased waste production and demand for landfill capacity or alternative services in coming years.

An increase in population results in increased residential and business waste. Population growth will place greater demands on facilities and services – requiring greater investment in kerbside services, placing greater demand on processing facilities (such as the materials recovery facility) and leading to greater activity at Resource Recovery Centres.

Figure 19 shows the municipal waste and total waste to landfill for the region over the last ten years and Figure 20 shows the total waste per capita over this period (between 606 and 743 kg per person). Figure 21 compares this with the New Zealand average. Waste to landfill in 2019-20 reduced due to the impact of the COVID-19 shutdowns measures in March to May 2020. Analysis of this period indicates that the reduction in waste volumes was almost entirely due to reduced commercial activity.

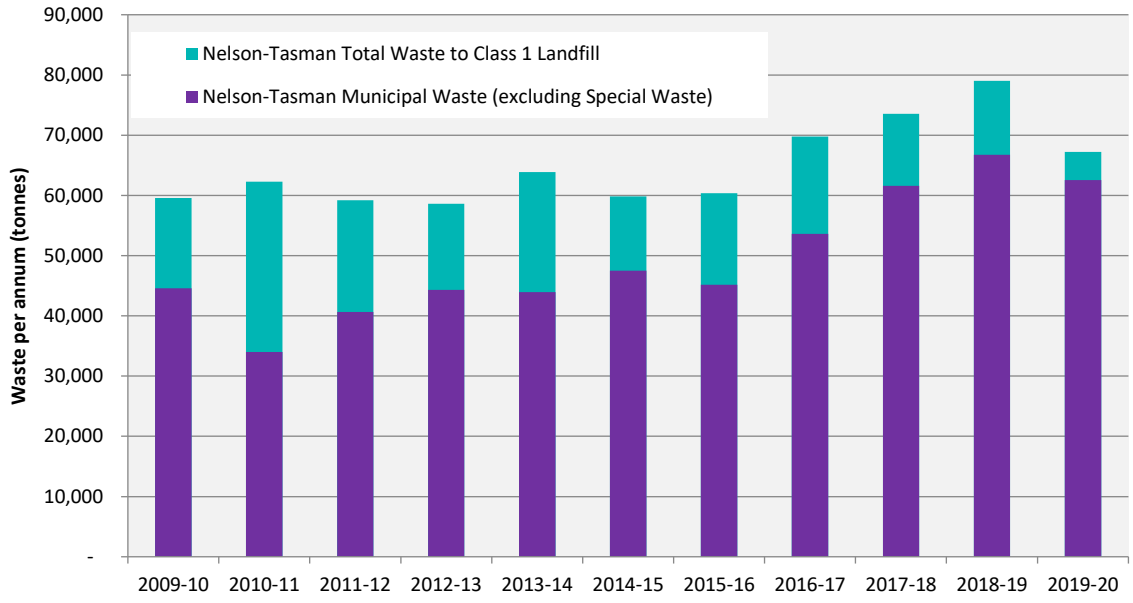


Figure 19: Nelson-Tasman Regional Waste to Landfill

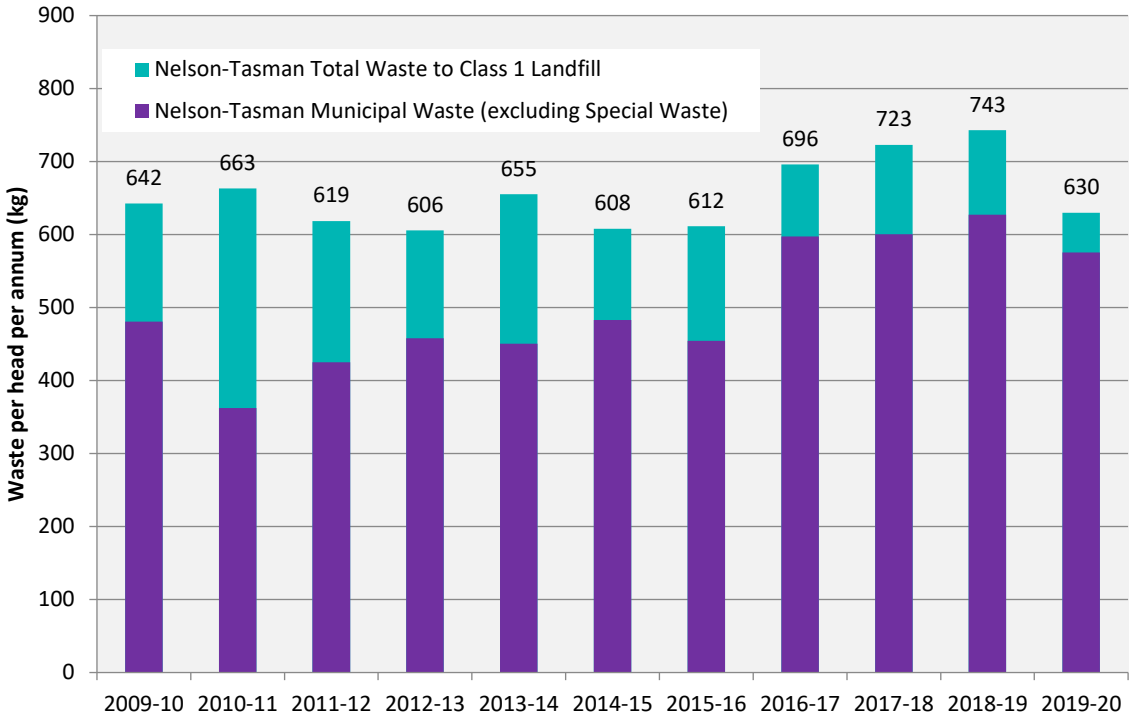


Figure 20: Nelson-Tasman Regional Waste to Landfill per Capita

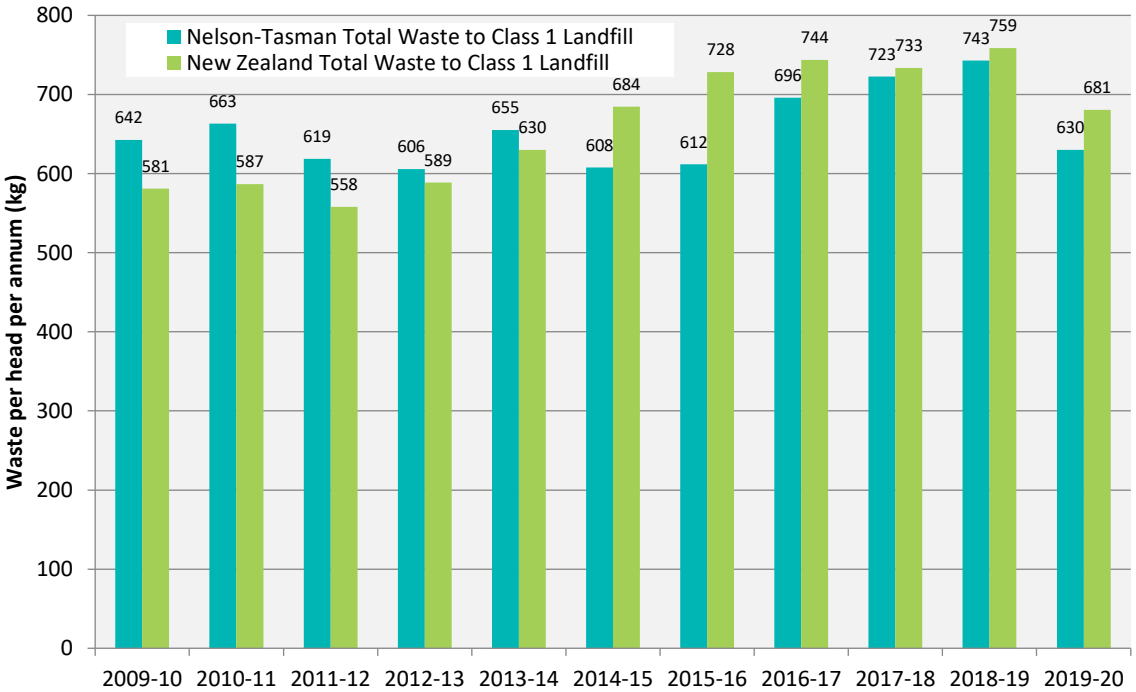
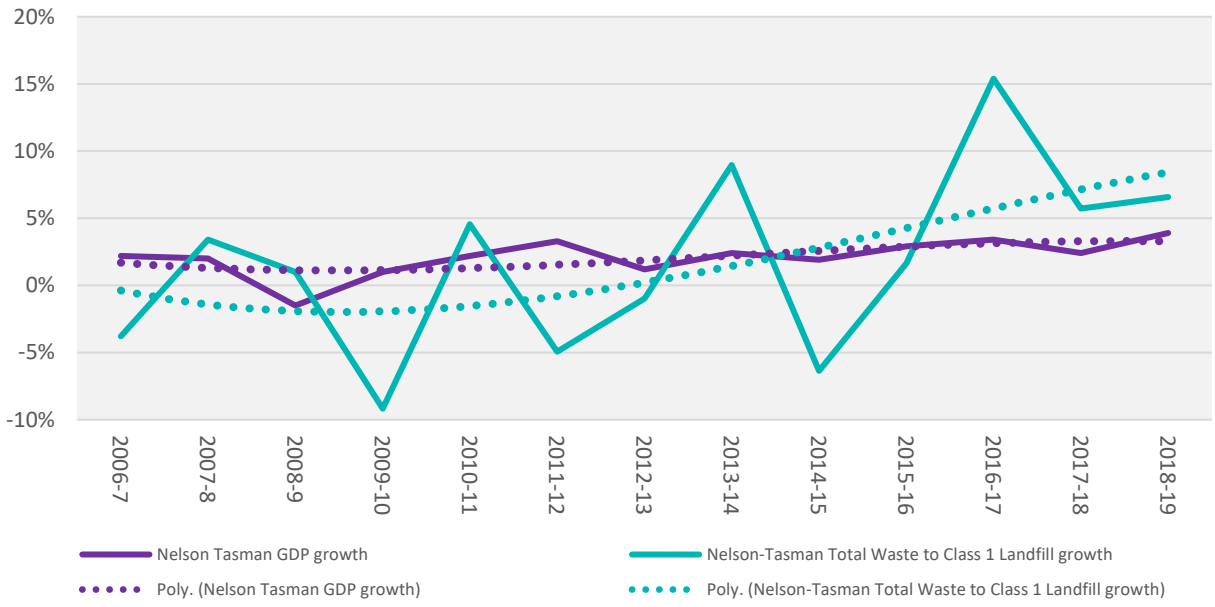


Figure 21: Comparison of Nelson-Tasman and New Zealand Waste to Landfill per Head of Population

These figures show a general increase in waste to landfill per capita from 2015-2016, consistent with but slightly less than national trends. This growth over and above population suggests that factors other than population growth are in play.

A simple comparison of waste growth with regional gross domestic product Figure 22 suggests that in recent years waste growth has exceeded economic growth in the region. This, combined with an increase in waste per capita, suggests that, left unchecked, waste production may increase over and above population growth.



Regional GDP: https://ecoprofile.infometrics.co.nz/nelson-tasman

Figure 22: Waste growth compared to economic growth

Land development activity may be fueling this growth. Construction activity results in increased waste production through construction waste and other economic activity. Land development may also result in significant demand for disposal of contaminated soil. In 2017-18 and 2018-19 higher than budgeted waste volumes were attributed by the Nelson Tasman Regional Landfill Business Unit to contaminated soil disposal. The Nelson Tasman Regional Landfill Business Unit will be considering an alternative facility for disposal of this material in the coming years.

Over the three years to 2018/19 overall waste through Resource Recovery Centres has decreased, driven by reductions in waste through the Richmond Resource Recovery Centre (Figure 23).

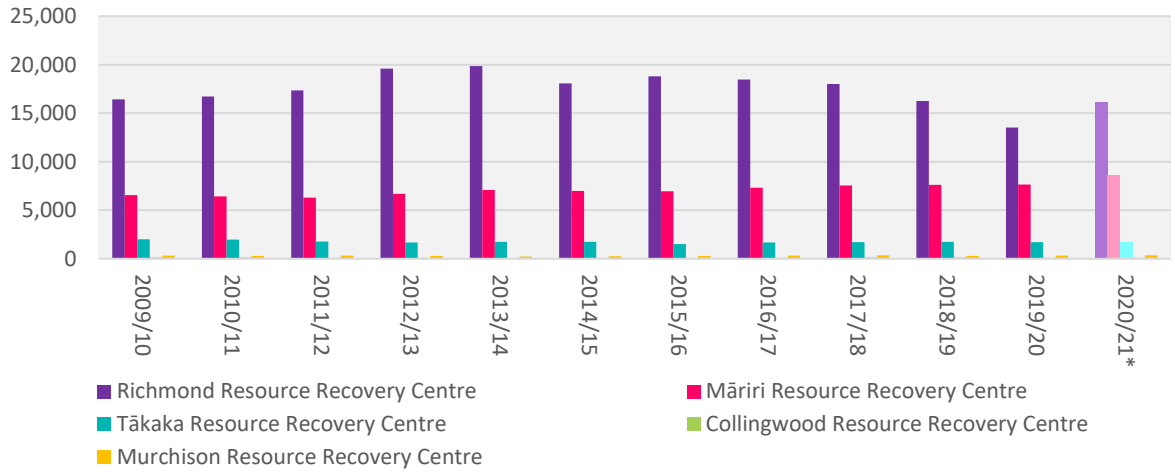


Figure 23: Resource Recovery Centre waste volumes over time

Tonnages at Richmond have dropped from at this site from 18,795 in 2015/16 to 16,277 in 2018/19 and 13,527 in 2019/20 and are trending towards 16,000 in 2020/21. This is due to large commercial loads now bypassing Richmond and travelling direct to landfill.

Waste volumes at Māriri are growing steadily, from 6,963 in 2015/16 to a projection of 8,600 in 2020/21. Waste at Takaka, Collingwood and Murchison have grown modestly over the period 2015/16 to 2020/21.

7.2.3 Demand for waste diversion

The ambition of this activity is to eliminate unnecessary waste to landfill and so waste diversion is a key activity. Given the target of 10% reduced waste per capita and increasing disposal charges in Years 1-3, we expect demand for waste diversion to grow strongly in coming years. This waste diversion capacity could be provided by Council(s), by commercial organisations or both.

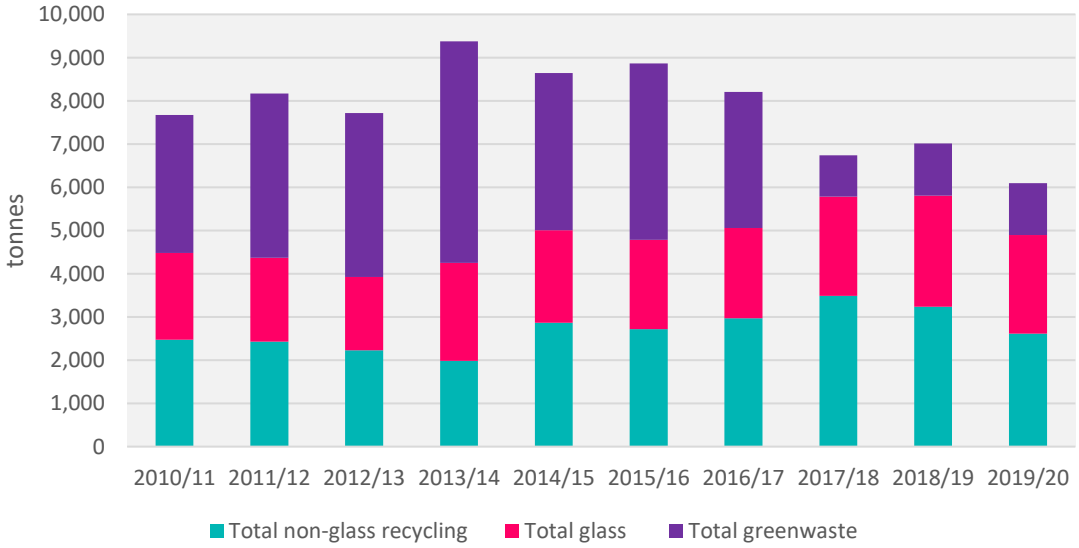


Figure 24: Historical Waste Diversion from Landfill

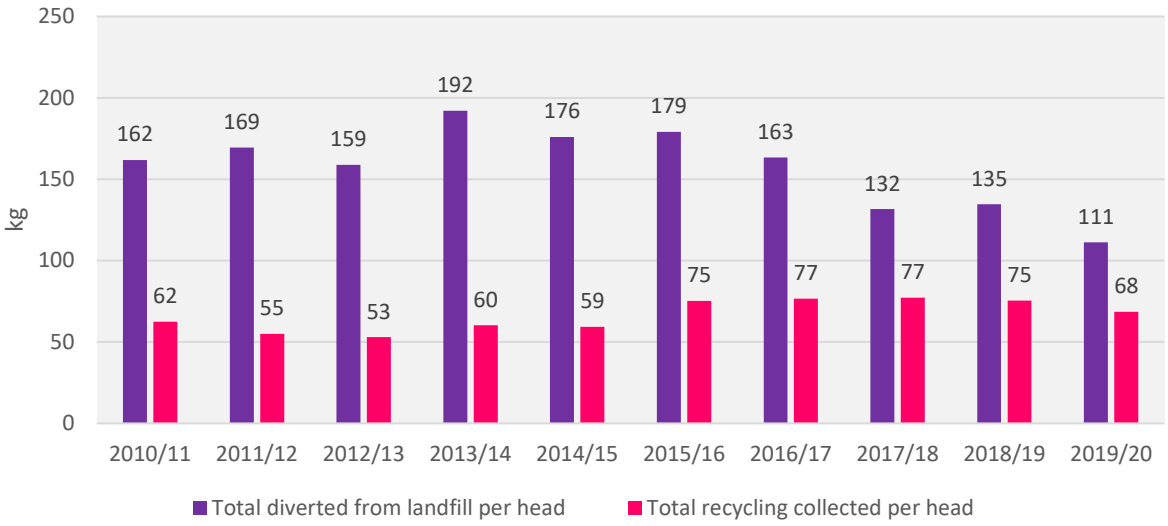


Figure 25: Historical Waste Diversion per Capita

Figure 24 and Figure 25 shows diverted material volumes by the Council over the last ten years. They appear to show a significant reduction in greenwaste diversion in 2017-18. This apparent reduction in diversion occurred because a Council contract with a greenwaste processor ended, although the greenwaste processing continued to occur at this site without support from Council.

This apparent reduction in diversion volume illustrates that private industry may provide diversion capacity, and that the diversion data for these volumes may not be readily available. While detailed data is not available, data supplied by commercial operators for the 2017 Nelson Tasman Waste Assessment indicated that around 5000 tonnes of paper and cardboard are and in the order of 10,000 tonnes of metals are handled by commercial organisations in the region.

If there is a 10% per capita waste reduction target met by 2030, then a further 70kg per capita will need to be diverted. This equates to the current recycling tonnage, and is approximately equal to our current estimate of greenwaste diversion. How this diversion will be provided is discussed in the next section.

7.3 Demand Management

The objective of demand management (sometimes called non-asset solutions) is to actively seek to modify customer demands for services in order to:

- Optimise utilisation/performance of existing assets
- Reduce or defer the need for new assets
- Meet the Council's strategic objectives
- Deliver a more sustainable service; and
- Respond to customer needs.

Waste minimisation is a form of demand management and is a key function of the Council's waste management and minimisation activity. Demand and supply for waste services is not constrained by the District boundary. Waste for landfill and diverted materials pass freely between Nelson and Tasman boundary, and this is why the councils have elected for a joint Waste Management and Minimisation Plan.

Waste volumes are also relatively variable, due to one-off fluctuations such as large infrastructure projects (biosolids or contaminated land) or adverse events (such as flooding or fire). These factors have historically made it difficult to plan for income, expenditure and new waste infrastructure, particularly for landfill facilities. This difficulty was a key driver for the establishment of the regional landfill business unit.

The Nelson Tasman Regional Landfill Business Unit has identified that increasing waste tonnages mean that the York Valley landfill has a remaining life of between 9 and 14 years, depending on levels of waste growth or reduction. Significant investment will be required when this capacity is reached, and this is a key issue for the business unit, and for the Councils.

The level of success of the Tasman District and Nelson City Council's demand management measures will impact directly on the timing of capital investment for the business unit, which will impact on the councils' debt levels.

7.3.1 Council's Approach to Demand Management

The Council has an ambition of eliminating unnecessary waste to landfill and committed to a target of 10% reduction per capita by 2030. Meeting this target is likely to require significant effort and investment.

The Council's approach to demand management centres around four key areas:

- Full cost disposal pricing.
- Providing waste minimisation services and facilities where appropriate.
- Integrating Council services with the commercial and not-for-profit sector, and
- Engaging with the community and sharing information to promote waste minimisation.

The Nelson-Tasman Waste Management and Minimisation Plan recognises that effective waste minimisation can only be successful if all of the community work together. It anticipates mixture of waste diversion activities, delivered by Councils, commercial organisations and not-for profit entities.

Disposal pricing

Council's preference is to implement full cost disposal pricing, in conjunction with product stewardship where available. This approach may also effect demand, but at present there is insufficient information to quantify this effect.

'Price elasticity' of demand for waste collection and disposal is the relationship between disposal price and the amount of waste disposed. A price elasticity of -0.5 means that for a 10% increase in price, waste disposal will reduce 5%.

Research conducted for the Ministry for the Environment in 2012[2] referenced United States suggests a range of elasticities between close to zero (-0.075) and -0.6. It also suggests that construction and demolition waste are more likely to be affected by price increases.

More recent research in New Zealand by Eunomia Consulting Ltd[3] suggests that for small price increases the effect is smaller than for larger increases. In a modelling New Zealand waste levies Eunomia used an elasticity of -0.2 for a $20 levy increase for general waste and -0.6 for an increase of $90. The Eunomia research also suggests that construction and demolition waste is more sensitive to price increases.

Over the first three years of this plan we expect Resource Recovery Centre waste disposal prices to rise around $30 per tonne each year: from $189.75 per tonne in 2020/21 to $282 per tonne in 2023/24. This research suggests that waste volumes could reduce by 8-12% each year, but recent waste disposal trends in the region challenge this assumption.

In the last four years pricing has increased 42% yet waste per capita has increased by around 3% per annum (excluding the effects of lockdowns in 2019/20). For this reason, we have not assumed that waste demand will reduce substantially due to price increases.

Waste minimisation services and facilities

While the Council will always provide some waste minimisation services, the Council's preferred approach is for commercial organisations and product stewardship to feature strongly in waste diversion. In considering whether to invest in substantial waste minimisation infrastructure or services, the Council needs to be confident on the value of the investment.

The Council currently provides the following facilities and services to provide waste diversion for the community:

- Kerbside recycling to around 82% of all properties.
- Drop-off facilities for recycling, scrap metals at five Resource Recovery Centres.
- At materials recovery facility to sort and consolidate recyclables for export.
- Greenwaste drop-off at four of five Resource Recovery Centres and processing at a contractors facility.
- Public place recycling in seven settlements.

[2] Economic Factors of Waste Minimisation in New Zealand, Covec, November 2012.

[3] The New Zealand Waste Disposal Levy, Potential Impacts of Adjustments to the Current Levy Rate and Structure, Final Report, Eunomia Research & Consulting Ltd, May 2017.

The Council is not proposing significant changes to services or facilities in the first three years of this plan, but from year four is proposing greater investment in waste minimisation. This delay in investment is due to expected changes in central government policy and funding and uncertainty on the value of short term investment. Expected policy changes most likely to affect the Council could include product stewardship proposals, including a container return scheme for beverage containers. Central government is also proposing to consult with local government on proposals to standardise kerbside collections, with consultation scheduled for mid-2021.

In developing a waste reduction target for the Waste Management and Minimisation Plan, the Council considered areas with good potential for waste diversion. Initial work has suggested that up to 1-7% waste reduction could be achieved through diversion of organic waste and 7-11% reduction could be achieved by diversion of dry wastes.

Detailed business and investment plans will need to be developed in the first two years of this plan to develop to assess the feasibility and affordability of these waste measures. The detailed business cases could recommend investment in waste reception and processing facilities for organic and dry waste and additional kerbside organic services (such as food waste collection).

In the interim, the Council will be working with Nelson City Council is to trial diversion of construction waste at some Tasman Resource Recovery Centre sites and monitor a trial of food waste collections in Nelson City.

Waste minimisation services by the commercial sector, not-for-profit sector and product stewardship organisations

The Council's preferred approach is for commercial organisations to feature strongly in waste diversion.

Considerable commercial and not for profit services already operate in the region, with potential for further growth. At present there are commercial recycling and greenwaste collections, scrap metal recycling, greenwaste processors and construction and demolition recovery contractors. The not-for-profit sector features strongly in the reuse and secondhand 'opshop' market, and in recent years this sector has expanded into e-waste and demolition recovery. In the short term the Council is planning to work with the commercial and not-for-profit sector, to identify opportunities to collaborate and support expansion of services where appropriate.

Product stewardship activity is likely to expand in the region in the short to medium term, and may reduce Council's need to invest in services or facilities. Product stewardship is where a producer, brand owner, importer, retailer or consumer accepts responsibility for reducing a product's environmental impact throughout its life cycle. It often involves product producers being responsible for a product at end of life, by take-back or recovery.

The funding for this stewardship is often provided by 'advanced disposal fees' at the initial sale of the product. This income then funds the collection and processing of the product at end of life. Managing of this funding is often delegated to a not-for-profit stewardship organisation. The Council already participates in two product stewardship schemes: Resene Paintwise and Agrecovery container recycling.

Central government have recently introduced proposals for regulated (mandatory) product stewardship. In August 2020 government declared six priority products for regulated product stewardship under the Waste Minimisation Act (WMA), and has funded research into a container return scheme for beverage containers. The six priority products are:

- Plastic packaging
- Tyres
- Electrical and electronic products (e-waste)
- Agrichemicals and their containers
- Refrigerants
- Farm plastics.

Progress on stewardship these products could significantly affect Council, by removing the need for the Council to manage these products, or by funding the Council to receive them. A container return scheme, where people return their bottles for a refund of a deposit, could significantly reduce the cost of kerbside collections by reducing the need for collections, or by providing increased revenue. This scheme is also expected to eliminate the need for public place recycling facilities, and so the Council has suspended further investment in this area.

Engaging with the community and sharing information to promote waste minimisation

The Council already provides activities, events and programmes that engage the community, in waste reduction, but is proposing to increase activity in this area. This increase will be modest in Years 1-3 of this plan, but is expected to increase substantially from Year 4, when additional waste disposal levy income is expected from central government.

Activity in the first three years is expected to focus on engagement with the commercial and not-for-profit sector, as well as trialing and developing detailed businesses cases for diversion of organic and dry wastes. Waste minimisation grants will also be introduced from Year 1.

Expected change to demand

In the first three years of this plan we have assumed reductions of around 0.5% per capita per annum, based on a recent assessment of potential waste reduction without investment. We have assumed that Nelson City Council will achieve similar waste reduction. We have not assumed any change in waste volumes due to price increases, or increase in diversion by commercial operators or product stewardship proposals by central government (such as tyre recovery) due to the uncertainty associated with these changes.

In the later seven years of the plan we have assumed that a further 8.5% reduction in waste to landfill will be achieved, in line with the waste plan target of 10% reduction per capita by 2030. The most significant reductions are likely to be achieved by further diversion of organic waste (food waste and garden waste) and 'dry' wastes (construction and dry business wastes, such as metals, rubble, wood and cardboard).

Council's approach when estimating volumes is to calculate the total waste to landfill per head of population from historical data and then to deduct from this forecast any expected increases in waste diversion.

The following graph (Figure 26) shows historical waste to landfill for Nelson-Tasman and the expected waste per capita for the next ten years.

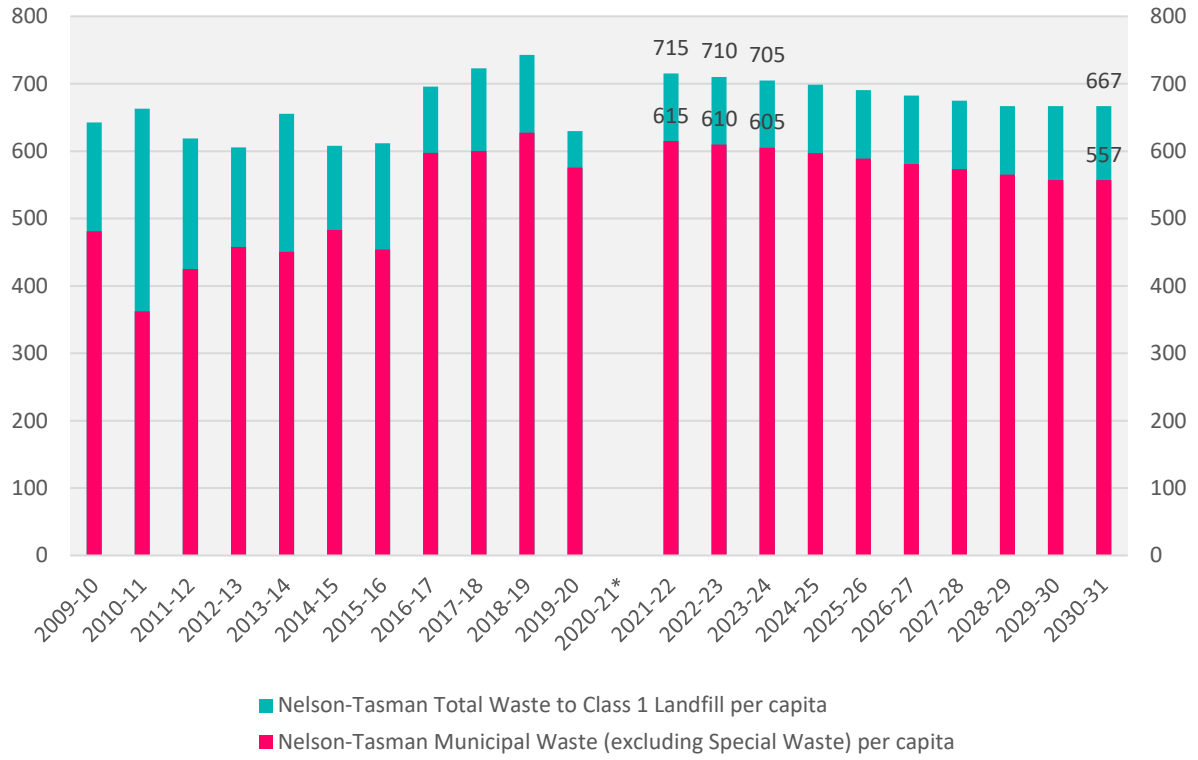


Figure 26: Historical Waste to Landfill per Capita (to 2019/20) and Projections from 2021/22 to 2030/31

8 Lifecycle Management

Lifecycle cost is the total cost to the Council of an asset throughout its life including, creation, operations and maintenance, renewal, and disposal. The Council aims to manage its assets in a way that optimises the balance of these costs. This section summarises how the Council plans to manage each part of the lifecycle for this activity.

8.1 Asset Condition and Performance

8.1.1 Resource Recovery Centres

Asset condition at resource recovery centres is not monitored formally. Assets are generally inspected as part of the management of the Operations contract. Some assets at the RRCs (waste pit, compactor, sealed pavements) are high wear assets, with some showing definite signs of wear and tear and require considerable on-going maintenance. There may also be a need to re-evaluate normal life for some of these high wear assets.

The assets at the Richmond Resource Recovery Centre are a mixture of nearly new and moderately young (around 30 year old) assets. Overall the site is moderately young in terms of infrastructure. Some assets at the RRC (waste pit, sealed pavements) are showing signs of wear and tear and will require considerable maintenance over the next 20 years. The Richmond waste compactor was replaced in 2019 with a new compactor, and the existing compactor refurbished and deployed to Takaka in 2020.

The former Materials Recovery Facility at Richmond is now a dry paper/card store, for holding baled product, and is near end of life and is scheduled for renewal, with funding from the kerbside recycling account.

The assets in the Mariri RRC are relatively young in their asset life expectancy and most assets are in good condition, but some of the pavements are in need of renewal. In 2012 the Council upgraded the site by providing a new drop-off loop on the lower level to separate recycling from solid waste operations. A new waste pit, compactor, bin weight indicator and waste bin loading area were commissioned in late 2017. The staff facilities and weighbridge are between 13 and 15 years old and are separated from each other, limiting the use of the weighbridge to commercial vehicles and limited domestic vehicles. This arrangement causes queueing and relies on visual estimation of loads for most domestic customers. A new weighbridge, kiosk and roading layout are scheduled for Years 1-2.

The wastewater treatment system at Māriri is underperforming and has been supplemented with separate tank collection system, which has reduced the load on the wastewater system to kiosk waste only. The waste pit is uncovered, which increases refuse weight and leachate. A new roof is scheduled for Year 8.

The Takaka Resource Recovery Centre was upgraded in 2019-20, with a new waste pit and refurbished waste compactor installed on the lower level. A new kiosk and weighbridge installed on the upper level, which has been reconfigured to manage only recycling and reuse. The former waste compactor has been repurposed to accept recycling.

Generally, the assets in the Collingwood RRC are relatively young in their asset life expectancy and have lower wear and tear than other resource recovery centres. The site is relatively small with mainly manual transfer of materials.

The infrastructure at the Murchison RRC is generally basic this RRC but in reasonable good condition, the majority being constructed in 2008/09. However, some assets at the RRC are showing definite signs of wear and tear and will require considerable maintenance (or renewal) in the near future. Improvements to the waste pit are scheduled for Year 3. Asset condition is not monitored formally. Assets are generally inspected as part of the management of the Operations contract.

8.1.2 Kerbside Collections

The majority of assets relating to this category are owned and maintained by the contractor. All mobile plant (vehicles, loaders, forklifts etc.) are owner by the operations contractor. The materials recovery facility (MRF) will pass to Council ownership in 2023 at an agreed depreciated value. The commodity baler in the MRF is now over 13 years old and may need replacement in 2023.

The Materials Recovery Facility (MRF) building at Richmond Resource Recovery Centre was constructed in July 2015, and is in good condition. This building now receives materials from Nelson and Tasman, and may need expansion beyond Year 3, depending on whether it continues as a regional MRF. In the event that a container return scheme is implemented, this plant or building may need expansion to securely manage returned containers.

8.1.3 Waste Transport

The Council owns a total of 26 waste transport bins (17 compactor bins and 9 open top bins) and 6 mobile recycling transport bins. The bins are monitored and maintained the by the waste transport contractor.

The waste compactor bins are between 8 and 1 year old, and in generally good condition. The open top bins are a mix of 5 bins older than 10 years and in fair condition and 4 bins less than 3 years old. The older bins require increasing maintenance but remain serviceable. The mobile recycling bins were purchased in late 2017 and are in new condition.

8.1.4 Other Assets

Other waste assets include public place recycling bins (single bins and 5 bin sets) and closed landfill assets (such as rock works and drainage structures).

The public place bins are just under 13 years old, not formally monitored and may be in need of maintenance (or renewal). The need for public place recycling bins will be reviewed when a government announcement on container return scheme is made.

The closed landfill assets are inspected, and their condition reported every two years as part of the closed landfill inspection.

8.2 Operations and Maintenance

8.2.1 Key Maintenance and Operational Themes

The majority of assets in this activity are generally maintained on a reactive basis. Because the majority are above ground, deterioration is normally visible before failure and the risk of failure is relatively low. However, we are looking to further improve our maintenance and condition monitoring of key assets (waste compactors, waste bins and pavement at key sites) over the next three years. This will include regular inspections and formal reporting of condition and programming of heavy maintenance (or renewals).

8.2.2 Operations and Maintenance Contracts

The Council currently contracts out the day-to-day operation and maintenance of waste management and minimisation assets and services with the aim of maintaining agreed levels of service in a cost-effective manner. A list of each of the current waste management and minimisation contracts and the contractor responsible for delivering the service are detailed in Table 15 below.

Table 15: Current Waste Management and Minimisation Contracts

Contract No.	Operations Responsibility	Description	Comment
1020	Smart Environmental Ltd	Operation and maintenance of Richmond, Mariri, Takaka, and Collingwood RRCs.	Commenced 29 June 2015, expires 30 June 2023.
		Provision of kerbside solid waste and recyclables collection services.	
1077	Azwood Ltd	Processing of greenwaste collected at RRCs and delivered to the facility.	Commenced 1 February 2017, expires 30 January 2022.
1160	Fulton Hogan Ltd	Operation and maintenance of Murchison RRC.	Commenced 1 February 2019, expires 30 June 2023.
1092	Fulton Hogan Ltd	Haulage of waste, greenwaste and other materials from RRCs to landfill and processing facilities	Commenced 1 September 2017, expires 30 June 2023.

Clearance and maintenance of litter bins in the district is separate to this activity. Litter bins in road reserve are serviced by Smart Environmental Ltd through Contract 1162 and bins in reserves and facilities are serviced by Nelmac Ltd via Contract RF2020.

Contract 1020, with Smart Environmental Ltd is the most significant of waste management contracts. The key components of the contract are:

- Operation of Richmond, Mariri, Takaka and Collingwood Resource Recovery Centres.
- Fortnightly collection of mixed recyclable materials in 240 litre wheelie bins and glass in 55 litre recycling crates from around 18,600 properties.
- Weekly Council rubbish bag collections, with Smart Environmental responsible for the sale, supply, distribution and marketing of rubbish bags.
- Operation of a materials recovery facility (MRF) at the Richmond Resource Recovery Centre for sorting recyclable materials.
- Management and sale of all recyclable material collected at the kerbside and Resource Recovery Centres.

In conjunction with the contract, the Council provided a 1000m^3 serviced building at the Richmond RRC to house the MRF.

The fifth Resource Recovery Centre, in Murchison is managed by Fulton Hogan Ltd. The Murchison area does not have a Council funded kerbside rubbish or recycling collection, and so this site is the only drop-off location of recycling. Fulton Hogan operate and maintain the site.

Fulton Hogan provide waste and materials transport for Council. Waste, greenwaste and recyclables are transported in the Council owned compactor, open top and recycling transport bins. Fulton Hogan also maintain and repair the transport bins.

Azwood Ltd (also known as Wholesale Landscapes) provide a greenwaste processing service for Council. Greenwaste from Māriri, Takaka, Collingwood and Murchison is processed to compost and landscaping supplies at a site on Eves Valley Road, Brightwater.

8.2.3 Maintenance Strategies

8.2.3.1 Resource Recovery Centres

The Resource Recovery Centre contractors are responsible for operations and maintenance of the site, and over time we are working with the contractors to increase the focus on asset maintenance and monitoring, and delegating more responsibility for significant maintenance and routine renewals. Most fixed assets on these sites are owned by Council, while most mobile plant is owned by the operations and maintenance contractors.

The Resource Recovery Centre contractors provide the following services:

- Receipt of waste, recoverable materials (greenwaste and recyclables) and (in some instances) reusable materials.
- Collection, accounting for and delivery of disposal fees to the Council.
- Direction of customers to appropriate recovery and disposal areas.
- Loading of waste into open top and compactor transport bins, operation of a waste compactor or loading plant where a compactor is not available.

- Communication to the haulage contractor regarding collection of transport bins.
- Separation, stockpiling and sale of recoverable resources. Car bodies, whiteware, steel scrap, waste oil, car batteries, plastics, tin cans, aluminium cans, paper, cardboard and glass are the minimum range of diverted materials. It is expected that more materials will be recovered by the contractor over time.
- Regular inspections of the site and equipment to satisfy the requirements of the specified maintenance schedules.
- Programming, execution and reporting of routine maintenance tasks.
- Arranging for quotations for completion of larger maintenance items, as required.
- Collection, accumulation and reporting of statistical data as required.
- Hosting site visits by schools and other interested groups.
- Staffing of the sites, as required, to carry out the specified operations to a high level of customer service.

The intent of the Resource Recovery Centre operational contracts is that the contractor's focus should be on reducing the quantity of waste disposed of to landfill by diverting recoverable resources from the waste stream, as well as providing waste disposal and transfer services. Materials are to be handled in a manner that maximises their salability and that additional recoverable materials are to be added progressively.

With an objective to divert more materials over time there will be increasing focus on resource recovery at these sites over the next three years.

The sealed pavements at the Resource Recovery Centre are managed separately, by Council. When these pavements fail, they tend to deteriorate quickly, due to high loadings and, in some cases, poor subbase strength. At the Richmond Resource Recovery Centre the sealed pavement is extensive (just under 10,000 sq.m), and is constructed on top of a closed landfill. Failures on these sealed pavements can be difficult to forecast, which makes renewal planning difficult which can result in higher levels of reactive maintenance. Many of the pavements on Resource Recovery Centre sites are due for renewal in the next three years.

8.2.3.2 Waste Minimisation

Over the next 30 years the Council expects to continue to provide waste minimisation services, although the range of these services are likely to change over time. Where these services change they will impact on Council's operations and asset maintenance requirements.

At present waste minimisation services include kerbside recycling services, receipt of recyclable materials, greenwaste and reusable materials at Resource Recovery Centres, processing of unsorted non-glass recycling at the MRF and public place recycling bins in seven townships. The infrastructure required to deliver these services is a mixture of the Council and contractor owned. The vehicles and plant required for these services are owned and maintained by operations contractors, with a minimum service level specified by Council. The MRF equipment and the initial fleet of 17,000 mobile recycling bins are owned by the operations contractor, but are purchased by the Council at the end of the contract term (June 2023). In the interim the maintenance of this plant and these bins is the responsibility of the contractor.

While most of the operational costs of these services are based on contracted, fixed rates, the Council shares the recycling revenue risk with the operations contractor and carries the risk of most reactive maintenance. In recent years, the drop in recycling commodity values has resulted in the Council adding additional funding for kerbside recycling services.

The Council also encourages the use of Council contracted facilities (such as the MRF) by commercial contractors and encourages diversion of residual waste from landfill through engagement with businesses, schools and the wider community. These waste minimisation initiatives are largely based around presenting convenient alternatives to the public that encourage the separation of waste material into the various recyclable, reusable and residual fractions prior to collection at the kerbside or Resource Recovery Centre. There is little asset maintenance required for these services.

Central government has signaled that they are looking to develop a standard specification for kerbside collections, to improve quality and make collections and messaging consistent across the country. The Council's recycling collection methodology is likely to meet the minimum recommended specification (mixed recycling, with glass collected separately) but it is possible that government will recommend a transition to more separated collections (e.g. paper and cardboard separated from plastic and tins) and government may also encourage or require food waste collections.

Central government has also signaled that it will be making decisions on a proposed container return scheme in 2021. If implemented, this could significantly change kerbside recycling – by reducing the volume of beverage containers presented and increasing the value of remaining containers. It would also eliminate the need for public place recycling bins. This could lead to decreased costs, due to reduced collection frequency, bin clearance costs and increased value in containers collected.

The timing of these changes could impact on current assets and maintenance – in particular the MRF and mobile recycling bins. These assets were purchased in 2015, and are expected to have 15 year lives. Significant changes to recycling collections would ideally be planned for around 2030, when these assets are obsolete, but minor changes could be made when the current kerbside collection contract concludes in June 2023. Changes that could be considered at this time could be the removal of rubbish collection from the Council contract and addition of food waste collections.

8.2.4 Forecast Operations and Maintenance Expenditure

The 30-year forecast for operations and maintenance expenditure is shown in Figure 27. These costs are based on current contract rates and do not include inflation. The summaries include both direct and indirect costs, which are necessary to balance expenditure and income (fees and charges from commercial customers).

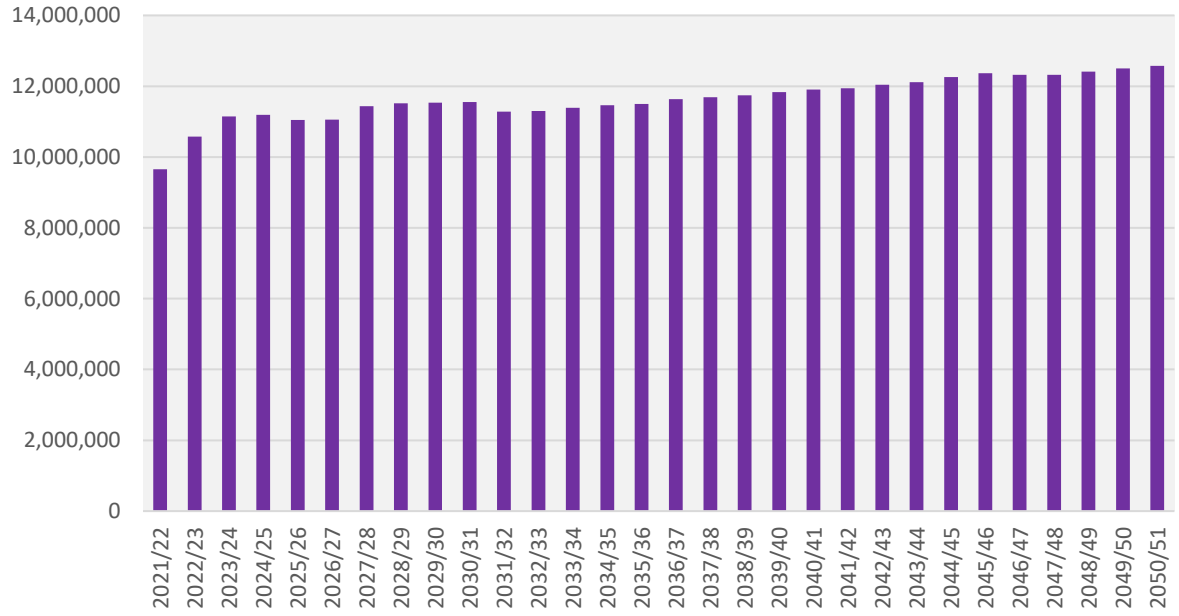


Figure 27: 2018-2048 Waste Management and Minimisation O&M Expenditure Excluding Inflation

The increase in operational costs in Years 1, 2 and 3 are due to increased disposal fees at York Valley and the increase in operational costs in Years 7, 8, 9 and 10 are due to the replacement of 17,000 mobile recycling bins. The increased disposal costs will be funded by increased Resource Recovery Centre disposal fees and the replacement recycling bins will be funded by the targeted refuse-recycling rate.

More detailed breakdown of waste management and minimisation operations and maintenance expenditure is included in Appendix A.

8.3 Asset Renewal/Replacement

Renewal expenditure is major work that does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original capacity. Funding of work over and above restoring an asset to its original capacity is considered to be new capital works expenditure.

8.3.1 Key Renewal Themes

The majority of assets in this activity are above ground or mobile assets, with the majority of mobile assets are provided by contractors. The majority of assets in this activity are reasonable new (<30 years old), but the assets are often subject to high wear and tear with actual asset lives often shorter than expected. For example, pavements and buildings often suffer damage due to the unloading and loading activity and the use of heavy equipment and high payloads of waste and recycled materials.

The Council takes a relatively reactive approach to renewals. This is due to a lack of long term maintenance data and correlation of this to waste quantities. For some sites (such as the Richmond Resource Recovery Centre) there is some uncertainty around the long term use of the site, and whether waste movements will increase or decrease over time.

This risk of this approach is relatively low as the majority of the assets are visible and able to be maintained before renewal is required. For high risk items (such as waste compactors) we are improving our condition assessment schedule to improve forecasting of renewals. This should reduce the risk of failure and higher reactive maintenance towards at the end of asset lives.

In some instances we will renew high use assets early and move them to lower use locations. An example of this was the Richmond waste compactor, which was refurbished and moved to the Takaka site and replaced with a new asset. The Takaka waste compactor has been repurposed as a recycling compactor.

The condition of most below ground assets is not known well. This carries some risk because many of the assets are located in or near closed landfills and under paved surfaces that are difficult to maintain.

8.3.2 Renewal Strategies

Assets are considered for renewal when:

- they near the end of their effective useful life;
- the cost of maintenance becomes uneconomical and the whole-of-life costs are less to renew the asset than keep up maintenance;
- the risk of failure of critical assets is unacceptable.

The renewal programme has generally been developed by the following:

- Taking asset age and remaining life predictions, calculating when the remaining life expires and converting that into a programme of replacements based on valuation replacement costs.
- Reviewing and justifying the renewals forecasts using the accumulated knowledge and experience of asset operations and asset management staff. This incorporates the knowledge gained from tracking asset failures and performance through the asset management system.
- The renewal programme is reviewed in detail every three years, by planning advisors, asset engineers and engineering management; and crossed referenced with other activities to determine if other projects are occurring in the same location. Timings may be tweaked to optimise overall programme to minimise disruptions to the public and realise potential costs saving in the reinstatement and preliminary and general works where possible.
- In some instances asset renewals have been delayed to manage the overall cost of the Council's capital programme in the early years. This carries some risk.
- Every year the annual renewal programme is reviewed and planned with the input of the maintenance contractor.

8.3.3 Delivery of Renewals

Procurement of renewals for this activity is considered on a case-by-case basis. Renewal of utility assets are normally delivered by the RRC operations contractor or Council's utility contractor. Renewal of small plant items or buildings are normally delivered by the RRC operations contractor. Small pavement renewals are normally delivered by a Council's road maintenance contractor or a contractor on the Council's panel of approved contractors.

Renewal of larger plant items (e.g. waste compactors or waste bins), extensive pavement renewals, extensive utility assets or buildings are normally delivered by a competitive procurement process – using Council's panel of contractors or by open tender. Renewals are also often included in capital upgrade works.

8.3.4 Deferred Renewals

Deferred renewal is the shortfall in renewals required to maintain the service potential of the assets. This can include:

- Renewal work that is scheduled but not performed when it should have been, and which has been put off for a later date (this can often be due to cost and affordability reasons).
- An overall lack of investment in renewals that allows the asset to be consumed or run-down, causing increasing maintenance and replacement expenditure for future communities.

If the renewals expenditure starts falling behind the accumulative depreciation it can indicate that the assets may not be being replaced or renewed at the rate at which they are being consumed. If this continues unchecked for too long, future communities will inherit a run-down asset, high maintenance costs and high capital costs to renew failing infrastructure.

Figure 28 compares Council's cumulative renewal expenditure and cumulative depreciation for this activity. While 50% of the Nelson Tasman Regional Landfill Business Unit asset depreciation is included in the financial reporting for this activity it has been excluded from Figure 28.

For the first 11 years, Council's investment in renewals generally matches depreciation, but lags depreciation after this date. This reflects the effect of depreciation from newer long term assets but also illustrate the difficultly in predicting renewals in later years. This will require monitoring and development of longer term renewal programmes.

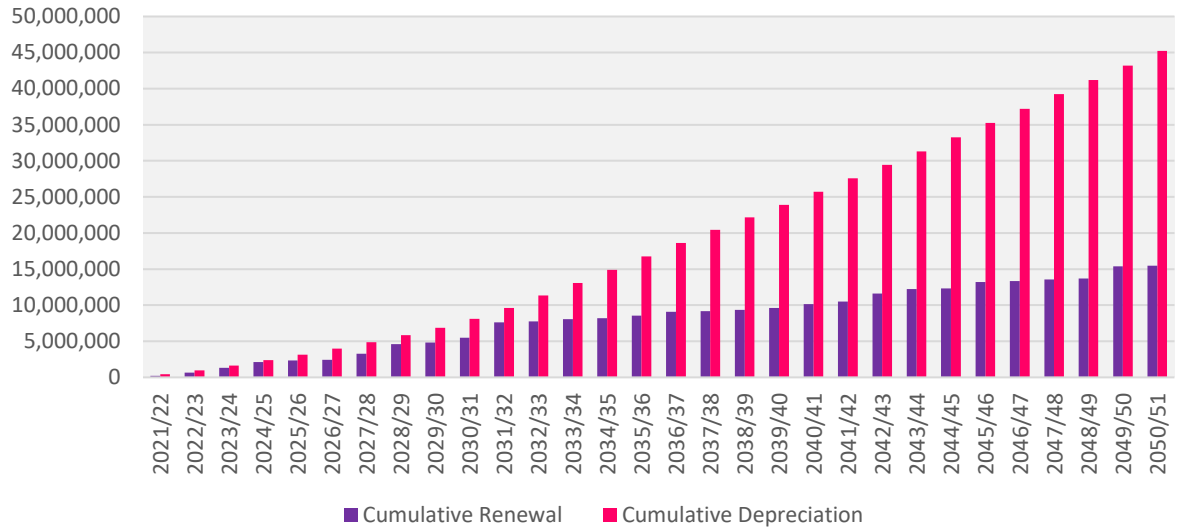


Figure 28: Comparison of Cumulative Renewal Expenditure and Cumulative Depreciation Including Inflation and excluding Nelson Tasman Regional Landfill Business Unit

8.3.5 Forecast Renewal Expenditure

Figure 29 summaries renewal expenditure for the next 30-year period. Larger renewal items include replacement of waste compactors, waste transport bins, buildings associated with recycling and other supporting infrastructure. In 2031/32 many assets at the Richmond Resource Recovery Centre are scheduled for renewal. This timing coincides with a potential closure of the York Valley landfill and a further $2m of new capital budgeted for this site.

Other significant renewal items in early years are renewal of pavement at resource recovery centres. Pavement life for these is difficult to estimate and limited pavement rentals have been provided for in the outer years. Over the next three years we plan to improve our renewals forecasting for these assets.

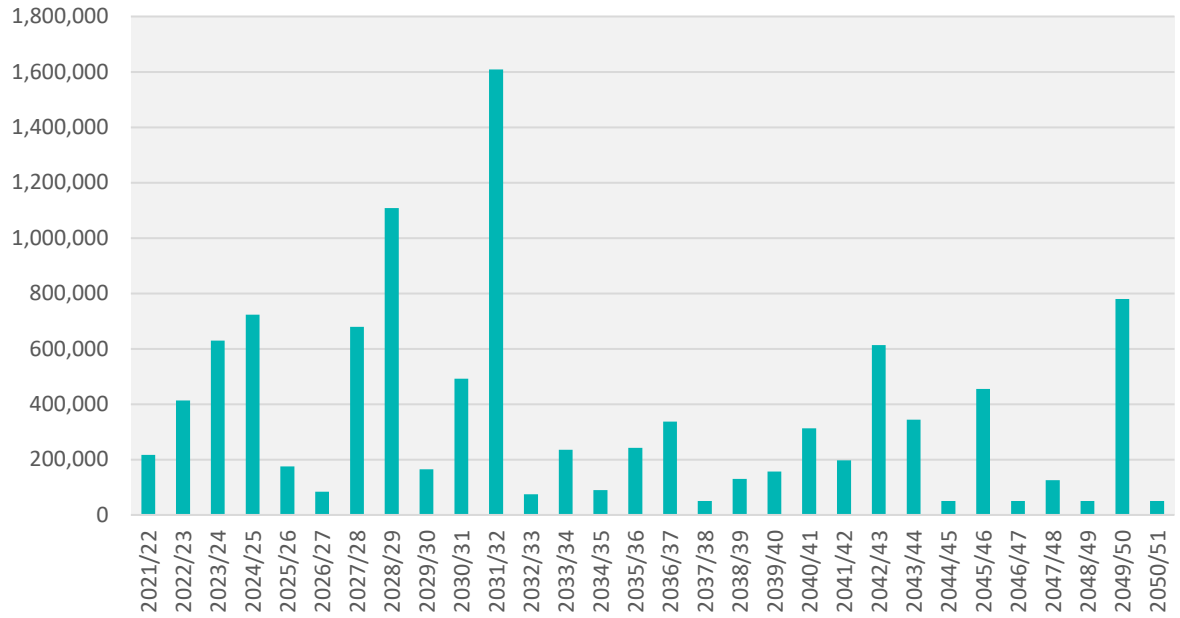


Figure 29: 2018-2048 Waste Management and Minimisation Renewal Expenditure Excluding Inflation

8.4 Asset Development

New capital expenditure is used to create new assets, expand or upgrade existing assets, or increase the capacity of existing assets beyond their original design capacity or service potential. This section summarises future new capital work requirements for this activity.

8.4.1 Key Asset Development Themes

Over the next 10 years we plan to invest approximately $13.9m in new assets to respond to the key issues for this activity. Much of the works will focus on improving safety and serviceability, purchase and expand recycling infrastructure, improve site access and provide small environmental and customer service improvements.

In the first three years of this plan we have focused on areas that are unlikely to be affected by any changes in government policy or Council's kerbside collection services. From Year 4 we are planning additional capital works to improve resource recovery. The investment needs from Year 4 onwards will be informed in the next AMP by detailed business cases for organic and dry waste diversion.

8.4.2 Assessment of New Capital Works

The Council plans in the short term to focus on safety and serviceability for the resource recovery centres. In the later years we proposed more significant investment in waste minimisation.

The key projects in the first three years of the plan are improvements at the Māriri Resource Recovery Centre, purchase of the equipment at the Materials Recovery Facility (MRF) and minor safety and environmental improvements at resource recovery centres and closed landfills. In this period we are also proposing to construct a bunker at the Richmond Resource Recovery Centre to trial dry waste diversion and complete investigations, design and preliminary works to expand the MRF. Both of these projects are entirely reliant on external funding, from the central government or users of the MRF facility.

In the later years the most significant work proposed is for expansion of the MRF building in Year 4, and significant improvements at the Richmond Resource Recovery Centre from Year 10, which is the earlier time that the York Valley landfill is likely to close.

We are also proposing to invest $350,000 per annum in waste minimisation infrastructure, funded by expected income from Council's share of the national waste disposal levy, which is expected to increase from year four. The expansion of the MRF building is dependent on securing outside funding.

Changes in government policy and regulations in the next two years may require a change in investment in the next AMP.

8.4.3 Projects to Support Increasing Levels of Service

The following projects have been included to support increases in Council's levels of service:

- A new dry waste diversion bunker at the Richmond Resource Recovery Centre (Year 1, $400k) – this will enable a trial of construction waste diversion ahead of further investment and reduce waste to landfill per capita. This project is reliant on receiving external funding.
- A relocated weighbridge and kiosk at the Māriri Resource Recovery Centre, with other roading improvements (Years 1-2, $1.8m) – this will reduce queueing, improve access to the recycling area and enable all customers to pay by weight - increasing customer satisfaction through fairer pricing and more convenient recycling.
- Purchase of the existing Materials Recovery Facility (MRF) from our existing contractor (Year 2, $500k), expansion of the MRF building (Years 2 and 4, $4.2m) and purchase of a new MRF (Year 10, $1.5m). This will increase diversion from landfill and reduce waste to landfill per capita.
- From Year 4 we are proposing to invest $2.5m in waste minimisation infrastructure. This will increase diversion from landfill and reduce waste to landfill per capita. The detail of this investment will be informed by detailed business cases investigating organic and dry waste diversion and by government policy decisions in the coming years.
- A second weighbridge at the Richmond Resource Recovery Centre (Year 6, $290k) – this will reduce queueing and increase customer satisfaction at this site.
- Small site improvements manage hazardous waste, improve safety and environmental performance (Years 1-10, $605k) – these will improve customer satisfaction and ensure consent compliance

8.4.4 Projects to Support Growth

There are no projects to support growth in this activity.

8.4.5 Forecast New Capital Expenditure

Council's new capital expenditure forecast for this activity is listed below and shown in Figure 30. Note that there are no growth-driven projects.

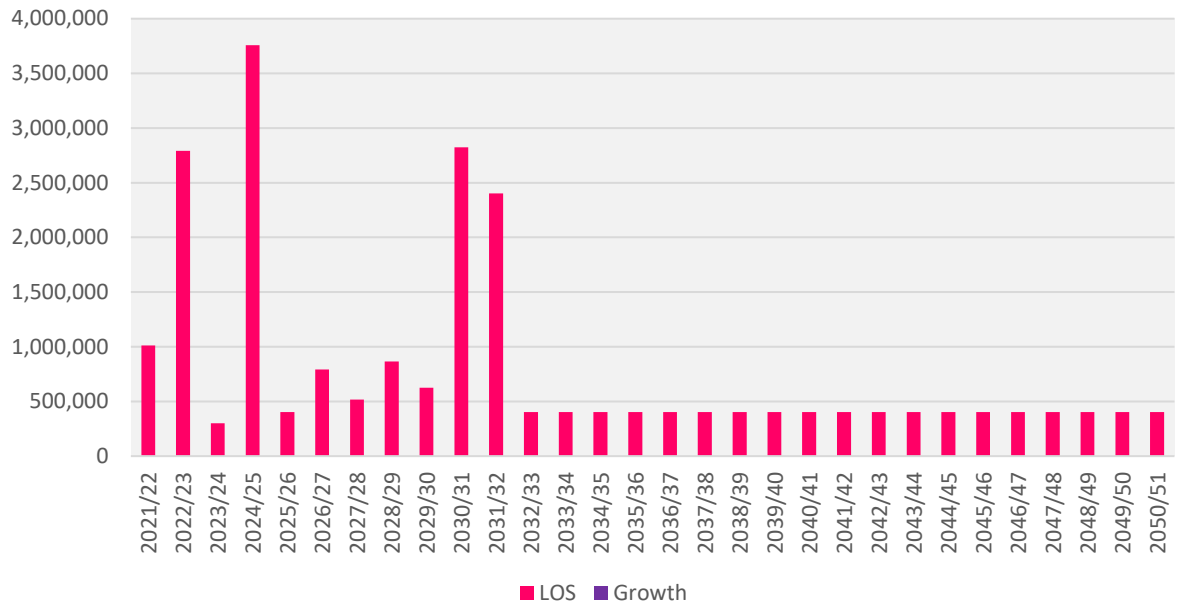


Figure 30: 2018-2048 Waste Management and Minimisation New Capital Expenditure Excluding Inflation

Figure 30 shows higher levels of new capital expenditure in the first four years, and again in Years 10 and 11. The significant capital in Years 1 and 2 are improvements at Māriri, purchase of the MRF and preliminary work on expansion of the MRF building. In Year 4 a significant expansion of the MRF is proposed. Other significant investment is improvements to the Richmond Resource Recovery Centre in Years 10 and 11. Most other investment over the period is waste minimisation infrastructure.

The key projects for the first 10 years are (excluding inflation):

Richmond RRC - new dry waste diversion bunker	Year 1	$392,000*
Māriri Resource Recovery Centre - relocated weighbridge and kiosk, road access improvements	Years 1-2	$1,755,000
Richmond Materials Recovery Facility – purchase of plant	Year 2	$503,000
Richmond Materials Recovery Facility – investigation and construction of expanded building	Years 2, 4	$4,156,000*
Closed landfill improvements – improve cover and erosion protection	Years 1-6	$400,000
Waste minimisation infrastructure – scope yet to be determined, but potentially organic and dry waste diversion	Years 3-10	$2,500,000*

Richmond RRC - second weighbridge	Year 6	$290,000
Māriri Resource Recovery Centre – roof over waste pit	Year 8	$581,000
Murchison Resource Recovery Centre – site improvements	Year 9	$223,000
Richmond RRC - new waste bin storage area and pit improvements	Year 10	$922,000
Resource Recovery Centres – safety and environmental improvements	Years 1-10	$605,000
* externally funded		

8.5 Asset Disposal

The Council does not have a formal strategy on asset disposals. When any such assets reach a state where disposal needs to be considered, the Council will treat each case individually.

The Council follows a practice of obtaining best available return from the disposal or sale of assets within an infrastructural activity and any net income is credited to that activity. Council has no significant assets that it intends to dispose of in the foreseeable future.

It is not unusual for councils to dispose of closed landfills. Most of these in the Tasman district are located within flood plains, close to rivers and marine environments. The Council is proposing to retain them so that they can be managed appropriately. Where appropriate they will be developed as parks or reserves for public access or re-vegetated with native plants.

9 Financials

The Council has planned a prudent financial approach to managing its assets and services. This section provides a summary of the total value of the activity and the investment that the Council has planned to make over the next 30 years.

9.1 Funding Sources

The Waste Management and Minimisation activity is currently funded through a mixture of sources, as shown in Figure 31 below.

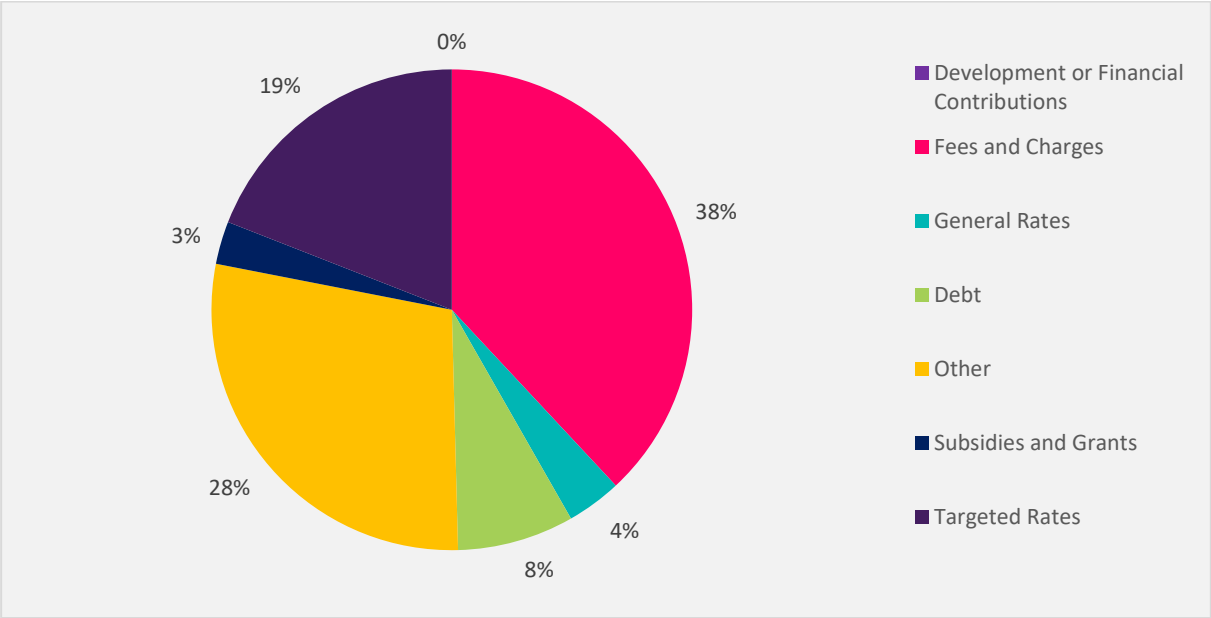


Figure 31: Funding Sources for this Activity

As shown in Figure 31, the majority of funding for this activity comes from fees and charges. The bulk of the revenue is from waste disposal charges.

"Other income" includes:

- Regional landfill revenue distributions from the regional landfill business unit (just over 69% of other revenue).
- Waste levy distributions for territorial authorities from central government (21%).
- Revenue for sale of commercial recyclables (1%), and
- other investment income from other Council activities (9%).

Targeted rate income is used to fund the kerbside recycling service and subsidies and grants refer to external funding from government or other users of the MRF.

9.1.1 Fees and Charges

Under the Revenue and Financing Policy, the Council has the ability to set a Schedule of Charges to recover some costs associated with Council's services. Some of these fees and charges are set by statute and others by Council.

All fees and charges are reviewed each year to determine whether they need to change or not. the Council engages with the community on the proposed charges through the Special Consultative Procedure set out in Section 83 of the LGA. This typically occurs in parallel with the Annual Plan or Long Term Plan consultation, but the Chief Executive has delegated authority to amend waste management fees and charges throughout the year if required. Revenue from waste disposal is a very significant income source for this activity. Almost all revenue from fees and charges is for the disposal of waste to Resource Recovery Centres. Of this revenue, over 85% is from commercial customers.

Council's preference is to implement full cost disposal pricing, in conjunction with product stewardship where available. When implementing this approach the Council will also consider affordability and potentially adverse effects – for example, increased illegal dumping or high disposal costs for remote communities. At present the Council does not fully fund Resource Recovery Centre operations through disposal charges, but is proposing to move towards full funding over time. This could achieved by raising charges at Resource Recovery Centres or by requesting additional funding from the Nelson Tasman Regional Landfill Business Unit.

The Council's pricing of waste disposal at Resource Recovery Centres is strongly dependent on pricing of landfill disposal at the business unit, as the Council pays the published gate rate for disposal of Resource Recovery Centre waste. The Council generally adds a charge to cover some of the cost of handling waste at Resource Recovery Centres and transporting the waste to landfill.

The business unit typically proposes disposal charges in October each year (effective 1 July of the following year), as part of the annual business plan submitted to the Council. The Council then considers proposed disposal fees at resource recovery centres (and other waste management and minimisation charges) for consultation in parallel with the Annual Plan or Long Term Plan consultation process. In recent years the regional landfill prices have risen, but they have remained in the mid-range or Council owned facilities. Figure 32 shows Nelson-Tasman regional landfill pricing over the past three years and compares this with other regions.

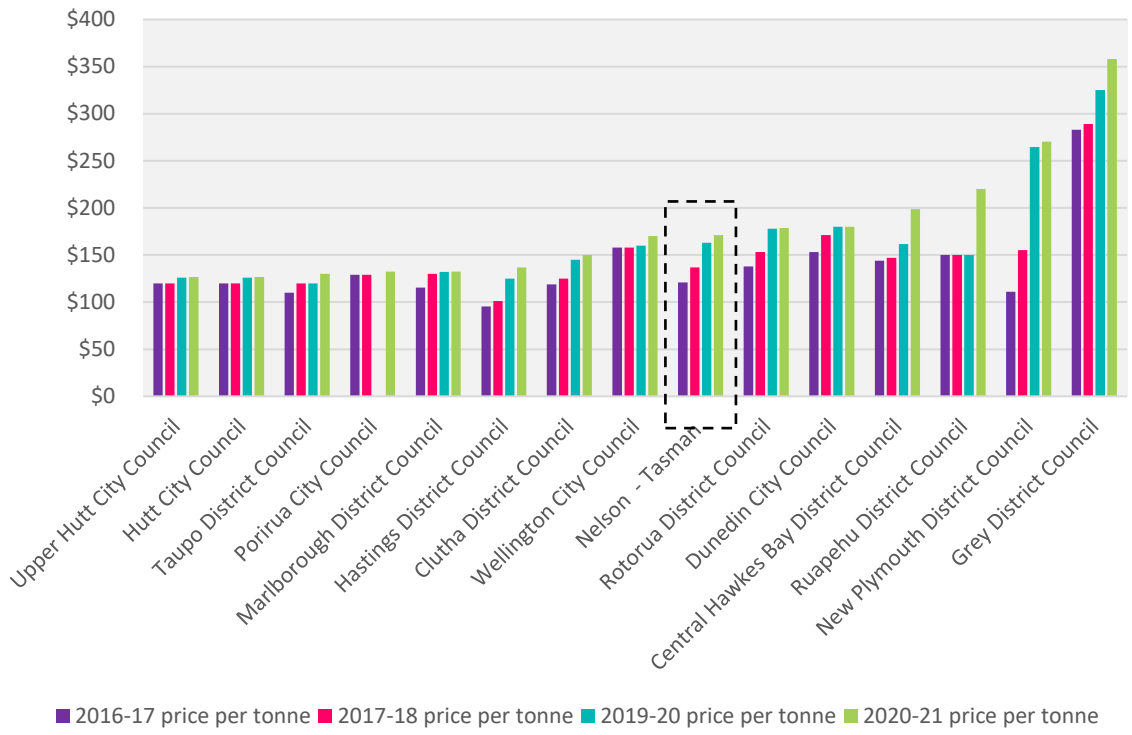


Figure 32 : Comparison of waste disposal charges at Council landfills around New Zealand

Waste disposal prices are affected by factors generally outside the control of the Council and the business unit. These costs include emission liabilities through the Emissions Trading Scheme and a change in the national waste disposal levy.

Figure 33 shows the budgeted disposal charges (including GST) for the first ten years of this plan. This charges will be dependent on confirmed charges from the Nelson Tasman Regional Landfill Business Unit and may be affected by changes to emissions and waste disposal levy charges.

Although not yet confirmed, central government has indicated that it proposes to increase the waste disposal levy for Class 1 landfills from the current levy of $10 per tonne to $20 in July 2021, to $30 in July 2022, $50 in July 2023 and $60 in July 2024. The budgeted income at the Resource Recovery Centres are based on the assumption that these levy increases will be implemented.

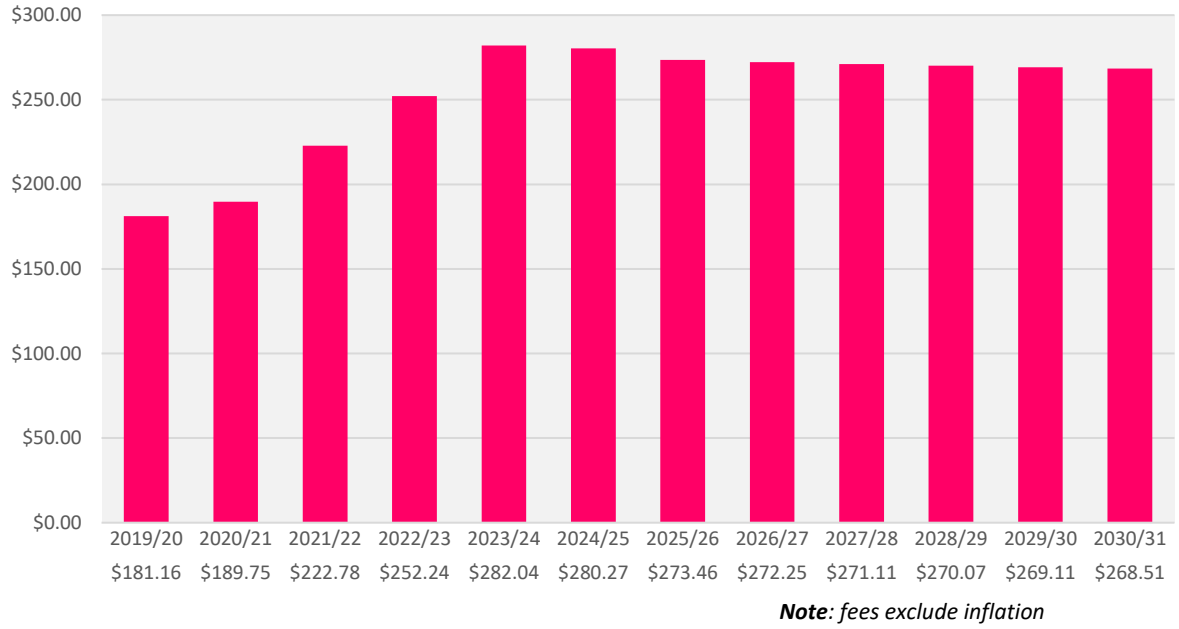


Figure 33 : Proposed waste disposal charges per tonne including GST

The Council is progressively moving to weight based charging on the three larger sites: Richmond, Māriri and Takaka. Weight based charging was implemented for all customers at Richmond from May 2020 and at Takaka from December 2020. Capital works proposed at Māriri in Years 1 and 2 will enable weight based charging for domestic customers.

In Richmond many commercial customers can chose whether to dispose at Richmond Resource Recovery Centre or direct to landfill at York Valley. In recent years commercial revenue at Richmond has dropped, and we expect it is due to diversion direct to landfill. At Richmond any drop in this income is generally matched by lower disposal fees and operational costs so the reduction in income is broadly cost neutral.

The Council has historically charged commercial customers by weight and domestic customers by volume. The volume based approach relies on assessment by kiosk staff, is less accurate and may be perceived to be unfair. Research undertaken for the Ministry for the Environment in 2012[4] also indicated that price was more likely to affect waste reduction where weight based charges were implemented.

9.1.2 Waste Levy Distributions from Central Government

Fifty percent of all national landfill levy income is distributed to territorial authorities by the Secretary of the Ministry for the Environment. Distribution of funding is on a population basis. Levy funds are required to be spent on waste minimisation measures that have been provided for in the Council's Waste Management and Minimisation Plan.

[4] Economic Factors of Waste Minimisation in New Zealand, Covec, November 2012

When proposing to increase waste disposal levy the government estimated that revenue from the waste disposal levy would increase by 500% over four years. In preparing this plan we have assumed that Council's revenue from the waste disposal levy will increase from $200,000 to $1,000,000 per annum.

9.1.3 Revenue from Regional Landfill Business Unit

The Nelson Tasman Regional Landfill Business Unit passes to Nelson City Council and Tasman District Council a "Local Disposal Levy" to fund waste management and minimisation. The business unit typically proposes the disposal levy in consultation with the Councils when developing the business unit asset management plan. For this activity management plan, we have assumed local levy income will rise from of $2.4m in 2020/21 to $3.3m in 2023/24 and then gradually to $3.8m in 2030/31 (Figure 34).

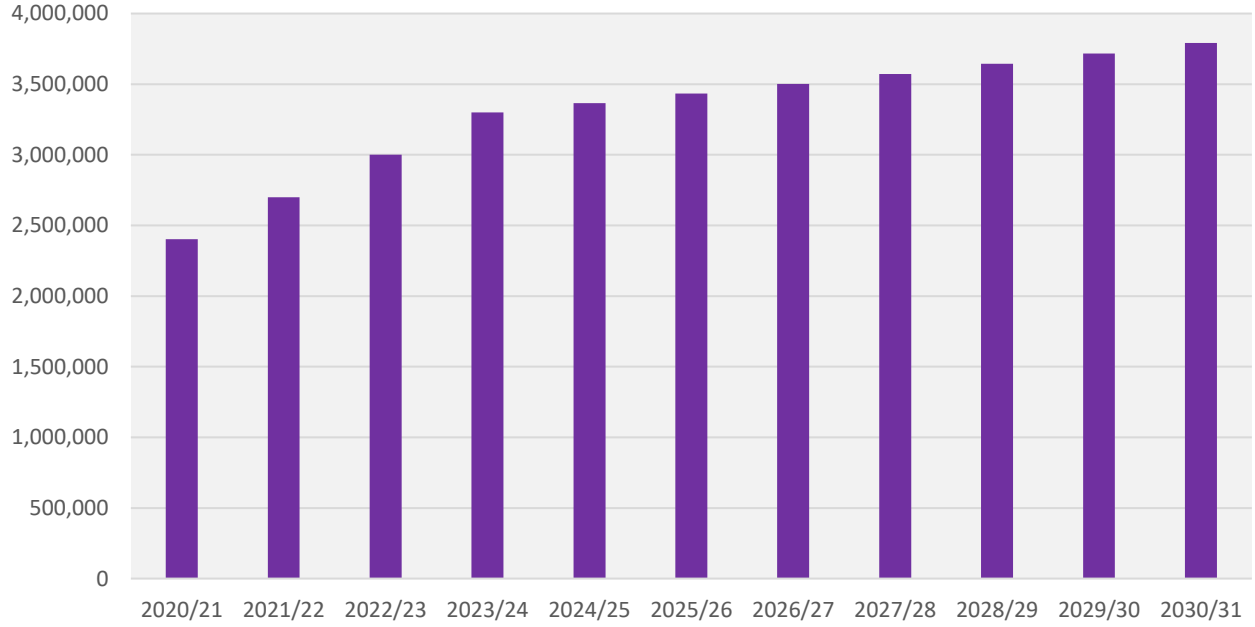


Figure 34 : Expected Local Disposal Levy from Nelson Tasman Regional Landfill Business Unit

9.1.4 Development Contributions

There are no development contributions for this activity.

9.2 Asset Valuation and Depreciation

The Local Government Act 1974 and subsequent amendments contain a general requirement for local authorities to comply with Generally Accepted Accounting Practice ("GAAP").

The Council requires its infrastructure asset register and valuation to be updated in accordance with Financial Reporting Standards and the AMP improvement plan.

The valuations summarised below have been completed in accordance with the following standards and are suitable for inclusion in the financial statements for the year ending June 2017.

- NAMS Group Infrastructure Asset Valuation Guidelines – Edition 2.0.
- New Zealand International Public Sector Accounting Standard 17; Property, Plant and Equipment (PBE IPSAS 17) and PBE IPSAS 21 (Impairment of Non Cash Generating Assets).

9.2.1 Latest Asset Valuation

Assets are valued every three years. The waste management and minimisation assets were last re-valued as at 1 April 2017 and is reported under separate cover. Key assumptions in assessing the asset valuations are described in detail in the valuation report.

The majority of information for valuing the assets was obtained from Council's Confirm database. This is the only the second time the database has been used to revalue Council's assets and some refinement of the valuation is still required. In the past, asset registers based on excel spreadsheets have been used. The data confidence is detailed in Table 16 below:

Table 16: Data Confidence

Asset Description	Confidence	Comments
Waste Management and Minimisation Assets	B – Reliable	The asset registers provide all the physical assets that make up each transfer station and landfill. The valuation has been based on actual contract costs, some of which date back to 2001 and have since been subject to adjustment factors. For a more accurate valuation, attribute information needs to be collated for each asset i.e. size of building, length of fence etc

*Based on NZ Infrastructure Asset Valuation and Depreciation Guidelines – Edition 2, Table 4.3.1: Data confidence grading system.

The Base Useful Lives for each asset type as published in the NZIAVDG Manual were used as a guideline for the lives of the assets in the valuation. Generally, lives are taken as from the mid-range of the typical lives indicated in the Valuation Manual where no better information is available. Lives used in the valuation relating to waste management and minimisation assets are presented in Table 17 below.

Table 17: Asset Lives

Feature Type	Useful Life (years)	Minimum Remaining Useful Life (years)
Buildings	50	5
Waste Compactor	25	2
Electrical equipment	5-50	2
Fencing	50	2
Humeceptor sediment treatment device	50	2
Landfill	No Depreciation-100	5

Feature Type	Useful Life (years)	Minimum Remaining Useful Life (years)
Miscellaneous items	No Depreciation - 80	5
Streetside recycling / rubbish bin	10	2
Roading / carpark	No Depreciation - 50	5
Stormwater other assets	80	5
Wastewater other assets	20-80	5
Wastewater pipe	80	5
Water supply assets	80	5
Weighbridge	60	5
Stormwater chamber, cleaning eye, inlet structure, outlet structure, Soakpit, sump	80	5
Stormwater channel	No Depreciation	
Stormwater collection pond	No Depreciation	
Stormwater culvert, manhole	120	5
Stormwater flapgate	50	5
Stormwater Pipe	See SW table	5
Water supply Miscellaneous items	15	2
Water supply Pipe	varies	5
Water supply Pump	20	2
Water supply Reservoir / dam	80	5
Water supply tanks, valves, air valves,	50	5
Wastewater Building structure	50	5

Feature Type	Useful Life (years)	Minimum Remaining Useful Life (years)
Wastewater Chamber, Monitoring point, Cleaning eye, Pump station, Structure, Valve chamber	80	5
Wastewater Control cabinet & Electrical equipment	15	2
Wastewater Flowmeter / meter	20	2
Wastewater Manhole	100	5
Wastewater Miscellaneous items	15	2
Wastewater Oxidation pond	No Depreciation	
Wastewater Pipe	See WW table	5
Wastewater Pump	20	2
Wastewater Telemetry	15	2
Wastewater Valve, Vent	50	5
Wastewater pipe or wastewater assets at Eves Valley Landfill		13

9.2.2 Depreciation

Depreciation of assets must be charged over their useful life. The Council calculates depreciation on a straight line basis on most infrastructural assets at rates which will write off the cost (or valuation) of the assets to their estimated residual values, over their useful lives. The optimised replacement value (gross replacement cost), optimised depreciated replacement value (or fair value) and the annual depreciation of the waste management and minimisation assets are summarised in
Table 18 below. On 1 July 2017 the assets associated with the Eves Valley landfill were transferred to the Nelson Tasman Regional Landfill Business Unit. The value of these are also shown in Table 18 and have been subtracted to give a net value of the activity, excluding Eves Valley.

Table 18: Waste Management and Minimisation Asset Valuation

	Gross Replacement Cost ($ 000)	Fair Value ($ 000)	Annual Depreciation ($/yr 000)
Total Assets 1 April 2017	13,628	9,613	342
Eves Valley assets at 1 April 2017	3,862	1,952	98

	Gross Replacement Cost ($ 000)	Fair Value ($ 000)	Annual Depreciation ($/yr 000)
1 April 2017 less Eves Valley	9,766	7,661	244
Total Assets 30 June 2020	15,611	10,075	371
Eves Valley assets at 30 June 2020	4,671	2,845	76
30 June 2020 less Eves Valley	10,940	7,230	295
Increase	12%	-6%	21%

9.3 Financial Summary

9.3.1 Funding Impact Statement

Council's Funding Impact Statement (FIS) for this activity is included in the table below. It summarises in one place how this activity will be funded and how those funds will be applied over the next 10 years.

Table 19: Funding Impact Statement

	2017/18 AP $000	2018/19 Budget $000	2019/20 Budget $000	2020/21 Budget $000	2021/22 Budget $000	2022/23 Budget $000	2023/24 Budget $000	2024/25 Budget $000	2025/26 Budget $000	2026/27 Budget $000	2027/28 Budget $000
SOURCES OF OPERATING FUNDING											
General rates, uniform annual general charges, rates penalties	902	1,392	1,349	1,342	1,292	1,313	1,354	1,458	1,292	1,321	1,255
Targeted rates	2,392	2,015	2,065	2,137	2,270	2,331	2,539	2,394	2,495	2,602	2,652
Subsidies and grants for operating purposes	0	0	0	0	0	0	0	0	0	0	0
Fees and charges	3,715	4,457	4,644	4,808	4,978	5,158	5,343	5,537	5,743	5,956	6,183
Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0	0
Local authorities fuel tax, fines, infringement fees, and other receipts	4,186	4,698	4,888	4,958	5,036	5,107	5,215	5,315	5,425	5,533	5,632
TOTAL OPERATING FUNDING	11,195	12,562	12,946	13,245	13,576	13,909	14,451	14,704	14,955	15,412	15,722
APPLICATIONS OF OPERATING FUNDING											
Payments to staff and suppliers	8,605	10,120	10,447	10,691	11,081	11,539	12,011	12,230	12,564	13,008	13,274
Finance costs	389	412	380	378	358	357	367	385	366	359	351
Internal charges and overheads applied	790	800	843	866	891	924	965	984	1,028	1,079	1,089
Other operating funding applications	0	0	0	0	0	0	0	0	0	0	0
TOTAL APPLICATIONS OF OPERATING FUNDING	9,784	11,332	11,670	11,935	12,330	12,820	13,343	13,599	13,958	14,446	14,714
SURPLUS (DEFICIT) OF OPERATING FUNDING	1,411	1,230	1,276	1,310	1,246	1,089	1,108	1,105	997	966	1,008
SOURCES OF CAPITAL FUNDING											
Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0	0
Development and financial contributions	0	0	0	0	0	0	0	0	0	0	0
Increase (decrease) in debt	3,349	406	(381)	(1,048)	(550)	(835)	834	(324)	(161)	(297)	(111)
Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0	0
Lump sum contributions	0	0	0	0	0	0	0	0	0	0	0

	2017/18 AP $000	2018/19 Budget $000	2019/20 Budget $000	2020/21 Budget $000	2021/22 Budget $000	2022/23 Budget $000	2023/24 Budget $000	2024/25 Budget $000	2025/26 Budget $000	2026/27 Budget $000	2027/28 Budget $000
Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0	0
TOTAL SOURCES OF CAPITAL FUNDING	3,349	406	(381)	(1,048)	(550)	(835)	834	(324)	(161)	(297)	(111)
APPLICATIONS OF CAPITAL FUNDING											
Capital expenditure											
- to meet additional demand	0	0	0	0	0	0	0	0	0	0	0
- to improve the level of service	0	1,191	414	74	323	77	787	542	626	389	244
- to replace existing assets	755	445	451	129	272	173	1,055	222	192	260	631
Increase (decrease) in reserves	(231)	(17)	6	37	62	(34)	63	(19)	(19)	(18)	(17)
Increase (decrease) in investments	4,236	17	24	22	39	38	37	36	37	38	39
TOTAL APPLICATIONS OF CAPITAL FUNDING	4,760	1,636	895	262	696	254	1,942	781	836	669	897
SURPLUS (DEFICIT) OF CAPITAL FUNDING	(1,411)	(1,230)	(1,276)	(1,310)	(1,246)	(1,089)	(1,108)	(1,105)	(997)	(966)	(1,008)
FUNDING BALANCE	0	0	0	0	0	0	0	0	0	0	0

9.3.2 Project Drivers

All expenditure must be allocated against at least one of the following project drivers.

- Operation and Maintenance: operational activities that do not involve the renewal or upgrade of assets, or work that is necessary in order to provide on-going services at the agreed levels.
- Renewals: significant work that restores or replaces an existing asset towards its original size, condition or capacity.
- Increase Level of Service: works to create a new asset, or to upgrade or improve an existing asset, beyond its original capacity or performance.
- Growth: works to create a new asset, or to upgrade or improve an existing asset, beyond its original capacity or performance to provide for the anticipated demands of future growth.

This is necessary for two reasons as follows.

- Schedule 13(1) (a) and section 106 of the Local Government Act require the Council to identify the total costs it expects to have to meet relating to increased demand resulting from growth when intending to introduce a Development Contributions Policy.
- Schedule 10(2)(1)(d)(l)-(iv) of the Local Government Act requires the Council to identify the estimated costs of the provision of additional capacity and the division of these costs between changes to demand for, or consumption of, the service, and changes to service provision levels and standards.

All new works have been assessed against these project drivers. Some projects may be driven by a combination of these factors and an assessment has been made of the proportion attributed to each driver.

9.3.3 Total Expenditure

Figure 35 and Figure 36 show the total expenditure for the waste management and minimisation activity for the first 10 and 30 years respectively. Nelson Tasman Regional Landfill Business Unit capital investment and expense have been excluded from these figures.

Growth in operating expenditure is generally due to increased disposal charges (Years 1-3), replacement of recycling bins (Years 7-10), population growth leading to growth in kerbside recycling activity, higher waste volumes and greater transport costs.

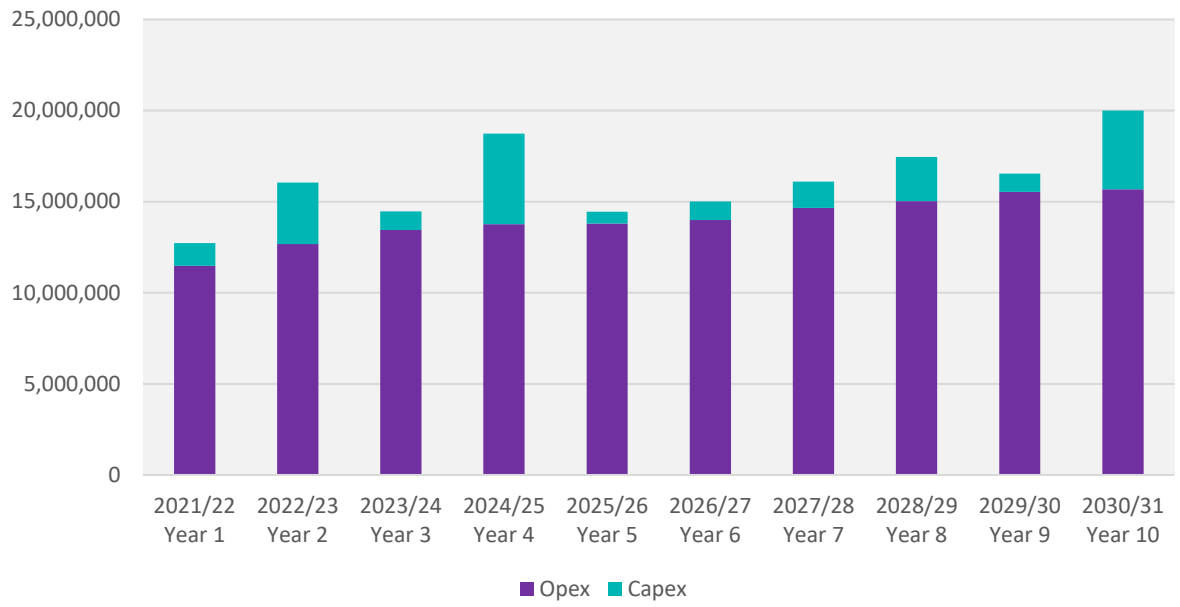


Figure 35: Total Annual Expenditure Years 1 to 10 Including Inflation

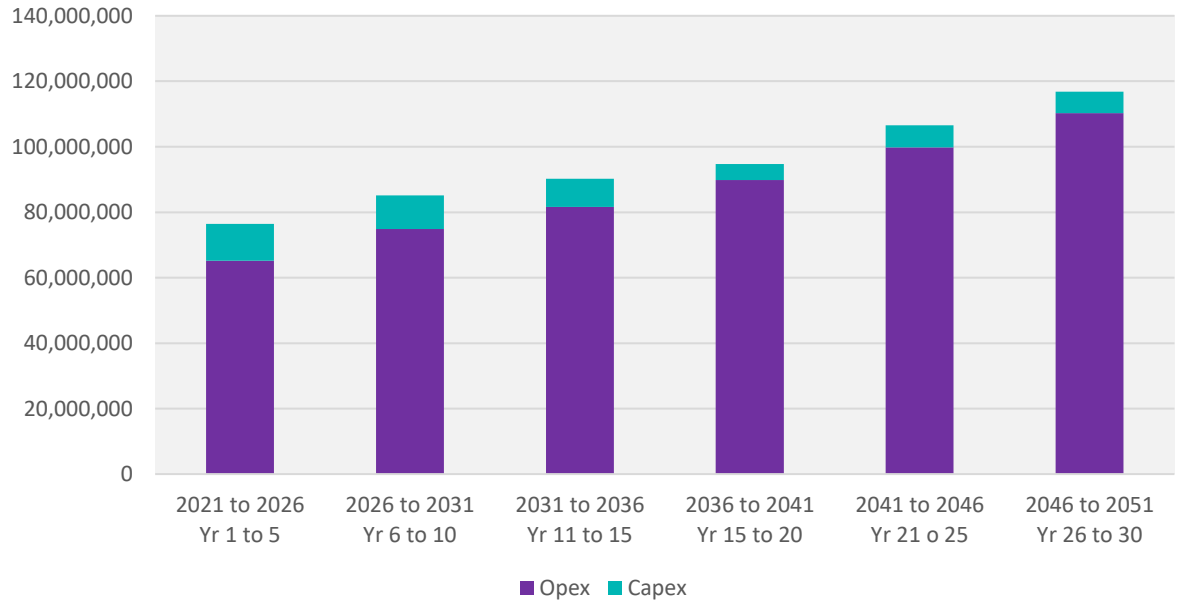


Figure 36: Five Yearly Total Expenditure Years 1 to 30 Including Inflation

9.3.4 Total Income

Figure 37 and Figure 38 show the total income for the waste management and minimisation activity for the first 10 and 30 years respectively.

Income throughout the period is dominated by fees and charges and 'other' income, which is mainly Local Disposal Levy income from the Nelson Tasman Regional Landfill Business Unit (around 70%) and the national waste disposal levy (around 20%).Income from subsidies and grants is funding for waste minimisation infrastructure in Year 1 and funding for a MRF extension in Years 2 and 4.

Fees and charges increase with increased disposal costs from Year 1 to Year 3, then decrease slightly. 'Other' income increases significantly from Year 1 to Year 4, with increases in local disposal levy and national disposal levy income increases. From Year 5 growth in 'other' income reduces.

Growth in rates income is driven by growth in targeted rates for kerbside collection services, while general rate decreases modestly. Increases in targeted rates in Years 7 to 10 are to fund replacement recycling bins.

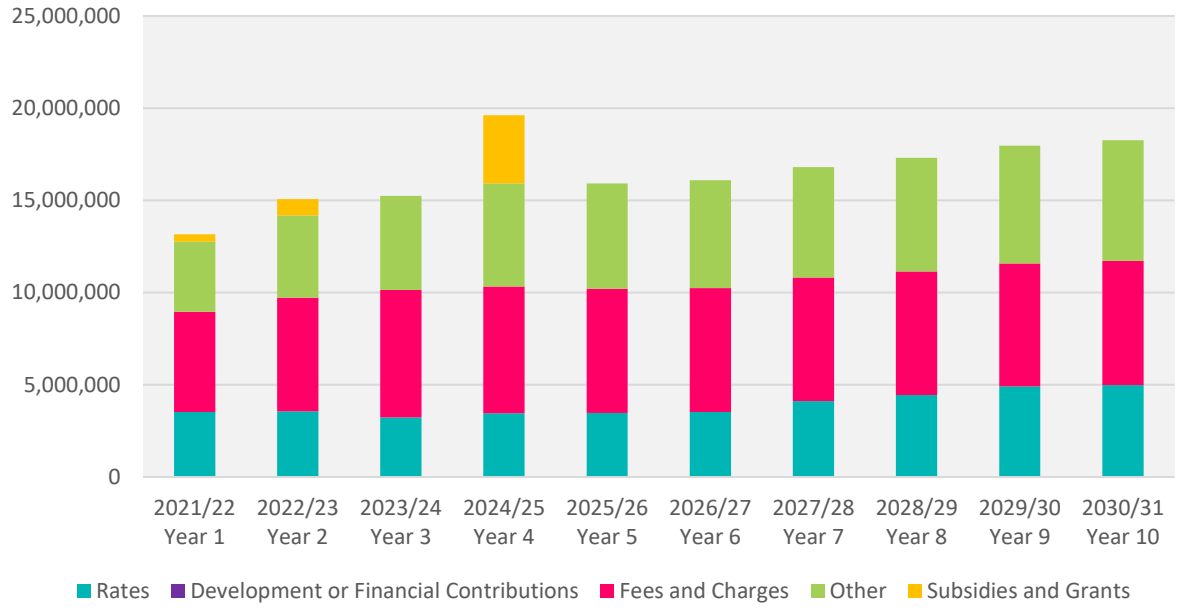


Figure 37: Total Annual Income Years 1 to 10 Including Inflation

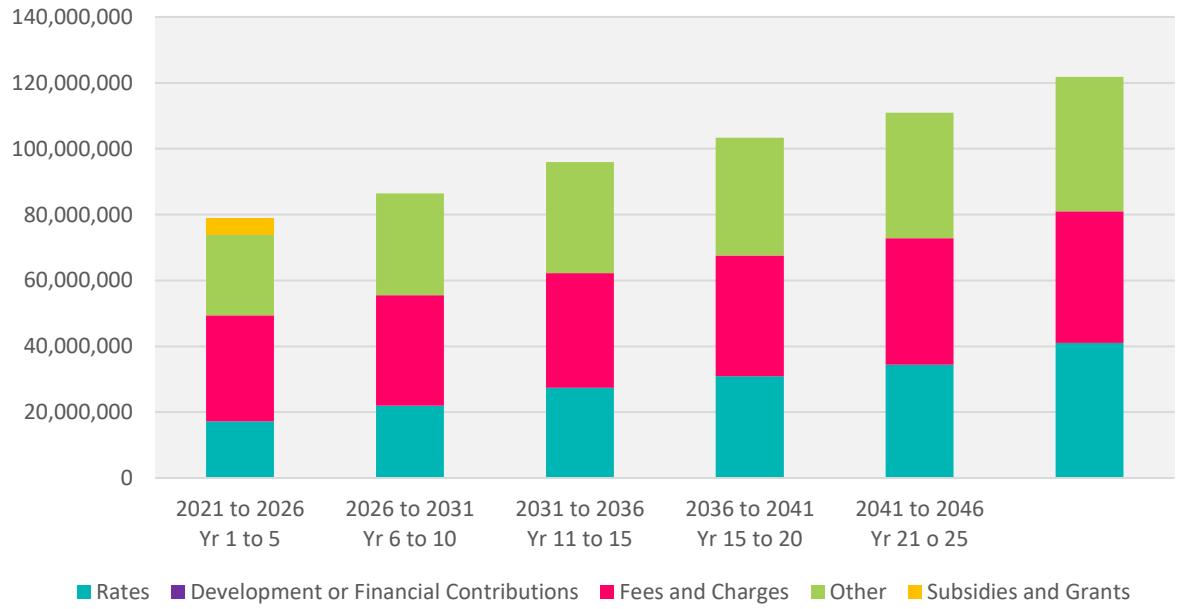


Figure 38: Five Yearly Total Income Years 1 to 30 Including Inflation

9.3.5 Operational Costs

Figure 39 and Figure 40 show the total operating expenditure for this activity for the first 10 and 30 years respectively.

Operating costs are dominated by "direct costs", which include payments to operations contractors and payments for landfill disposal. The significant increases in Years 1 to 3 are due to waste disposal costs increasing and in Years 7 to 10 due to the cost of replacing kerbside recycling bins. Other costs rise over time due to inflation and increases in population leading to higher operational costs.

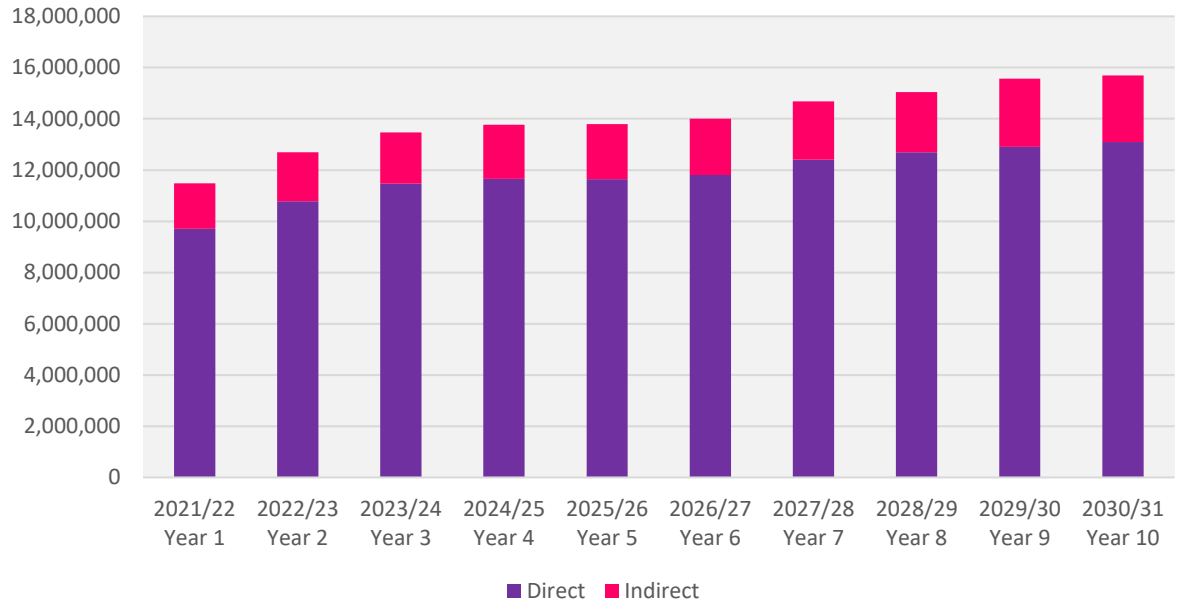


Figure 39: Annual Operating Costs Years 1 to 10 Including Inflation

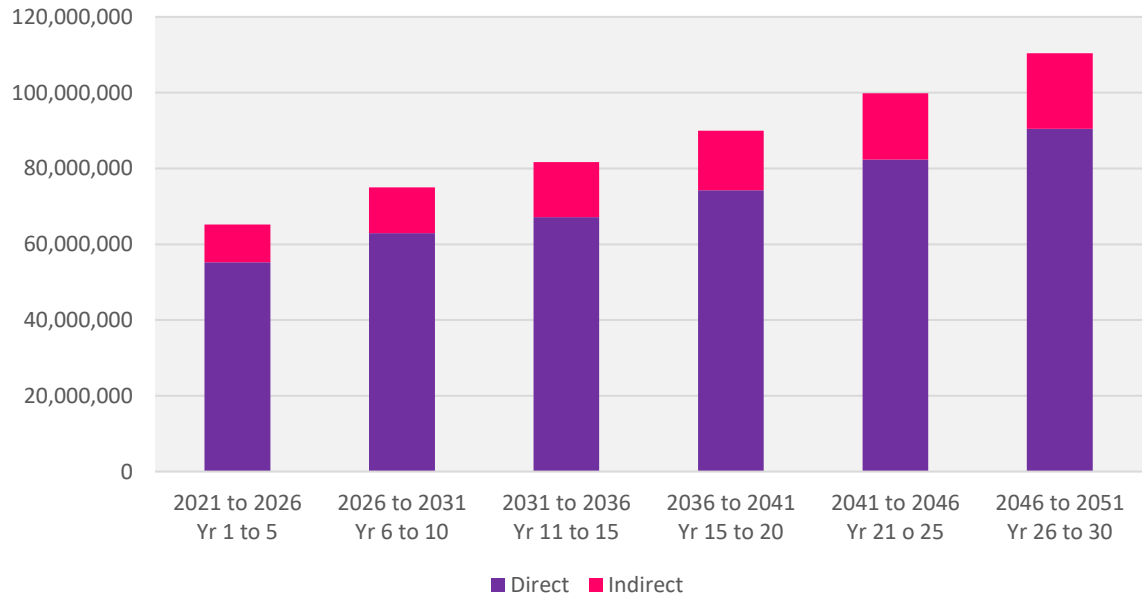


Figure 40: Five Yearly Operating Cost Years 1 to 30 Including Inflation

9.3.6 Capital Expenditure

Figure 41 and Figure 42 show the total capital expenditure for this activity for the first 10 and 30 years respectively. The capital expenditure excludes Council's 50% share of regional landfill capital expenditure in this plan.

The new capital expenditure for the activity is relatively modest, following improvements which have lifted levels of service in recent years. Expenditure in Year 4 and part of Year 2 is due to purchase of the MRF and an extension to the MRF building. In Year 10 and 11 the most significant capital expenditure is an upgrade to the Richmond Resource Recovery Centre. In later years capital expenditure is dominated by renewals and most other capital expenditure is for waste minimisation, nominally $350,000 per annum (uninflated). The detailed business plans proposed in the next two years for organic and dry waste diversion and a review of the waste management plan in future may identify future capital needs for the region, which will be incorporated into the next AMP.

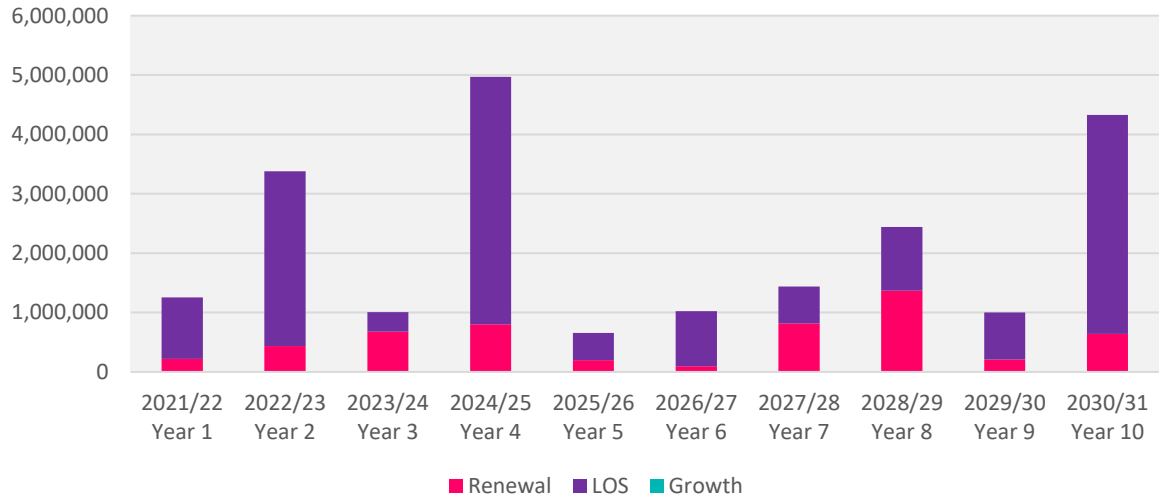


Figure 41: Annual Capital Expenditure Years 1 to 10 Including Inflation

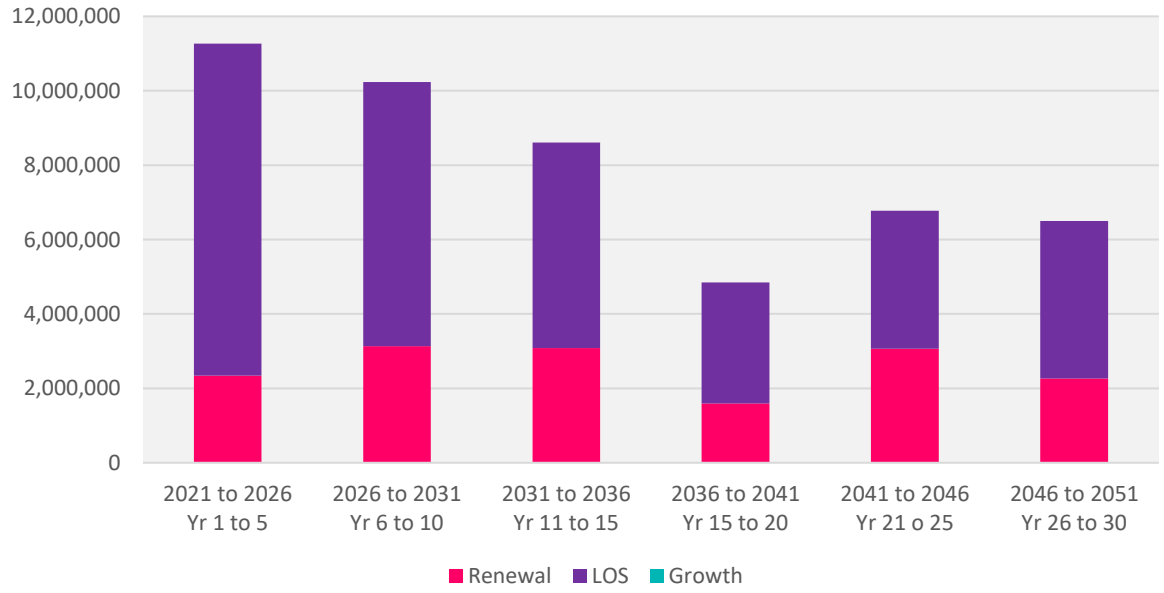


Figure 42: Five Yearly Capital Expenditure Years 1 to 30 Including Inflation

10 Sustainability

Sustainability means that we effectively balance the needs of present and future communities. From an asset management perspective, sustainability is critical, as many assets have a long lifespan and must be 'future-proofed'. The Council has a responsibility to manage this activity in way that supports the environmental, social, cultural and economic well-being of current and future generations.

The Local Government Act 2002 requires local authorities to take a sustainable development approach while conducting their business, taking into account the current and future needs of communities for good-quality local infrastructure, and the efficient and effective delivery of services.

Sustainable development is a fundamental philosophy that is embraced in the Council's Vision, Mission and Objectives, and is reflected in the Council's community outcomes. The levels of service and the performance measures that flow from these inherently incorporate the achievement of sustainable outcomes. We measure sustainability against the triple bottom line framework that aims to create a balance between the three dimensions of performance, often referred to as people, planet and profit (3P's).

People - The effects of the activity on the social and cultural wellbeing of our community.

The Council is guided by the Community Outcomes to assist in determining how our decisions affect the social wellbeing of our community. We undertake the activity to meet the level of service that is required to enhance community well-being by providing waste disposal, recycling and other waste minimisation services for the community.

Planet - The effects of the activity on the environment.

Our receiving environments are affected by stormwater discharges and occasional dust and litter discharges from our resource recovery centres and from our closed landfills. We control our discharges through discharge consents site management plans that are required under the Tasman Resource Management Plan.

Profit - The financial and overall long-term economic viability of the activity.

The Council operates, maintains and improves the waste management and minimisation infrastructure assets on behalf of its ratepayers. The Council uses its Financial Strategy to guide the development of an affordable work programme. The Council's finances are managed within the set debt limits and rates income rises to ensure economic viability for current and future generations.

At the activity level, a sustainable development approach is demonstrated by the following:

- A strategy of working towards a joint approach with Nelson City Council for regional waste management and minimisation. This approach is expected to result in more sustainable long term management of activities.
- A strategy of diversion of material from landfill to improve resource efficiency and prolong asset life of the Council's landfill assets.
- Reduced emissions from landfill activities by moving waste to York Valley, which has beneficial landfill gas collection systems.

10.1 Negative Effects

Potential significant negative effects and the proposed mitigation measures are listed below in Table 20.

Table 20: Negative Effects

Effect	Description	Council's Mitigation Measure
Dust, odour and windblown litter (Social and environmental effects)	Kerbside collections: Loose kerbside recycling materials and broken solid waste bags may become windblown litter and odorous if not collected promptly	This is managed through the contract specification. Short to medium term options include moving to collections in MRBs
	Recyclables Processing: Excessive recyclable materials may become windblown litter	This is managed through the contract specification and regular inspection of the site. Short to medium term options include improved handling facilities
	Resource Recovery Centres (RRCs): These can become odorous, dusty and give rise to windblown litter if incorrect operating procedures are not applied	RRCs are also operated in accordance with Site Management Plans. RRC contracts allow for monthly KPI inspections which penalise contractors if the site is untidy or not operated correctly
	Operational Landfills: These can become odorous, dusty and give rise to windblown litter if incorrect operating procedures are not applied	This is managed by the contractor as detailed in the contract specifications and landfill management plan and checked through regular inspections
Discharges of pollutants to water and land (Environmental effects)	Resource Recovery Centres: There is the possibility of stormwater contamination on site if materials are not managed well	The development and operation of RRCs must meet certain resource consent conditions. This is managed through the contract specification and regular inspection of the site
	Operational Landfills: Landfills produce leachate – this may cause contamination of groundwater or surface water if not collected and treated appropriately. There is also the possibility of stormwater contamination on site	The operation of the landfill must meet resource consent conditions. The landfill is also operated in accordance with a Landfill Management Plan. This is managed through the contract specification and regular inspection of the site

Effect	Description	Council's Mitigation Measure
	Closed Landfills: If closed landfills are not capped off and vegetated correctly, they may release additional solid waste or leachate to the environment	Closed landfills are consented under a 'Global Consent' which requires remediation of certain identified landfills and inspections of all closed landfills every two years to determine if further remediation is required
Disruptions to service (Social and economic effects)	Kerbside collections: Disruption to kerbside solid waste services can cause a public health effect if wastes are not collected in a timely manner	This is managed by the contractor through the provision of back-up plant and the use of subcontractor services
	Resource Recovery Centres: Failure to open these centres can prevent businesses operating and create public health risks with the storage of waste on properties	Waste can be stored at residences or businesses for short periods of time. In the event of longer closure waste can be transported to another RRC or direct to landfill
	Operational Landfills: Failure to operate the landfill can prevent restrict the operation of RRCs and create public health risks with the storage of waste on properties	RRCs have some storage capacity on site. In the event of closure of the York Valley Landfill the Eves Valley landfill is able to re-open at short notice
Discharge of methane and carbon dioxide (Environmental and economic effects)	Operational Landfills: Landfills produce gas, including methane. Methane contributes 15 times the effect that carbon dioxide does to the "greenhouse effect"	Mothballing of the Eves Valley Landfill will reduce methane emissions and ETS liabilities. Gas capture at the York Valley Landfill reduces potential liabilities at this site
Unaffordable or uneconomic cost of services (Social and economic effects)	The loss of viable markets for recovered materials can have a negative effect on the economic viability of recycling	Procurement of recycling services requires contractors to provide evidence of experience and track record in recycling markets. The Council and the contractor share the revenue risk for recyclable materials and are then both motivated to maximise quality.
	The costs of providing the services	The Council is entering a shared services arrangement with Nelson City Council to reduce projected debt and overall operating costs The Council uses competitive tendering processes to achieve best value for money for works it undertakes

10.2 Positive Effects

Potential significant positive effects are listed below in Table 21.

Table 21: Positive Effects

Effect	Description
Public health benefits	Council offers kerbside collection services to 80% of properties and resource recovery centres in five locations across the district. This provides safe and sanitary waste disposal to all residents of the district.
Economic benefits	Access to waste disposal and recycling services at reasonable cost supports economic activity Council is able to offer kerbside collections to 80% of properties at reasonable cost due to Council's factor of scale. Council also supports waste disposal and recycling in more remote locations by part funding from general rate.
Environmental benefits	Provision of recycling services, greenwaste processing and other waste minimisation activities reduces the need for landfill space and reduces potential negative effect of these activities

10.3 Resource Management

10.3.1 Overview

The statutory framework defining what activities require resource consent is the Resource Management Act (RMA) 1991. The RMA is administered locally by Tasman District Council, as a unitary authority, through the Tasman Resource Management Plan (TRMP). The following section discusses key consents that Council holds in order to undertake this activity.

An important aspect of the waste management and minimisation activity is to ensure that any discharge of contaminants to the district's land, air or water is managed responsibly.

The Council's waste management and minimisation facilities have an essential role in ensuring that waste produced within the district is properly collected and disposed of in ways that meet community expectations and avoid causing significant adverse effects in the environment.

Under the RMA and TRMP, resource consents are required for disposal of wastes and any associated odours and discharges. Other resource consents may also be required for installation and operation of waste management and minimisation facilities, such as Resource Recovery Centres (RRCs).

The Council has designated most of the waste management and minimisation sites, which is an alternative way provided for in the RMA of authorising the land use aspects of public works.

The Council holds resource consents or designations for all of its waste management and minimisation activities to the extent required by the RMA and current rules in the TRMP.

10.3.2 Resource Consents

A summary of resource consents held for the Council's waste management and minimisation activities is provided in Table 22 below. Please note that this list may not be exhaustive, is only accurate at the time of compilation and is subject to change. Short-term consents are required from time to time for construction activities including the installation of bores for monitoring wells or fresh water sources at waste management and minimisation facilities and are not included in Table 22.

Table 22: Schedule of Current Resource Consents Relating to the Waste Management and Minimisation Activity

Location	Consent No.	Consent Type	Effective Date	Expiry Date
RRCs				
Richmond RRC	RM050981V2	Discharge to water	6/11/2012	2/06/2041
	RM100281	Land use – recycling centre	31/5/2010	N/A
	RM051064	Land use – outline plan	3/2/2006	N/A
	RM031343	Land use – outline plan	4/2/2004	N/A
Mariri RRC	RM090392V1	Discharge to land	31/08/2009	31/08/2044
	RM060748	Land use – outline plan	11/10/2006	N/A
Collingwood RCC	NN990433V1	Land Use	20/10/2013	N/A
Takaka RRC	RM940041	Land Use	23/6/1994	N/A
	RM140174	Discharge to land & water	24/6/2014	24/6/2049
Murchison RRC	RM071027	Discharge to Air	8/5/2008	15/04/2028
	RM071231	Discharge to land & water	8/5/2008	15/04/2028
Closed Landfills				
Tasman District Council Closed Landfills	RM090694V2	Global consent – discharge to air, land, and water	13/11/13	21/12/2044
	RM090695	Land use	21/12/2009	21/12/2044

Location	Consent No.	Consent Type	Effective Date	Expiry Date
Rototai Closed Landfill	RM090203	Coastal disturbance	20/8/2009	29/07/2044
	RM130779	Land use – operate cleanfill site	29/11/2013	29/11/2048
	RM130780	Coastal disturbance	29/11/2013	29/11/2048

10.3.3 Resource Consent Monitoring and Reporting

The Council aims to achieve minimum compliance with all consents and / or operating conditions. A detailed register of waste management and minimisation resource consents is being developed to be held in Council's consents database "BraveGen".

Where permits for discharges, water takes or coastal activities, or consents for river beds are required, the RMA restricts those consents to a maximum term of 35 years only. Hence there needs to be an ongoing programme of consent renewals for those components of Council's waste management and minimisation activities, as well as a monitoring programme for compliance with the conditions of permitted activities or resource consents. Consent renewals have been programmed in the Capital programme.

Regular site audits are completed by the Council's maintenance contractor to ensure sites are operating in accordance with a number of key performance indicators aligned to any conditions or other legislative requirements.

In addition to audit assessments, environmental monitoring conditions are reported on annually (or as determined by the consent conditions). Any non-compliance incidents are recorded, notified to the Council's Compliance Monitoring team, and mitigation measures put in place to minimise any potential impacts.

The Council has invested in a programme, Samplyzer, which is used by Council staff and their consultant to produce chain of custody forms for all monitoring. This allows the Council, the operation and maintenance contractor and testing laboratories to all use the same sample identifiers. Samplyzer also allows the automated input of monitoring data direct from laboratory reports into Hilltop, the Council's database for storing monitoring data.

Where required by consent conditions an annual report is also prepared for each site. Annual reports are prepared for the following sites:

- Richmond RRC
- Mariri RRC,
- Takaka RRC,
- Murchison RRC and closed landfill,
- Closed landfill (monitoring report every two years).

The reports summarise operational activities, any physical works undertaken on site, details any monitoring results, identifies trends, discusses current performance, highlights any non-compliances and recommends any changes to the monitoring programme.

10.3.4 Designations

Once given effect, a designation remains valid for the life of the TRMP or until the requiring authority removes of alters the designation. All of the designations for waste management and minimisation activities have been given effect.

Alterations to some designations (e.g., boundaries) and outline plans for proposed work may be required from time to time. Designations do not negate the ongoing need for regional resource consents (e.g., water permits) required for the designated site or purpose (refer to section 10.3.2 above).

Table 23: Property Designations

ID	Location of Site	Site Name/ Purpose	Duration of Designation
D160	Beach Road, Richmond	Waste management facility	Indefinite – given effect
D161	Robinsons Road, Mariri	Tip	Indefinite – given effect
D162	State Highway 63, St Arnaud	Tip	Indefinite – given effect
D163	Eves Valley	Sanitary landfill solid waste disposal	Indefinite – given effect
D164	Murchison, Matakitaki West Bank Road	Sanitary landfill solid waste disposal	Indefinite – given effect
D166	Collingwood West	Solid waste tip	Indefinite – given effect

11 Risk Management and Assumptions

This AMP and the financial forecasts within it have been developed from information that has varying degrees of completeness and accuracy. In order to make decisions in the face of these uncertainties, assumptions have to be made. This section documents the uncertainties and assumptions that Council considers could have a significant effect on the financial forecasts, and discusses the potential risks that this creates.

11.1 Our Approach to Risk Management

A risk is any event that has the potential to impact on the achievement of Council's objectives. The potential impact of a risk is measured by a combination of the likelihood of the risk occurring, and the magnitude of its consequences on objectives if it does. The Council has adopted both a Risk Management Policy that aligns with the Australian/New Zealand Standard AS/NZ ISO 31000:2009, and a Risk Management Framework which provides guidance and tools to apply to ensure a consistent approach to analysing and managing risks across the organisation. All risks described and managed in this Activity Management Plan comply with the principles and requirements of the policy and framework.

11.2 Activity Risks and Mitigation Measures

The key risks relevant to the waste management and minimisation activity are summarised in Table 24.

Table 24: Key Risks

Risk Event	Mitigation Measures
Changes in recyclable products markets make recycling less affordable or not possible for some products	Current • monitor commodity markets with operations contractor • risk share with operations contractor • Proposed scope to support recycling operations from local or national waste levy revenue
Serious harm or fatal accident	Current • safety management actively monitored in operations contracts • safety audits scheduled regularly • recent safety improvements to mitigate key risks at resource recovery centres • Proposed • additional capital and operations budgets to further reduce risks

Risk Event	Mitigation Measures
Hazardous goods incident or fire at resource recovery centre	Current • actively engage with key customers on risky products • safe operating practice documents and drills by operations contractor • Proposed • budget for assessment of risk profiles of each site • budget for capital and operational improvements
Premature deterioration or obsolescence of a key asset	Current • maintenance performance measures included in the operations contracts. • routine inspections. Proposed increased monitoring forecasting life of key waste assets (waste compactors and bins)
Catastrophic failure of a key asset	Current • routine maintenance and inspections are included in the operations contracts. • reactive inspection following extreme weather events. • building warrant of fitness for MRF buildings
Failure of contractor to deliver levels of service	Current • include performance monitoring and penalty provisions in operations contracts.

11.3 Assumptions and Uncertainties

Table 25 documents the uncertainties and assumptions that the Council consider could have a significant effect on the financial forecasts, and discusses the potential risks that this creates.

Table 25: Generic Assumptions and Uncertainties

	Uncertainties	Assumption	Discussion
Financial	Unless stated it can be unclear whether financial figures include inflation or not, as well as whether GST has been included or not.	That all expenditure has been stated in 1 July 2020 dollar values and no allowance has been made for inflation and all financial projections exclude GST unless specifically stated.	The LTP will incorporate inflation factors. This could have a significant impact on the affordability of each activity if inflation is higher than allowed for. The Council is using the best information practically available from Business and Economic Research Limited (BERL) to reduce this risk.
Asset Data Knowledge	The Council has inspection and data collection regimes in place for assets. These regimes do not allow for entire network coverage at all times. The Council's aim is to strike the right balance between adequate knowledge and what is practical.	That the Council has adequate knowledge of the assets and their condition so that planned renewal works will allow the Council to meet the proposed levels of service.	There are several areas where the Council needs to improve its knowledge and assessments, but there is a low risk that the improved knowledge will cause a significant change to the level of expenditure required.
Growth Forecasts	Growth forecasts are inherently uncertain and involve many assumptions. The Council uses Stats NZ projections as the basis for its growth planning, but these will vary depending on actual birth and death rates as well as net migration.	That the district will grow or decline as forecast in its Growth Model.	Growth forecasts are used to determine infrastructure capacity and when that capacity will be required. If actual growth varies significantly from what was projected, it could have a moderate impact on the Council's plans. If higher, new or additional infrastructure may be required quicker than anticipated. If lower, the Council may be able to defer the delivery of new or additional infrastructure.

	Uncertainties	Assumption	Discussion
Project Timing	Multiple factors affect the actual timing of projects e.g.: • Consents • Access to land • Population growth • Timing of private developments	That projects will be undertaken when planned.	The risk of the timing of projects changing is high due to factors like resource consents, third party funding, and land acquisition and access. The Council tries to mitigate these issues by undertaking the investigation, consultation and design phases sufficiently in advance of when construction is planned. If delays occur, it could have an impact on the levels of service and the Council's financing arrangements.
Project Funding	The Council cannot be certain that it will receive the full amount of anticipated subsidy or contribution. It depends on the funder's decision making criteria and their own ability to raise funds.	That projects will receive subsidy or third party contributions at the anticipated levels.	The risk of not securing funding varies and depends on the third party involved. If the anticipated funding is not received it is likely that the project will be deferred which may impact levels of service.
Accuracy of Cost Estimates	Project scope is often uncertain until investigation and design work has been completed, even then the scope can change due to unforeseen circumstances. Even if the scope has certainty there can be changes in the actual cost of work due to market competition or resource availability.	That project cost estimates are sufficiently accurate enough to determine the required funding level.	The risk of large underestimation is low; however, the importance is moderate as the Council may not be able to afford the true cost of the project. The Council tries to reduce this risk by undertaking reviews of all estimates and including an allowance for scope risk based on the complexity of the project.

	Uncertainties	Assumption	Discussion
Land Access and Acquisition	Land access and acquisition is inherently uncertain. Until negotiations commence, it is difficult to predict how an owner will respond to the request for access or transfer.	That the Council will be able to secure land and/or access to enable completion of projects.	The risk of delays to projects or changes in scope is high due to the possibility of delays in obtaining access. Where possible, the Council undertakes land negotiations well in advance of construction to minimise delays and scope change. If delays do occur, they may affect the level of service that the Council provides.
Legislation Changes	Often Central Government changes legislation in response to events where the need for change is identified. It is difficult to predict what events may occur and the associated response. Election of a new Government also introduces uncertainty as to what policies they will implement.	That there will be no major changes in legislation or policy.	The likelihood of major change is very high due to the changing nature of the Government and its policies. If major changes occur, it is likely to have an impact on the required expenditure. The Council has planned for changes in income and expenditure, but these may not be correct.
Emergency Reserves	It is impossible to accurately predict when and where a natural hazard event will occur. Using historic trends to predict the future provides an indication but is not comprehensive.	That the level of funding reserves combined with insurance cover will be adequate to cover reinstatement following emergency events.	Funding levels are based on historic requirements. The risk of requiring additional funding is moderate and may have a moderate effect on planned works due to reprioritization of funds.

	Uncertainties	Assumption	Discussion
Climate change	Continued emissions of greenhouse gases will cause further warming and changes in all parts of the climate system. The International Panel on Climate Change (IPCC) has developed four scenarios named RCPs (Representative Concentration Pathways). They represent different climate change mitigation scenarios with varying levels of CO2 emission (low – medium – high). The likelihood of any of the scenarios occurring as predicted is uncertain and depends on many different factors.	The Council uses the latest climate predictions that have been prepared by NIWA for New Zealand and more specifically for the Tasman District. The anticipated effects from climate change in Tasman District include: • An increase in seasonal mean temperature and high temperature extremes • An increase in rainfall in winter for the entire district and varying increases of rainfall in other seasons in different areas. • Rising sea levels, increased wave height and storm surges. • Floods, landslides, droughts and storm surges are likely to become more frequent and intense	It is likely that risk of low lying land being inundated from the sea, and damage to the Council property and infrastructure from severe weather events, will increase. The Council will need to monitor the level of sea level rise and other impacts of climate change over time and review its budgets, programme or work and levels of service accordingly.

11.3.1 Activity Specific Assumptions

In addition to the general assumptions above the Council needs to make assumptions that are specific to the Waste Management and Minimisation activity. These are discussed further in Table 26.

Table 26: Waste Management and Minimisation Specific Assumptions and Uncertainties

Type	Uncertainties	Assumption	Discussion
Waste disposal costs	A large proportion of the Council's expenditure for the activity is affected by landfill charges at York Valley.	The Council has based income and expenditure using information on gate rates provided by the Nelson Tasman Regional Landfill Business Unit in November 2020.	If these change then the Council will need to change RRC fees and charges and projected income and expenditure.
Income from Nelson Tasman Regional Landfill Business Unit	Local disposal levy received from the Nelson Tasman Regional Landfill Business Unit	Local disposal levy income increases from of $2.4m in 2020/21 to $3.3m in 2023/24 and then gradually to $3.8m in 2030/31	The Local disposal levy is set by the Nelson Tasman Regional Landfill Business Unit in consultation with the Councils through the approval of the business plan of the business unit by the Councils. The Councils may request additional income for waste management and minimisation purposes. Any increase in the local disposal levy would allow further activities to be funded by the Council or require less revenue from general rate, targeted rate or disposal charges. • A decrease in the local disposal levy would require the Council to reduce services or require more revenue from general rate, targeted rate or disposal charges.

Type	Uncertainties	Assumption	Discussion
Waste Generation Trends	Total waste per head of population through resource recovery centres Waste disposal patterns for resource recovery centres	473 kg per capita per annum in 2021/22, decreasing to 434kg in 2030/31 Waste distribution will be as follows: Richmond 58% Mariri 32.7% Takaka 7.4% Collingwood 0.4% Murchison 1.2%	A significant proportion of revenue for the activity is directly related to the quantity of waste received. If waste volumes increase above budget then revenue will increase, but this will be matched by an increase in disposal costs (with no net difference). If more waste is presented at outlying resource recovery centres (e.g. at Mariri rather than Richmond) then Council's transport costs will increase. If more waste diverts direct to landfill then revenue will reduce, but so also will disposal and transport costs. If total waste to landfill for the region reduces then revenue for the Nelson Regional Landfill Business Unit will reduce. This may affect gate rates and/or revenue to the Council from the business unit.
Contract Rates	Cost of existing and future operations contracts	No change in activity costs when a new operations contract is awarded. Costs are based on contract rates applied over the 2019/20 year. That the contracts will run full term and that future contract terms will be similar duration as currently. That kerbside recycling bins have a 15 year life with 0.2% lost per annum.	We have assumed that there will be no real change in activity costs when a new operations contract is awarded and that any industry cost increases will be reflected in cost fluctuation provisions. We have also assumed that the new contracts will have similar capital requirements for contractors as the current contracts. In particular we have assumed that in the recycling contract the material recycling facility will be owned by the contractor, as will be the new recycling bins required in 2030.

Type	Uncertainties	Assumption	Discussion
Income from the central government landfill levy	The amount of funding from central government from the national waste disposal levy	That total income will rise from $200,000 in 2021/22 to $1,000,000 in 2024/25, and then follow population growth	Local government receives a 50% share of the nation waste disposal levy, based on each district's share of the national population. The levy is currently set at $10 per tonne (excluding GST) and is expected to rise to $20 in July 2021, $30 in July 2022, $50 in July 2023 and $60 in July 2024. If Tasman District grows faster than the national population, if national waste volumes increase or a wider range of landfills are included in the waste disposal levy then Council's income would increase, and there would be greater opportunity to fund waste minimisation activities. Conversely, if Tasman grows slower than the national population or national waste volumes decrease then the Council will receive less income. Central government has signaled that they may amend the Waste Minimisation Act, and this could include a change to the distribution of 50% share of the nation waste disposal levy to local government.

Type	Uncertainties	Assumption	Discussion
Central government policy change	Change in central government policy requiring higher waste minimisation performance	Central government will change some nation waste management policies, but there is not yet specific detail on these changes.	Since early 2019, central government has introduced a series of initiatives to improve waste management within New Zealand. These initiatives include phase-out of some plastic bags, regulated product stewardship, an increase in the scale and reach of the waste disposal levy (the 'landfill levy'), new environmental standards, restrictions on recycling exports and proposed phase-out of problematic plastics. Further changes are expected in the coming year, including a review of the New Zealand Waste Strategy, decisions on a container deposit scheme and consideration of a standard kerbside recycling methodology for councils. While these changes have the potential to improve waste minimisation, they could significantly affect the range of services that we provide (including kerbside collections). The uncertainty that they bring make it difficult to plan ahead.

Type	Uncertainties	Assumption	Discussion
Properties with kerbside recycling	Growth of ratable properties on the kerbside collection route	Growth in properties on the kerbside collection route will match total district population growth in the Council's growth model, and that 20% of these will be in rural or semi-rural areas No significant change to the collection area or the range of services.	Additional properties results in increased targeted rate funding and additional cost of providing services. Growth in properties requires additional payment to our contractor for supply and delivery of bins and payment for on-going servicing of these properties. The long term cost of this is expected to be slightly less than the current targeted rate so additional properties are unlikely to increase the targeted rate per property. With changes to recycling markets, and possible changes like container return systems signaled by government we may need to review the range of kerbside services we provide. This could include changing the frequency of some services or stopping some services, adding some services or changing the areas that we collect from. Our current contract for kerbside recycling and rubbish bag collections ends in June 2023. We'll be reviewing any decisions by government this year and then engage with the community to understand what services we should deliver.

Type	Uncertainties	Assumption	Discussion
Waste Diversion Rates	Growth in quantity and range of recycled and diverted materials.	Increase of 0.5% per annum of diverted materials. That existing and planned services and infrastructure will be adequate to manage increases in diverted materials.	If there is demand for additional diversion of materials or demand to divert a new range of materials there may be a requirement for additional services or infrastructure. The cost of these may require additional funding: this could be from local or national disposal levy income, fees and charges or general or targeted rates. We will work with Nelson City Council to trial diversion of dry waste at selected Resource Recovery Centres and monitor Nelson's food waste collection trial. Working with Nelson City Council and the Nelson Tasman Regional Landfill Business Unit we will prepare detailed business plans for diversion of dry waste and organic waste from landfill.

12 Asset Management Processes and Practices

Good quality data and asset management processes are the heart of effective planning. This section outlines our approach to asset management, our processes, and provides an overview of our data management systems and strategies that underpins this activity.

12.1 Appropriate Practice Levels

The Office of the Auditor General (OAG) has chosen to use the International Infrastructure Management Manual (IIMM) as the benchmark against which New Zealand councils measure their activity management practices. There are five maturity levels in the IIMM; Aware, Basic, Core, Intermediate and Advanced. The IIMM sets out what the requirements are for each level against each area of the activity management system.

In 2017, the Council reviewed its Activity Management Policy and adopted an updated version. The Policy sets out the Council's activity management objectives and appropriate levels of practice. For this activity the Council has determined that the appropriate level of practice is "Core" with "Intermediate practice" identified for Asset Management Policy and Asset Register Data.

12.2 Service Delivery

12.2.1 Activity and Asset Management Teams

The Council has an organisational structure and capability that supports effective asset management planning. Multiple teams across the Council are responsibility for the different aspects of activity and asset management. The focus of the teams ranges from a strategic focus at the Long Term Plan/Infrastructure Strategy level which involves a cross-Council team, through to detail/operational focus at the Operational team level.

Within the Engineering Services department, the asset management planning function is managed by the Activity Planning team. Operations are the responsibility of the Utilities and Transportation teams, while Projects and Contracts are managed by the Programme Delivery team.

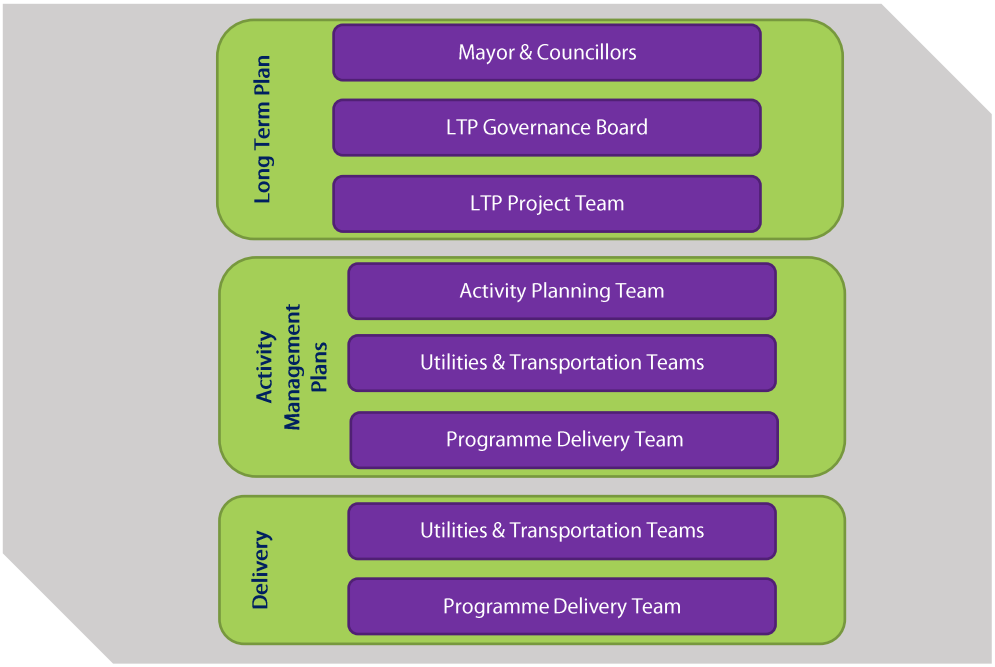


Figure 43: Teams Involved in Activity and Asset Management

The Activity Planning Team is responsible for the update of the activity management plans every three years, as well as implementation of the improvement plan. Each plan is assigned to the respective Activity Planning Advisor who is responsible for updating it. The Activity Planning Advisor works in with the activity's Asset Engineer to ensure that the current and future operating and maintenance aspects of the activities are adequately incorporated into the document. All activity management plans are reviewed by the Activity Planning Programme Leader who holds a National Diploma in Infrastructure Asset Management. The quality assurance process for the Engineering Services activity management plans is provided below.

- Preparation — Activity Planning Advisor
- Check — Utilities or Transportation Manager, and relevant Asset Engineer
- Review — Activity Planning Programme Leader
- Approve — Engineering Services Manager
- Adopt — Full Council

12.2.2 Staff Training

The Council maintains an annual budget for staff training that is managed by the Engineering Services Manager for the Engineering Services department. This budgets allows for continued development of staff to ensure that best practice is maintained and that the Council retains the skills needed to make improvements in asset management practices. This includes on-going technical and professional training as well as specific asset management training.

12.2.3 Professional Support

The Engineering Services Department has a need to access a broad range of professional service capabilities to undertake investigation, design and procurement management in support of its significant transport, utilities, coastal management, flood protection and waste management and minimisation capital works programme, as well as support with activity management practice. There is also a need to access specialist skills for design, planning and policy to support the in-house management of the Council's networks, operations and maintenance.

To achieve this the Council went to the open market in late 2013 for a primary professional services provider as a single preferred consultant to undertake a minimum of 60% in value of the Council's infrastructure professional services programmes. The contract was awarded to MWH New Zealand Ltd (now Stantec NZ), beginning on 1 July 2014 with an initial three-year term and two three-year extensions to be awarded at the Council's sole discretion. In 2017, the first of these discretionary three-year extensions was granted, with the proportion of Council's professional services programmes reduced to 50%. In addition to this, a secondary professional service panel was also appointed through an open market tender process for a period of three years, to provide professional services that will not be supplied by Stantec.

12.2.4 Procurement Strategy

The Council has a formal Procurement Strategy that it follows in order to engage contractors and consultants to assist the Engineering Services department. This strategy has been prepared to meet NZ Transport Agency's requirements for expenditure from the National Land Transport Fund, and it describes the procurement environment that exists within the Tasman District. It was developed following a three-year review of the strategy and was approved in November 2013. It principally focuses on Engineering Services activities but is framed in the NZ Transport Agency procurement plan format, which is consistent with whole-of-government procurement initiatives. A review of the strategy was commenced in 2017/18.

12.2.5 Service Delivery Reviews

In 2014, Section 17A was inserted into the Local Government Act which requires the Council to review the cost effectiveness of its current arrangements for providing local infrastructure, services, and regulatory functions at regular intervals. Reviews must be undertaken when service levels are significantly changed, before current contracts expire, and in any case not more than six years after the last review. In addition to the regular reviews, the Act requires the Council to complete an initial review of all functions by August 2017.

Table 27summarises the reviews that have been completed to date and when the next review is required for this activity.

Table 27: Summary of Reviews

Scope of Review	Summary of Review	Review Date	Next Review
Waste transport, greenwaste processing and Murchison Resource Recovery Centre operations	The review identified that the majority of services (kerbside recycling and operation of 4 of 5 resource recovery centres) are contracted until June 2023 and so the best time for changes in governance, funding and delivery would be prior to 2023. The review identified that the status quo (governance and funding by Tasman District Council and delivery by another party) was the most cost effective in the short term. There will be opportunity for a joint review of governance, funding and delivery with Nelson City Council in 2020.	August 2016	2020
Landfill services	The Council resolved in considering the proposal for joint landfill governance that "given the extensive work undertaken on the governance, funding and delivery of the waste management and minimisation services by the two Councils over recent years, the potential benefits of undertaking a S.17A Delivery of Services review under the Local Government Act 2002 do not justify the costs of undertaking the review". The next review of services is most likely to be in 2020 in conjunction with other waste services.	March 2016	2020

In addition to the Section 17A reviews, the Engineering Services department reviewed its current capability and capacity against the requirements of the future programmes of work set out in its activity management plans. To enhance the department's ability to deliver the capital works programme the following actions have been taken:

- Undertaken a detailed review of the capital programme for the next five years to better understand project complexities and delivery requirements.
- Implemented Planview a new project management system to track and report project delivery progress.
- Increased the number of Project Managers from 4 to 5.5 full time equivalent staff resources.
- Introduced enhanced performance requirements for our lead technical consultant for delivery of technical advice and engineering design.
- Tendered for a new supporting professional services paned with enhanced performance requirements.

12.3 Asset Management Systems and Data

12.3.1 Information Systems and Tools

The Council has a variety of systems and tools that support effective operation and maintenance, record asset data, and enable that data to be analysed to support optimised life-cycle management. These are detailed below in Figure 44. There is a continual push to incorporate all asset data into the core asset management systems where possible; where not possible, attempts are made to integrate or link systems so that they can be easily accessed.

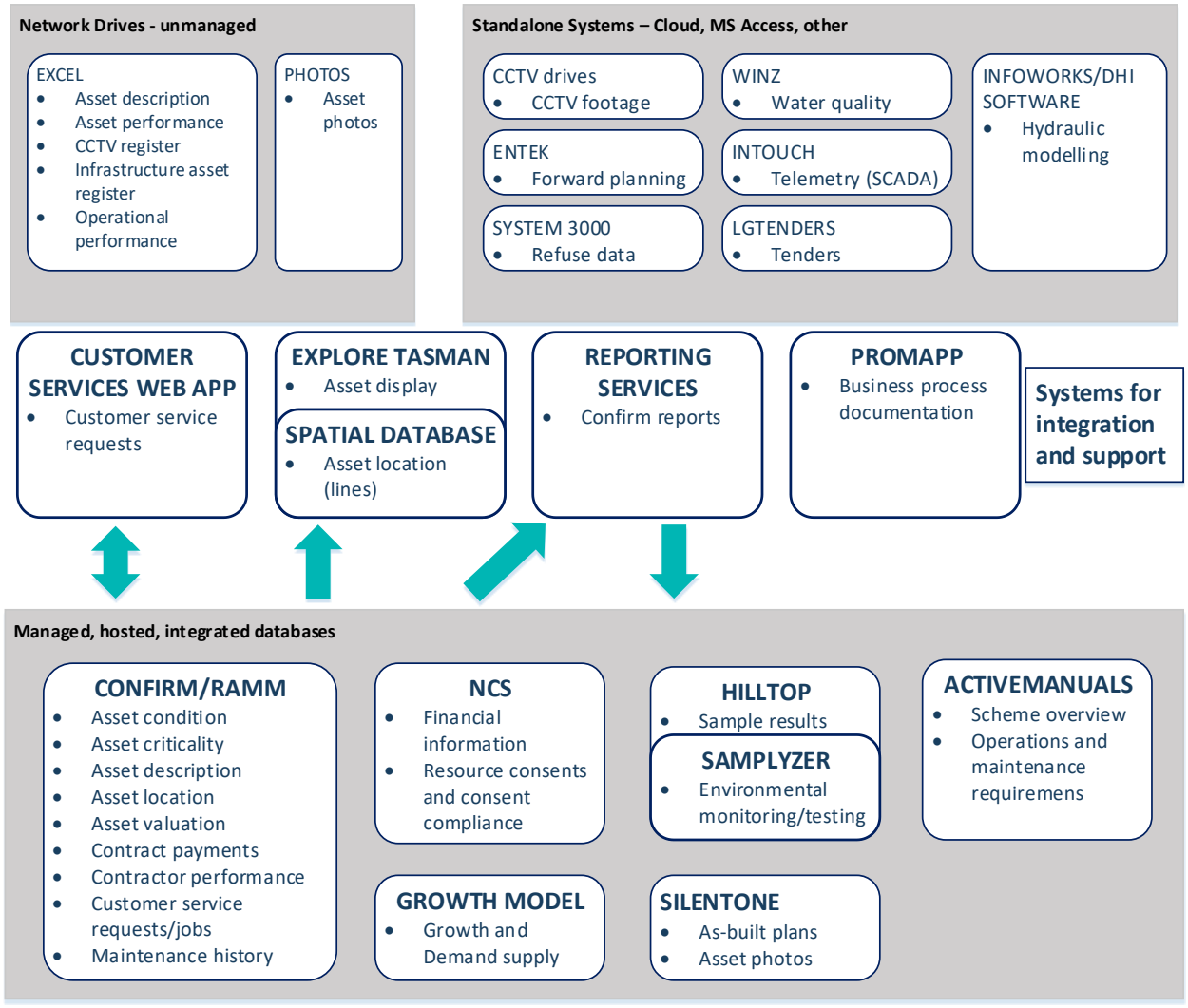


Figure 44: Systems Used for Asset Management

12.3.2 Asset Data

Table 28 summarises the various data types, data source and how they are managed within the Council. It also provides a grading on data accuracy and completeness where appropriate.

Table 28: Data Types and Information Systems

Data Type	Information System	Management strategy	Data Accuracy	Data Completeness
As-built plans	SilentOne	As-built plans are uploaded to SilentOne, allowing digital retrieval. Each plan is audited on receipt to ensure a consistent standard and quality.	2	3
Asset condition	Confirm / spreadsheets / reports	Assets are inspected by a consultant, staff or contractor. Asset condition recorded in either spreadsheets or in Confirm.	3	3
Asset criticality	Confirm	When a new asset is created, the activity planner and engineer will make an assessment on criticality. Criticality of asset can be modified by authorized users should circumstances change.	N/A	N/A
Asset description	Confirm / spreadsheets	All assets are captured in Confirm's Site and Asset modules, from as-built plans and maintenance notes. Hierarchy is defined by Site and three levels of Asset ID (whole site, whole asset or asset). Assets are not broken down to component level except where required for valuation purposes. It is also possible to set up asset connectivity, but this hasn't been prioritised for the future yet. Detail on some datasets held in spreadsheets relating to Utilities Maintenance Contract 688; work is in progress to transfer this detail to Confirm as resourcing allows.	2	3
Asset location	Confirm (point data) / GIS (line data)	Co-ordinates for point data completely (NZTM) describe spatial location. Line data links to GIS layers that describe the shape.	2	2
Asset valuation	Confirm	Valuation of assets done based on data in Confirm and valuation figures stored in Confirm.	3	3

Data Type	Information System	Management strategy	Data Accuracy	Data Completeness
Contract payments	Confirm	All maintenance and capital works contract payments are done through Confirm. Data on expenditure is extracted and uploaded to NCS.	N/A	N/A
Contractor performance	Confirm and spreadsheets	Time to complete enquiries is measured against contract KPIs through Confirms enquiry module and other performance is measured through a spreadsheet of KPI performance.	N/A	N/A
Corporate GIS browser	Explore Tasman	Selected datasets are made available to all the Council staff through this internal GIS browser via individual layers and associated reports.	N/A	N/A
Customer service requests	Customer Services Application / Confirm	Customer calls relating to asset maintenance are captured in the custom-made Customer Services Application and passed to Confirm's Enquiry module.	N/A	N/A
Environmental monitoring / testing	Hilltop / spreadsheet	Laboratory test results performed on monitoring and testing samples (from treatment plants and RRCs) are logged direct into Hilltop via an electronic upload from the laboratories. Due to historical difficulties in working with Hilltop data, it is duplicated in spreadsheets.	2	2
Financial information	NCS	The Council's corporate financial system is NCS, a specialist supplier of integrated financial, regulatory and administration systems for Local Government. Contract payment summaries are reported from Confirm and imported into NCS for financial tracking of budgets. NCS also holds Water billing information, while asset details and spatial component are recorded in Confirm and cross-referenced.	N/A	N/A
Infrastructure Asset Register	Spreadsheet	High level financial tracking spreadsheet for monitoring asset addition, disposals and depreciation. High level data is checked against detail data in the AM system and reconciled when a valuation is performed.	2	2

Data Type	Information System	Management strategy	Data Accuracy	Data Completeness
Forward planning	Spreadsheets, GIS Mapping	Forward programmes for the Council's activities are compiled in excel, These are loaded onto GIS based maps for information and in order to identify clashes and opportunities.	N/A	N/A
Growth and Demand Supply	Growth Model	A series of linked processes that underpin the Council's long term planning, by predicting expected development areas, revenues and costs, and estimating income for the long term.	2	2
Maintenance history	Confirm / spreadsheets and reports	Contractor work is issued by variation or instruction by staff. Maintenance history is recorded at a site level rather than at an asset level.	3	3
Photos	Network drives / SilentOne	Electronic photos of assets are mainly stored on the Council's network drives. Coastal Structures and Streetlight photos have been uploaded to SilentOne and linked to the assets displayed via Explore Tasman.	N/A	N/A
Processes and documentation	Promapp	Promapp is process management software that provides a central online repository where Council's process diagrams and documentation is stored. It was implemented in 2014 and there is a phased uptake by business units.	2	5
Resource consents and consent compliance	NCS	Detail on Resource Consents and their compliance of conditions (e.g. sample testing) are recorded in the NCS Resource Consents module.	2	2
Reports	Confirm Reports	Many SQL based reports from Confirm and a few from RAMM are delivered through Confirm Reports. Explore Tasman also links to this reported information to show asset information and links (to data in SilentOne and NCS).	N/A	N/A

Data Type	Information System	Management strategy	Data Accuracy	Data Completeness
Tenders	GETS (NZ Government Electronic Tendering Service)	Almost all New Zealand councils use this system to advertise their tenders and to conduct the complete tendering process electronically.	N/A	N/A

Table 29: Data Accuracy and Completeness Grades

Grade	Description	% Accurate
1	Accurate	100
2	Minor Inaccuracies	+/- 5
3	50 % Estimated	+/- 20
4	Significant Data Estimated	+/- 30
5	All Data Estimated	+/- 40

Grade	Description	% Complete
1	Complete	100
2	Minor Gaps	90 – 99
3	Major Gaps	60 – 90
4	Significant Gaps	20 – 60
5	Limited Data Available	0 – 20

12.4 Critical Assets

Knowing what's most important is fundamental to managing risk well. By knowing this, the Council can invest where it is needed most, and it can tailor this investment at the right level. This will avoid over investing in assets that have little consequence of failure, and will ensure assets that have a high consequence of failure are well managed and maintained. For infrastructure, this is knowing Tasman's critical assets and lifelines. These typically include:

- Arterial road links including bridges
- Water and wastewater treatment plants
- Trunk mains
- Main pump stations
- Key water reservoirs
- Stopbanks
- Detention dams

There are no assets in this activity that are considered critical assets.

During 2016, the Council in partnership with Nelson City Council, the Regional Civil Defence Emergency Management Group and other utility providers, prepared the Nelson Tasman Lifelines Report. This report summarises all lifelines within Nelson and Tasman. Within the report there was a number of actions identified to improve the Region's infrastructure resilience.

Over the next three years, as part of Council's risk, resilience and recovery planning work, it will focus on the identification, planning and management of its critical assets and lifelines. This will help to ensure that the appropriate level of effort is being made to manage, maintain and renew them, and will extend to ensuring that the Council has adequate asset data to enable robust decisions to be made regarding the management of those assets.

12.5 Quality Management

Table 30 outlines quality management approaches that support the Council's asset management processes and systems.

Table 30: Quality Management Approaches

Activity	Description
Process documentation	The Council uses Promapp software to document and store process descriptions. Over time, staff are capturing organisational knowledge in an area accessible to all, to ensure business continuity and consistency. Detailed documentation, forms and templates can be linked to each activity in a process. Processes are shown in flowchart or swim lane format, and can be shared with external parties.
Planning	The Long Term Plan and associated planning process are formalised across Council. There is a LTP project team, LTP governance team, and AMP project team that undertakes internal reviews prior to the Council approval stages. Following completion of the AMPs, a peer review is done, and the outcomes used to update the AMP improvement plans.
Programme Delivery	This strictly follows a gateway system with inbuilt checks and balances at every stage. Projects cannot proceed until all criteria of a certain stage have been completely met and formally signed off.
Subdivision Works	Water Supply infrastructure is inspected throughout its installation and pressure tested before the Council sign-off and acceptance. Defects and poor workmanship will not be accepted. All work is bonded for a 2-year maintenance period.
Asset Creation	As-built plans are reviewed on receipt for completeness and adherence to the Engineering Standards and Policies. If anomalies are discovered during data entry, these are investigated and corrected. As-built information and accompanying documentation is required to accompany maintenance contract claims.
Asset Data Integrity	Monthly reports are run to ensure data accuracy and completeness. Stormwater, water, wastewater, coastal structures, solid waste and streetlight assets are shown on the corporate GIS browser, Explore Tasman, and viewers are encouraged to report anomalies to the Activity Planning Data Management team.
Operations	Audits of a percentage of contract maintenance works are done every month to ensure that performance standards are maintained. Failure to comply with standards is often linked to financial penalties for the contractor.
Levels of Service	Key performance indicators are reported annually via the Council's Annual Report. This is audited by the Office of the Auditor General.
Reports to Council	All reports that are presented to the Council by staff are reviewed and approved by the Senior Management Team prior to release.

13 Improvement Planning

The activity management plans have been developed as a tool to help the Council manage their assets, deliver on the agreed levels of service and identify the expenditure and funding requirements of the activity. Continuous improvements are necessary to ensure the Council continues to achieve the appropriate level of activity management practice along with delivering services in the most appropriate way while meeting the community's needs.

13.1 Assessment of our Activity Management Practices

In 2017, the Council undertook an assessment of its current asset management practices for this activity. This was a self-assessment with the targets developed in consultation with Waugh Infrastructure Management Ltd to ensure there were appropriate for the activity given:

- Criticality of the Assets;
- Value of the Assets;
- Value spent on maintaining the assets.

The maturity levels were based on the International Infrastructure Management Manual descriptions to maturity.

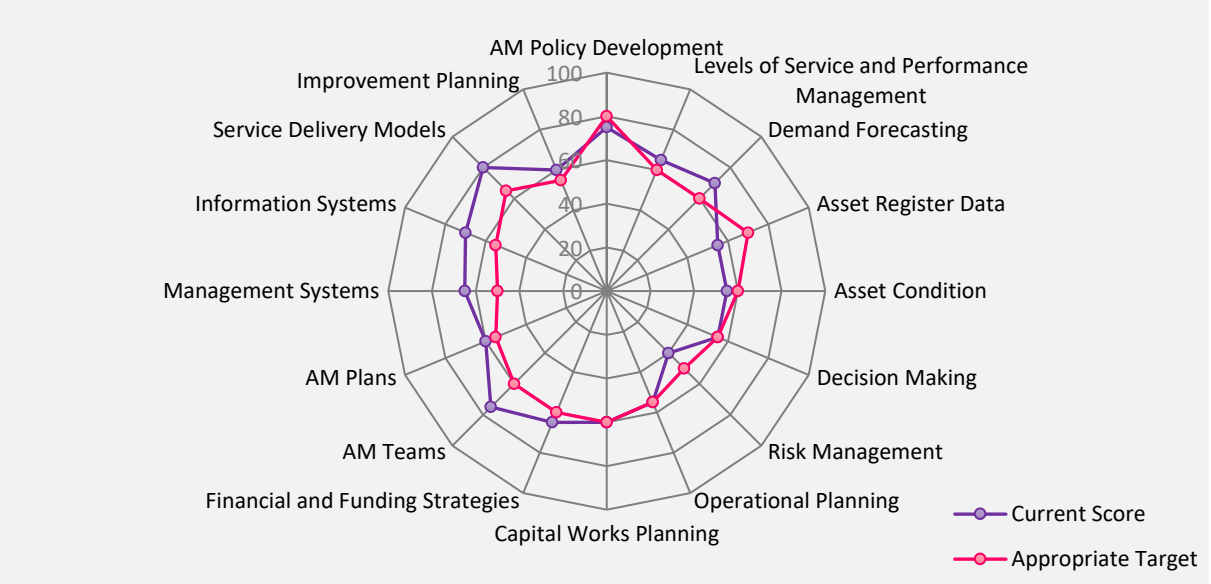


Figure 45: Waste Management and Minimisation Assets Maturity Levels

Figure 45 shows that there are some gaps between where Council's current practice is and where it is desired to be. Focus areas for improvements are Asset Register Data and Risk Management. The actions required to close these gaps have been included in the Improvement Plan.

13.2 Peer Reviews

13.2.1 Waugh Peer Review

In early 2018, the Council engaged Waugh Infrastructure Management Ltd to undertake a peer review on the consultation version of this activity management plan. The peer review considered all Engineering Services activities and included the following analysis:

- Overview analysis and consideration of AMP progress completed since the Waugh Infrastructure detailed 2011 AMP Compliance Report (in summary not detail).
- Review of AMPs against general industry practice as observed by Waugh Infrastructure in the past 12 months.
- Review and commentary on the adequacy of the AMP structure against current industry practice and requirements, as set out in IIMM 2015, ISO 55000.
- Analysis of AMP individual section strengths and emphasis, including analysis of overall AMP 'message' verses issues identified.
- Overview analysis of AMP status against appropriate asset management practice levels adopted in Council's Activity Management Policy (summary not detail).
- Analysis of the AMPs against Local Government Act 2002 amendment requirements, both 2012, and 2014 – identification of any issues or 'misses'.
- Provide review comments of AMP strengths and weaknesses identified, with commentary on any suggested priority changes to be completed before LTP 2018.

It is important to note that the peer review only considered what was included in the consultation version of this activity management plan. There are aspects of the Council's asset management processes that are not discussed in this activity management plan and are therefore not incorporated into the scoring.

The overall findings of the Peer Review were that the Council's AMPs are well developed to support the Council's Long Term Plan. Some of the AMPs had sections that required completion, but overall missing elements noted were relatively minor.

The AMP template has been updated to incorporate recent Local Government Act changes. The AMP template developed and used by the Council has allowed clear, concise presentation of information in a logical manner. The overall compliance status is shown below in Figure 46.

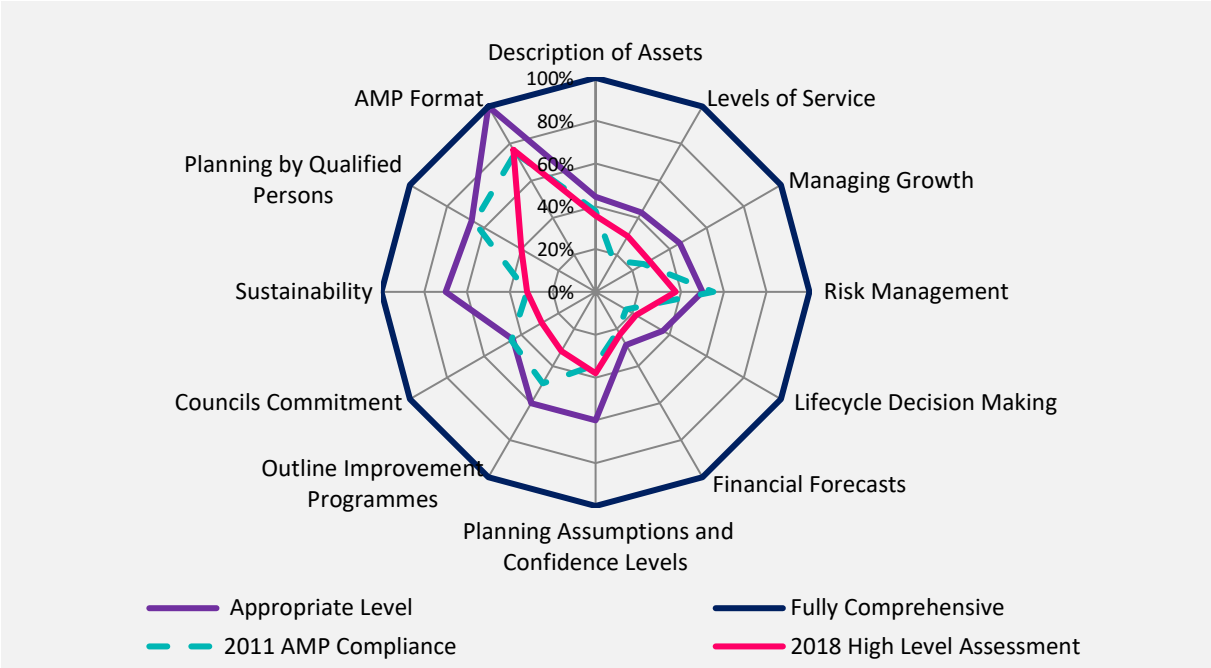


Figure 46: 2018 Peer Review Compliance Status Summary

The Council staff have reviewed and prioritised the feedback received in the peer review report. Improvements that could be made immediately have been incorporated into the final version of this activity management plan. Other improvements have been ranked and included in the Improvement Plan.

There has been a noticeable decrease in scores for Outline Improvement Programmes, Council's Commitment, and Planning by Qualified Persons. This is not due to a change in Council's practice or performance, but due to a change in the activity management plan template. After receiving the peer review feedback, additional discussion has been included in Section 12 and Section 13 to address these issues.

13.3 Improvement Plan

Establishment of a robust, continuous improvement process ensures that the Council is making the most effective use of resources to achieve the appropriate level of asset management practice. The continuous improvement process includes:

- Identification of improvements
- Prioritisation of improvements
- Establishment of an improvement programme
- Delivery of improvements
- On-going review and monitoring of the programme.

All improvements identified are included in a single improvement programme encompassing all Engineering Services activities and is managed by the Activity Planning Programme Leader. In this way opportunities to identify and deliver cross-activity or generic improvements can be managed more efficiently, and overall delivery of the improvement programme can be monitored easily.

13.3.1 Summary of Recent Improvements

Since development of the 2015 Activity Management Plan, the Council has made the following improvements:

- Completed a waste assessment and substantially completed a review of the Nelson Tasman joint waste management and minimisation plan (item SW1 in the 2015 AMP).
- Started improving the completeness of the asset data in Confirm (SW2 in the 2015 AMP).
- Improved asset condition assessments and remaining life estimates of key assets (SW3 in the 2015 AMP).
- Improved estimates of landfill assets in the 2017 valuation (SW4 in the 2015 AMP) – these assets have now been transferred to the regional landfill business unit.
- Improved renewals planning, based on asset valuations (SW5 in the 2015 AMP).
- Reviewed the capital programme for the Eves Valley landfill (SW6 in the 2015 AMP) – these assets have now been transferred to the regional landfill business unit.
- Improved the maintenance regime and reporting of key assets (primarily compactors and waste transport bins).
- Improved recording and reporting of contractor performance.

13.3.2 Summary of Planned Improvements

A list of the planned improvement items for this activity is provided in Table 31 below.

Table 31: Waste Management and Minimisation Specific Improvement Items as at June 2018

Improvement Item	Further Information	Priority	Status	Expected Completion Date	Team Responsible	Cost / Resource Type
Review Waste Management and Minimisation Plan	The Council is required to review the WMMP at least every 6 years.	High	In progress	June 2018	Utilities	$20,000 Staff time, NCC staff and consultant
Asset Data: Improve level of asset data in Confirm.	Visit RRCs, confirm asset register, review as-built data, detail all new assets and update database	High	In progress	June 2019	Utilities and Activity Planning	Staff time and contractor supplied data
Asset Data: Conduct condition assessment for key assets	Remaining life estimates drive renewal programme for key assets.	High	In progress	June 2018	Utilities and Activity Planning	Staff time and contractor reports
Renewal strategy: review and improve renewal cycle for key assets	The assets for the activity are relatively new, but subject to high wear. An improved renewal strategy is required for these assets	High	In progress	June 2019	Utilities and Activity Planning	Staff time and contractor reports
Review need for a Water and Sanitary Services Assessment	The Council is not planning to conduct any further Water and Sanitary Services Assessments in the period of the AMP.	Low	Not started	June 2019	Utilities and Activity Planning	Staff time
Review requirement of Hazardous Substances and New Organisms Act 1996	The Act places restrictions and controls the receipt and handling of some materials accepted at Resource Recovery Centres.	High	Not started	June 2019	Utilities	Staff time, contractor and consultant.

Improvement Item	Further Information	Priority	Status	Expected Completion Date	Team Responsible	Cost / Resource Type
Update description of assets to include smaller assets and components.	The AMP does not describe all the assets found in Table 15.	Low	Not started	June 2020	Utilities and Activity Planning	Staff time
Sensitivity analysis of operations estimates.	Consider sensitivity analysis for waste streams, costs and income in next AMP.	Medium	Not started	June 2020	Utilities and Activity Planning	Staff time
Review level of service at Resource Recovery Centres	Consider the level of service offered at each Resource Recovery Centre, including opening hours and services offered.	Medium	Not started	June 2020	Utilities and Activity Planning	Staff time

A list of general across activity improvement items is given in Table 32 below.

Table 32: General Activity Management Improvement Items

Improvement Item	Further Information	Priority	Status	Expected Completion Date	Team Responsible	Cost/Resource Type
Create Critical Asset Framework	Only the initial assessment has been undertaken, the framework was never re-tested.	High	In Progress	June 2020	Activity Planning	Staff Time

Improvement Item	Further Information	Priority	Status	Expected Completion Date	Team Responsible	Cost/Resource Type
Provide data confidence ratings for groups of assets within the valuation for each activity.	In the valuation reports data confidence is only assessed across the activity and not for the different types of asset groups. It is likely that data confidence varies considerably between buried assets and above ground assets and this is not reflected in the reports.	Mediu m	Not started	Jun-20	Data Analyst – Utilities	Consultants and staff time Budget $33,500 in 2019/20

Appendix A: Detailed Operating Budgets

ID	Name	Description	Total Budget	Financial Year Budget ($)										Total Budget	
			2021-51	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	3030/31	2031-41	2041-51
72001	Waste Minimisation Projects	New projects for waste minimisation - likely new engagement, construction waste and organic waste in Years 1-3	16,940,000	240,000	250,000	360,000	410,000	420,000	430,000	440,000	450,000	460,000	470,000	5,960,000	7,050,000
72003	Waste Minimisation Grants	Grants to businesses and community groups to minimise waste	600,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000	200,000
72011	Public Place Recycling	Large format containers and recycling bins	1,629,120	54,304	54,304	54,304	54,304	54,304	54,304	54,304	54,304	54,304	54,304	543,040	543,040
72017	Kerbside safety	Investigation and audit of kerbside safety	1,200,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000	400,000
72023	Professional Services	Professional advice on waste management	50,550	5,055	5,055	5,055	5,055	5,055	5,055	5,055	5,055	5,055	5,055	0	0
72024	Waste assessment and WMMP	External advice for preparation of waste assessment and waste plan	700,000	25,000	25,000	10,000	25,000	25,000	10,000	50,000	25,000	10,000	25,000	255,000	215,000
72026	Refuse Insurance	Cost of insurance for all of waste activities	697,656	53,603	57,355	61,370	65,666	65,666	65,666	65,666	65,666	65,666	65,666	65,666	0
72027	H&S Investigations & remediation	Investigation of health and safety needs	789,000	26,300	26,300	26,300	26,300	26,300	26,300	26,300	26,300	26,300	26,300	263,000	263,000
72030	RRC legal advice	Legal advice for RRC sites	40,000	0	5,000	5,000	0	0	0	0	0	5,000	5,000	10,000	10,000
72031	RRC consultants	Specialist advice for RRC sites	720,000	40,000	40,000	20,000	20,000	20,000	20,000	20,000	20,000	40,000	40,000	200,000	240,000
72032	Retender RRC contract	Procure RRC contract (in conjunction with kerbside contract)	150,000	25,000	25,000	0	0	0	0	0	25,000	25,000	0	0	50,000
72033	RRC EFTPOS	EFT POS terminal hire	18,300	610	610	610	610	610	610	610	610	610	610	6,100	6,100
72034	RRC programmed site maintenance	Routine maintenance excluding pavement, bin and compactors	3,480,000	172,000	172,000	112,000	112,000	112,000	112,000	112,000	112,000	112,000	112,000	1,120,000	1,120,000
72037	RRC reactive site maintenance	Reactive maintenance excluding pavement, bin and compactors	3,750,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	1,250,000	1,250,000
72040	RRC electricity	Cost of electricity not included in ops contracts	1,000	500	500	0	0	0	0	0	0	0	0	0	0
72041	RRC rates	Cost of rates and water	695,582	23,186	23,186	23,186	23,186	23,186	23,186	23,186	23,186	23,186	23,186	231,860	231,862
72045	Richmond RRC operations	Richmond RRC operations contractor	11,655,870	388,529	388,529	388,529	388,529	388,529	388,529	388,529	388,529	388,529	388,529	3,885,290	3,885,290
72047	Waste Transport Costs	Transport of waste to landfill	15,355,227	442,848	443,808	444,675	445,389	446,016	446,558	447,008	447,378	447,469	451,138	5,446,470	5,446,470
72048	Landfill Disposal Costs	Cost of landfill disposal	190,224,482	4,744,720	5,446,083	6,157,568	6,129,645	5,981,637	5,963,211	5,944,651	5,926,722	5,905,857	5,958,024	63,135,667	68,930,697
72049	Greenwaste Transport Costs	Cost of greenwaste transport	2,615,910	87,197	87,197	87,197	87,197	87,197	87,197	87,197	87,197	87,197	87,197	871,970	871,970
72050	Greenwaste Processing Costs	Cost of greenwaste processing	2,289,840	76,328	76,328	76,328	76,328	76,328	76,328	76,328	76,328	76,328	76,328	763,280	763,280
72051	Hardfill Transport Costs	Cost of hardfill transport	563,040	18,768	18,768	18,768	18,768	18,768	18,768	18,768	18,768	18,768	18,768	187,680	187,680
72053	Recycling Transport Costs	Transport from RRCs	2,009,820	66,994	66,994	66,994	66,994	66,994	66,994	66,994	66,994	66,994	66,994	669,940	669,940
72055	RRC consent sampling and reporting	Cost of sampling and reporting	300,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000	100,000
72056	RRC consent monitoring lab fees	Cost of lab analysis	257,820	8,594	8,594	8,594	8,594	8,594	8,594	8,594	8,594	8,594	8,594	85,940	85,940
72058	Closed Landfill Maintenance	Proactive and reactive maintenance	1,061,550	35,385	35,385	35,385	35,385	35,385	35,385	35,385	35,385	35,385	35,385	353,850	353,850
72059	Eves Valley Maintenance	Maintenance of Stage 5 site area	75,840	2,528	2,528	2,528	2,528	2,528	2,528	2,528	2,528	2,528	2,528	25,280	25,280
72060	Closed landfill rates	Rates for closed landfill sites	61,530	2,051	2,051	2,051	2,051	2,051	2,051	2,051	2,051	2,051	2,051	20,510	20,510
72061	Closed Landfill Monitoring	Cost of inspection and reporting	903,300	20,220	40,000	20,220	40,000	20,220	40,000	20,220	40,000	20,220	40,000	301,100	301,100
72062	Closed landfill monitoring lab fees	Cost of lab analysis	60,660	2,022	2,022	2,022	2,022	2,022	2,022	2,022	2,022	2,022	2,022	20,220	20,220
72063	Murchison closed landfill monitoring	Cost of inspection and reporting	158,100	5,270	5,270	5,270	5,270	5,270	5,270	5,270	5,270	5,270	5,270	52,700	52,700

ID	Name	Description	Total Budget	Financial Year Budget ($)										Total Budget	
			2021-51	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	3030/31	2031-41	2041-51
72064	Murchison closed landfill monitoring lab fees	Cost of lab analysis	41,100	1,370	1,370	1,370	1,370	1,370	1,370	1,370	1,370	1,370	1,370	13,700	13,700
72065	General district illegal dumping	Cost of clearance of illegal dumping	130,419	13,042	13,042	13,042	13,042	13,042	13,042	13,042	13,042	13,042	13,042	0	0
72066	Kerbside illegal dumping	Cost of clearance of illegal dumping	21,838	2,184	2,184	2,184	2,184	2,184	2,184	2,184	2,184	2,184	2,184	0	0
72067	Riverside illegal dumping	Cost of clearance of illegal dumping	197,145	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	19,715	0	0
72068	Abandoned vehicle collection	Cost of collecting dumped vehicles not on road reserve	5,055	506	506	506	506	506	506	506	506	506	506	0	0
72069	Illegal Dumping Disposal Fees	Cost of disposal of illegal dumping	26,645	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	2,665	0	0
72070	Redundant Agchem Disposal	Council share of Agchem disposal	210,781	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	0	0
72071	Household hazardous waste	Cost of disposal of household hazardous waste	210,781	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	0	0
72072	Kerbside Professional Services	Specialist advice for kerbside services	230,000	5,000	10,000	10,000	5,000	5,000	5,000	5,000	5,000	15,000	15,000	70,000	80,000
72073	Mariri RRC operations	Mariri RRC operations contractor	10,232,400	341,080	341,080	341,080	341,080	341,080	341,080	341,080	341,080	341,080	341,080	3,410,800	3,410,800
72074	Takaka RRC operations	Takaka RRC operations contractor	4,676,280	155,876	155,876	155,876	155,876	155,876	155,876	155,876	155,876	155,876	155,876	1,558,760	1,558,760
72075	Collingwood RRC operations	Collingwood RRC operations contractor	781,950	26,065	26,065	26,065	26,065	26,065	26,065	26,065	26,065	26,065	26,065	260,650	260,650
72076	Murchison RRC operations	Murchison RRC operations contractor	1,668,000	55,600	55,600	55,600	55,600	55,600	55,600	55,600	55,600	55,600	55,600	556,000	556,000
72077	External Weighbridge Charges	Cost of external weighbridges for RRC customers	94,860	3,162	3,162	3,162	3,162	3,162	3,162	3,162	3,162	3,162	3,162	31,620	31,620
72078	Legal fees - kerbside services	Legal advice on kerbside services and procurement	100,000	10,000	10,000	0	0	0	0	0	10,000	10,000	0	20,000	40,000
72079	Re-tender kerbside contract	Allowance to procure kerbside services	400,000	50,000	50,000	0	0	0	0	0	50,000	50,000	0	0	200,000
72080	Kerbside Advertising	Publishing of calendars and public information	435,000	12,500	15,000	30,000	12,500	12,500	12,500	12,500	12,500	30,000	15,000	125,000	145,000
72083	Tasman District Council bag purchases for counter sale	Cost of purchasing bags for sale over counter	645,750	21,525	21,525	21,525	21,525	21,525	21,525	21,525	21,525	21,525	21,525	215,250	215,250
72084	Kerbside bags and recycling	Base cost of kerbside recycling collections (and bags on user pays)	38,958,578	1,084,108	1,096,729	1,240,048	1,252,452	1,264,855	1,277,259	1,289,645	1,302,049	1,313,833	1,325,600	13,256,000	13,256,000
72085	Kerbside property growth and route extensions	Payment for servicing additional properties since start of contract	1,408,506	35,316	36,902	38,487	40,048	41,610	43,171	44,726	46,288	47,771	49,247	492,470	492,470
72086	Kaiteriteri peak collections	Payment for additional summer collections	662,400	22,080	22,080	22,080	22,080	22,080	22,080	22,080	22,080	22,080	22,080	220,800	220,800
72089	New and replacement MRBs	Supply of new and replacement MRBs	2,672,651	38,205	205,613	38,329	37,830	37,955	37,955	387,036	387,036	385,537	385,537	365,810	365,810
72090	New and replacement crates	Supply of new and replacement crates	310,591	10,604	10,630	10,630	10,527	10,552	10,552	10,578	10,578	10,270	10,270	102,700	102,700
72091	MRF operations	Operation of Richmond Materials Recovery Facility	21,328,200	710,940	710,940	710,940	710,940	710,940	710,940	710,940	710,940	710,940	710,940	7,109,400	7,109,400
72095	Waste minimisation publicity	Publicity of waste minimisation initiatives	600,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000	200,000
72096	Compost Bin Incentive Scheme	Compost bin subsidy	303,300	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	101,100	101,100
72097	In-house programme	Council facilities - recycling and waste minimisation	121,320	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	4,044	40,440	40,440
72100	Paintwise expenses	Paint recycling at RRCs	206,250	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	6,875	68,750	68,750
72108	Annual satisfaction survey	Provision for funding satisfaction survey	144,000	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	4,800	48,000	48,000
72110	MRF waste disposal	Allowance for disposal of contaminated recycling	1,650,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	550,000	550,000
	Event recycling		303,300	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	10,110	101,100	101,100
	Feasibility Studies	Feasibility Studies	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix B: Detailed Capital Budgets

ID	Name	Description	Project Driver %			Total Budget	Financial Year Budget ($)										Total Budget	
			Growth	Inc LOS	Renewals	2021-51	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	3030/31	2031-41	2041-51
76002	Waste minimisation infrastructure	Capital investment for waste minimisation - could include organic or dry waste facilities from Y3	0	100	0	9,500,000	0	0	50,000	350,000	350,000	350,000	350,000	350,000	350,000	350,000	3,500,000	3,500,000
76003	Expand existing MRF building	Extend existing building, replace dry store and build new office facilities to enable better sorting and storage of fibre and accommodate new contract.	0	100	0	4,155,964	0	831,193	0	3,324,771	0	0	0	0	0	0	0	0
76004	MRF plant purchase	Purchase plant from Smart Environmental	0	100	0	2,002,607	0	502,607	0	0	0	0	0	0	0	1,500,000	0	0
76005	RRC consent renewals	Murchison 2028, Richmond stormwater 2041, Mariri 2044, Takaka 2049	0	0	100	96,417	0	0	0	0	0	0	31,992	0	0	0	32,212	32,212
76006	RRC site renewals	Renewals includes buildings, pavements, compactors, compactor bins, weighbridges, drainage and all other RRC assets	0	0	100	10,006,109	216,378	413,472	542,086	723,333	175,541	83,700	572,200	1,108,456	165,200	491,546	2,980,828	2,533,369
76012	RRC computer renewals	No longer budgeted separately	0	0	100	525,000	0	0	75,000	0	0	0	75,000	0	0	0	225,000	150,000
76014	RRC safety improvements	Site safety minor improvements	0	100	0	816,993	40,000	26,660	26,660	26,660	26,660	26,660	26,660	26,660	26,660	26,843	268,434	268,433
76015	RRC hazardous stores	Hazardous good store and civil works - located at Richmond and outlying sites	0	100	0	75,000	75,000	0	0	0	0	0	0	0	0	0	0	0
76016	Richmond RRC bin storage area	Area to store full bins in Richmond RRC	0	100	0	921,792	0	0	0	0	0	0	0	0	0	921,792	0	0
76017	Richmond RRC dry waste bunker	This new bunker area replaces the existing glass bunker to enable it to be used to divert building waste	0	100	0	392,233	392,233	0	0	0	0	0	0	0	0	0	0	0
76018	Richmond RRC pit upgrade	This is an upgrade prior to closure of York Valley landfill. Additional to renewal works.	0	100	0	2,000,000	0	0	0	0	0	0	0	0	0	0	2,000,000	0
76019	Richmond RRC second weighbridge	Second weighbridge for all transactions	0	100	0	289,610	0	0	0	0	0	289,610	0	0	0	0	0	0
76020	Mariri RRC access road improvements	Armco barrier to improve safety	0	100	0	65,251	65,251	0	0	0	0	0	0	0	0	0	0	0
76021	Mariri RRC weighbridge and roading	Move weighbridge to upper level and improve traffic and reduced queueing	0	100	0	1,689,277	337,855	1,351,422	0	0	0	0	0	0	0	0	0	0
76023	Mariri RRC roof over pit	Provide roof over pit to reduce litter and tanker costs	0	100	0	581,413	0	0	0	0	0	0	116,283	465,130	0	0	0	0
76027	Collingwood RRC improvements	Now included in renewals and minor safety	0	100	0	10,664	10,664	0	0	0	0	0	0	0	0	0	0	0
76028	Murchison RRC pit improvements	Provide a pad for waste and greenwaste management	0	80	20	61,925	0	0	61,925	0	0	0	0	0	0	0	0	0
76029	Murchison RRC improvements	Provide a recycling baler to increase efficiency	0	100	0	222,636	0	0	0	0	0	0	0	0	222,636	0	0	0
76032	Closed landfill improvements	Provide erosion protection to closed landfills	0	100	0	400,251	65,251	55,000	150,000	30,000	0	100,000	0	0	0	0	0	0
76033	RRC environmental controls	Improvements to reduce discharges or contain materials	0	100	0	750,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	250,000	250,000