

SOLID WASTE 2021-2031

- Activity Management Plan -

Quality Assurance Statement

Waikato



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Part I: Introduction

The Solid Waste Activity Management Plan is a 10-year Strategic Plan which shows our vision and what steps we will take to get there.

The audience for this plan includes our Solid Waste customers, stakeholders, Council representatives, Council staff, contractors, consultants, ratepayers and residents who will take an interest in current and future levels of service we will be providing in respect to Solid Waste assets.



I. Background

I.1 Our Vision and Values

Our **Vision Statement** is:

'Liveable, Thriving and Connected Communities'

Our **Values** are:

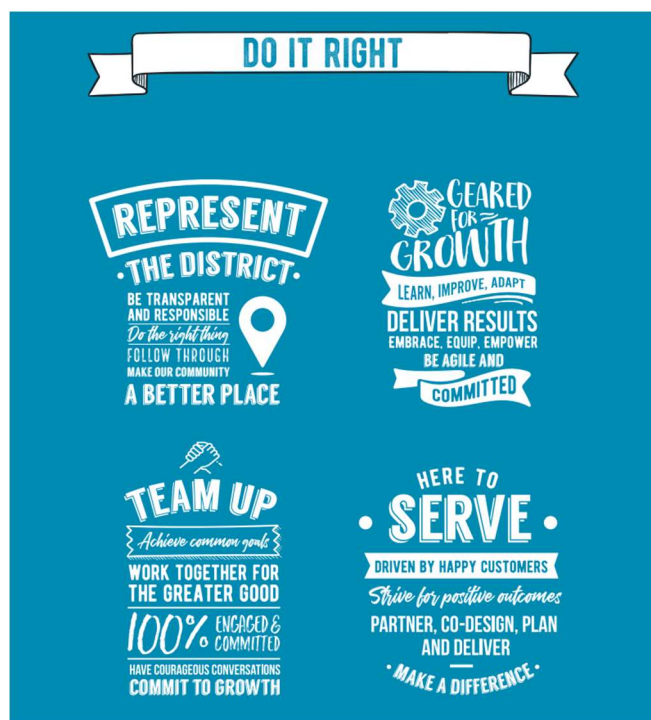


Figure 1: Waikato District Council Values

I.2 Our District

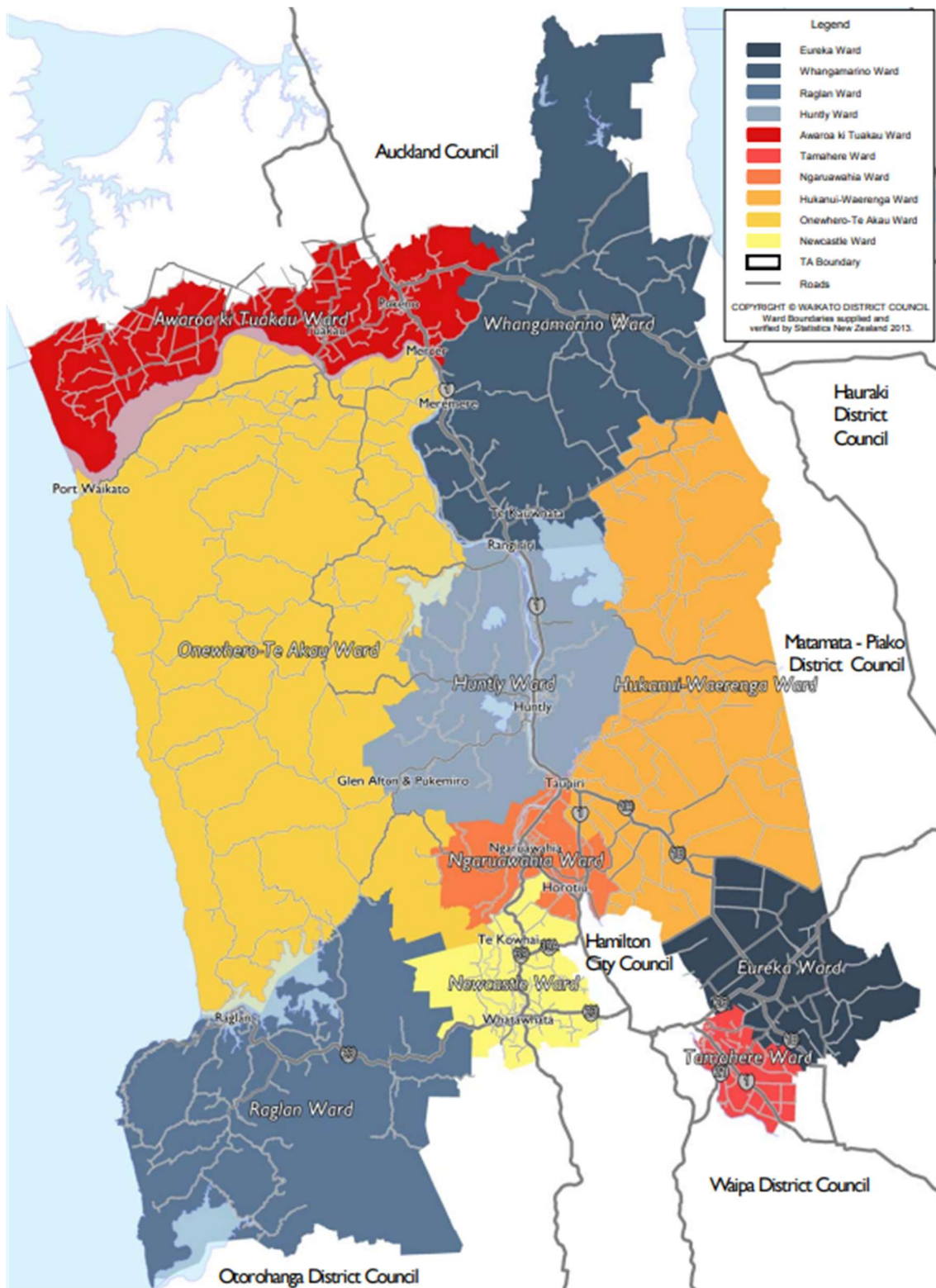


Figure 2 - The Waikato District 2019

1.3 How does this plan interact with other Plans and Documents?

Waikato District has a number of key internal and external strategic documents in place that govern many of its activities. These relate to, and will assist, in working towards the achievement of the community outcomes.

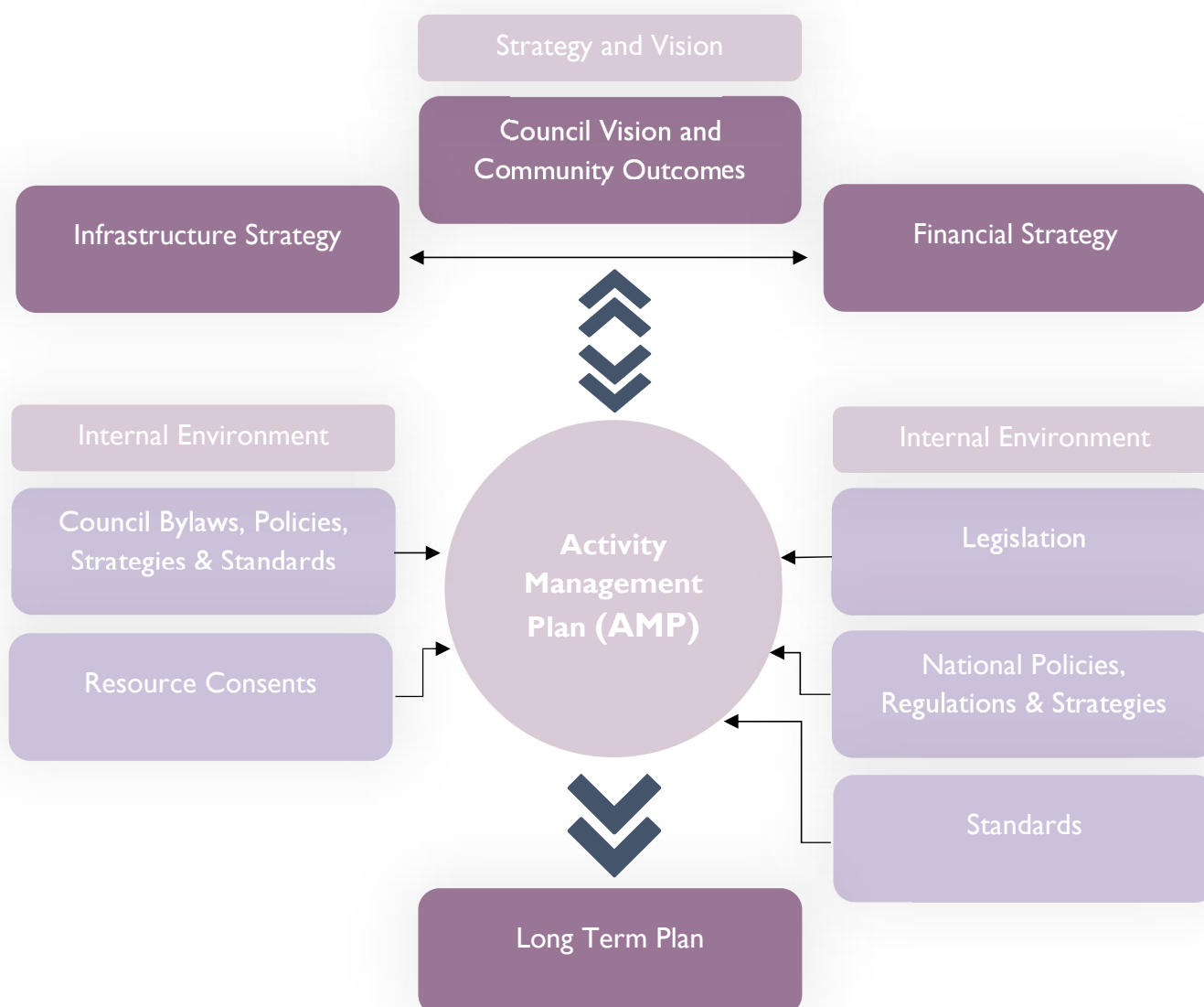


Figure 3: How the Solid Waste activity relates to other documents

1.4 What Assets are Included in this Plan?

Our activity covers all services related to community waste; these services are classified as Kerbside Collection, District wide Transfer Stations, Local Recycling Drop-off Centres, Closed landfill and Waste Education. There is also mention towards Resource Recovery Centres and Community Recycling Centres which are currently being managed externally.

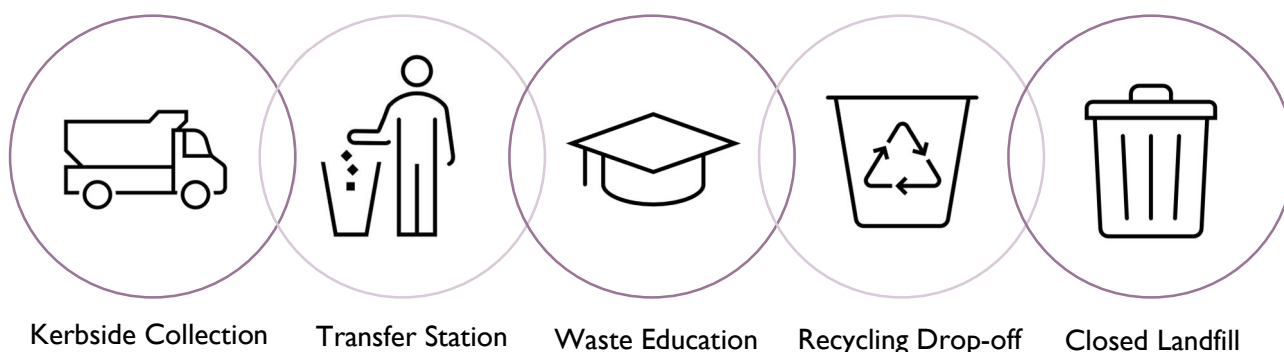


Table 1: Overview of the Value of Council's Solid Waste Activities

Asset Location	Replacement Value	Depreciated Value
Huntly	\$844,452	\$551,495
Ngaruawahia	\$61,571	\$9,373
Raglan	\$1,220,805	\$810,401
Te Kauwhata	\$311,428	\$174,785
Tuakau	\$48,476	\$31,863
Total	\$2,486,732	\$1,577,917

Source: BECA Valuation 2020

The table below shows the location of the three Refuse Transfer Stations and solid waste facilities across the District.

Table 2: Location of Solid Waste Facilities

Refuse Transfer Station	Description
186 Te Hutewai Road, Raglan operated by Xtreme Zero Waste	Resource Recovery Centre - accepting residential, and commercial waste, clean fill waste, green waste, food waste, recycling, second hand good use item for resale, wood recovery, and renewed furniture
McVie Road, Huntly operated by Metro Waste	Transfer Station – accepting residential, commercial waste and domestic recycling
Rata St, Te Kauwhata Metro Waste	Transfer Station - accepting residential, commercial waste and domestic recycling and green waste
Drop-off Centre	Description
Te Uku	Unmanned waste (prepaid) and recycling drop-off on Okete Road and State Highway 23 Te Uku
Te Mata	Unmanned recycling drop-off located on Te Mata Road near Te Mata School
Collection Point	Description
Glen Murray Community Hall	Collection of household recyclables monthly.

1.5 Who are our Partners, Customers and Key Stakeholders?

To enable an efficient level of service we have identified the partners, customers, and stakeholders relevant to our Activity. They are listed in Table 3 below.

Table 3: Partners, Customers and Key Stakeholders

Category	Customer Groups
The Wider Community	Residents and Ratepayers
	TA Liaison Group Regional Council
Associated Service Providers	Metro Waste Smart Environmental Xtreme Zero Waste EnviroWaste Services Ltd – Hampton Downs
Key Partnerships & Stakeholders	
Key Partnerships	Local and Central Government WasteMinz Waste Liaison Group Waikato and BoP
External Stakeholders	Tangata Whenua – Iwi and Marae Non- residential users of these services (from outside the district) Government agencies (Department of Health, Ministry for the Environment, DOC) Schools Neighbouring Councils
Internal Stakeholders	Councillors ELT Community Boards Community Committees Asset managers and AM staff Development Engineers Resource Consent Planners Economic Development Advisor Financial managers Contact Centre and Customer Delivery Team GIS Team Information technology managers Strategic planning managers Communication Team Rating Team

1.6 What, How and Why we do it?

We are responsible for all Solid Waste assets and services within the Waikato District. The Solid Waste service is provided by local government to deliver a range of benefits to the public. These benefits are believed to enhance the community's health and well-being, including

Roles

- To oversee, facilitate and manage a range of programmes and interventions to achieve effective and efficient waste management and minimisation within the district.
- To be responsible for a range of contracts, facilities, and programmes to provide waste management and minimisation services to the residents and ratepayers of the district.
- To ensure that operational activities are carried out as set down contractually and in a safe way.
- To provide information, expertise and support to Council that enables good decision making for waste management and waste minimisation.
- To work with community to meet aspirational goals.
- To continue to work together as part of the waste Liaison Group in Waikato and BoP to share information and work in partnership to achieve joint outcomes.

Goals

- Waste minimisation and management are best practice, and manage social, cultural, spiritual, economic, health and environmental impacts of waste.
- Reduce quantity of material entering the waste stream, increased resource recovery.
- Our nationally recognised, innovative local resource recovery industry is growing.
- Our collaborative partnerships with key stakeholders are growing our "zero-waste communities".
- Access to good information about waste in the District, in alignment with the National Waste Data Framework.



Put towards the national waste data framework system through MFE



Support national waste min initiatives and stewardship schemes locally and nationally within the industry peer group

We carry out our duties under the Local Government Act 2002 through two key management teams:

- The *Executive Leadership Team* consists of the senior managers of Council and is headed by the Chief Executive. They set the overall direction for the delivery of the activity and its services.
- The *Service Delivery Team* consists of the operational and maintenance staff who carry out the direction set by the *Executive Leadership*.

We fall under the Service Delivery Group led by the Community Connections Manager who reports to the Service Delivery General Manager. This is shown in the structures outlined below.

Our Solid Waste Team handles the day-to-day management of service delivery. Involved with the operations, maintenance and customer service related to solid waste. The preparation of the reserve management plans, and strategic planning is also our responsibility. Capital project planning and delivery is a team effort. With involvement from Community Assets and Community Projects.

Solid Waste Organisational Structure

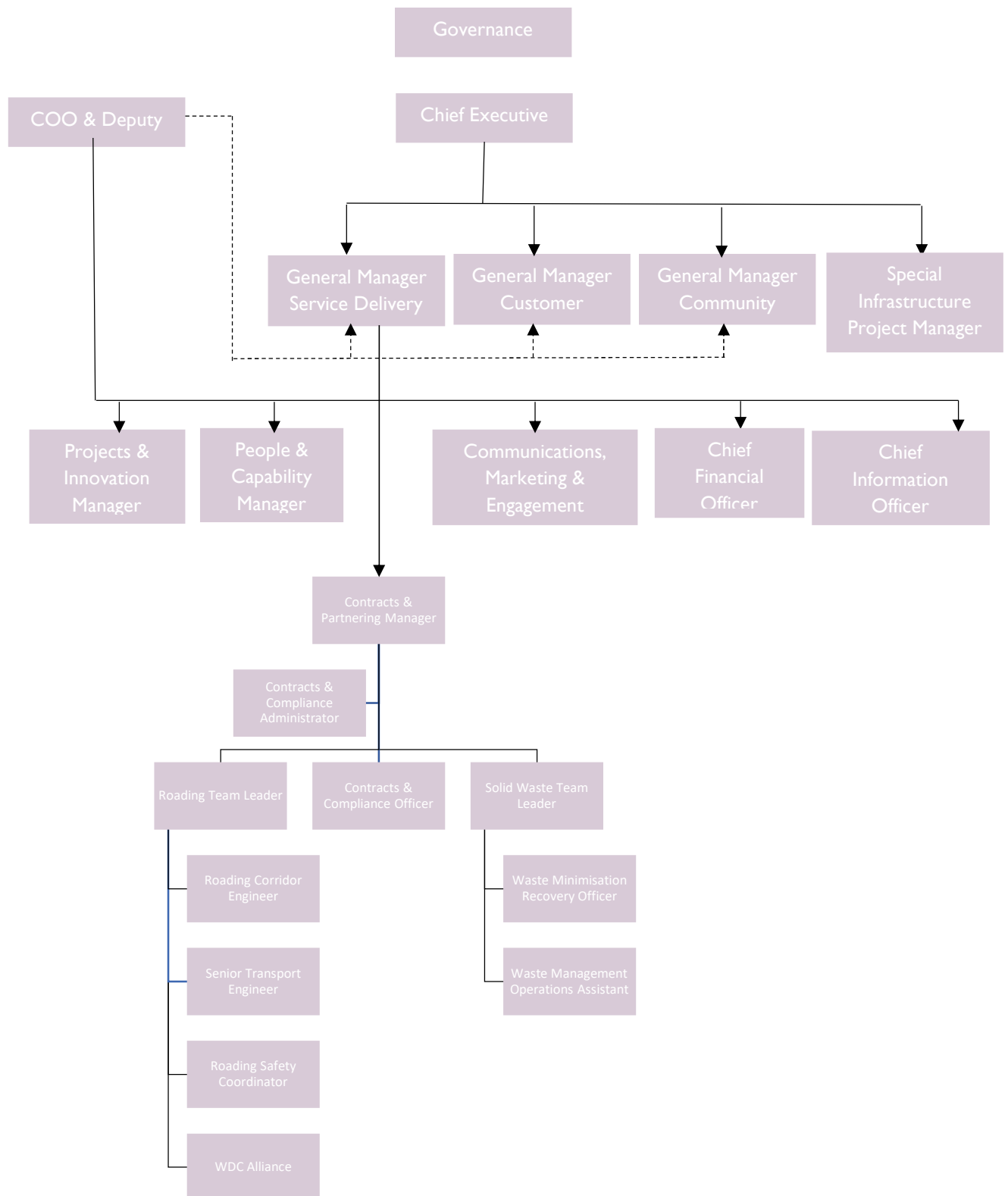


Figure 4: Solid Waste Activity Organisational Structure

1.7 The Solid Waste Activity

Waikato District Council provides the following services in the solid waste sector:

- Kerbside collection and disposal of residential recycling and refuse,
- Waste minimisation and diversion to support the WMMP,
- Contribution to the national discussion on waste as appropriate,
- Transfer stations for residential and commercial refuse and recycling, and
- Other waste stream diversion services
- Waste and environmental education programmes for schools,
- Inorganic collections at times determined by Council.
- Emptying public rubbish bins and
- Monitoring of closed landfills.

2. What are the goals and objectives of Asset Management?

2.1 Why are we important?



We are essential to our community because it provides a sense of belonging and pride. This is through the provision of waste education, services and facilities that are accessible to all. This benefits the communities' physical, social, and environmental quality of life.




Due to the commercial opportunity and benefit, the private sector provides an essential part to the solid waste activity.

How do our community outcomes link to the solid waste activity?

Under the Local Government Act 2002 we are required to have community outcomes, they are statements of the measures of success that we are working to achieve for the community. The community outcomes are set out in the 2021-2031 Long-Term Plan and outlined in Table 4 below.

Table 4: Council Community Outcomes

Community Outcomes	Solid Waste Outcomes
 <p>Supporting our communities <i>We consider the well-being of all our people</i></p>	<p>Provide solid waste service that; encourages waste reduction, avoidance, and diversion outcomes for our community</p>
 <p>Working together with you <i>Collectively focussed on the right things</i></p>	<p>Facilitating waste minimisation and behaviour change programs to support communities and stake holders to achieve "zero waste."</p>

Community Outcomes	Solid Waste Outcomes
 <p>Sustaining our environment <i>We are a community that believes in environmental sustainability</i></p>	<p>To ensure that our solid activities follow best practice to protect our natural environment.</p>
 <p>Building our economy <i>We attract diverse business, creating jobs and opportunities</i></p>	<p>Solid waste services provide employment for residents and revenue for our district.</p>
 <p>Providing value for money <i>Residents and ratepayers get value for money</i></p>	<p>Suitable Solid waste Services and infrastructure is available, well maintained, and provides value for money for community.</p>

2.2 Solid Waste Objectives

Table 5: WMMP Solid Waste Objectives

Waste Management & Minimisation Objectives	
1	Waste management practices manage social, cultural, spiritual, economic, health and environmental impacts of waste
2	Waste diversion is increasing and waste to landfill is decreasing including Council's waste generating activities.
3	A commitment to work with Tangata Whenua to achieve the waste minimisation outcomes set out in the WMMP.
4	Our communities are actively engaging in waste avoidance and minimisation, and becoming "zero-waste communities"
5	Partnerships with others to achieve efficient and sustainable waste minimisation and management, including joint working and co-operation with territorial and regional councils, and central government
6	Contributing to the national discussion advocating for effective product stewardship and a bottle deposit scheme

3. What are the Success, Issues, Opportunities and Risks?

3.1 What are the Key Success Factors?

- Solid Waste Review
- Data Licensing
- National Sword
- Waste Education
- Waste Diversion Levels
- Council Controlled Kerbside Services
- Resource recovery
- Review/Adoption of the following Policies/Bylaws:
- Wheelie Bin Policy
- Kerbside Collection Private Roads Policy
- Public Litter Bin Policy
- Solid Waste Bylaw

3.2 What are the Key Strategic Issues?

The Infrastructure Strategy identifies significant infrastructure challenges for us over the next 30 years. It identifies the principal options for managing those challenges and the implications of those options. This aligns with the key strategic issues relating to the Activity which have been identified to address through the implementation of this AMP.

- Collapse of international recycling market
- BASEL Amendment
- Container deposit and other Stewardships
- Waste Minimisation levy
- Lack of local Infrastructure

3.3 How do we improve in the future?

- Reducing Waste to Landfill
- Encourage re-use
- Standardising Recycling Services

3.4 What are the key Strategic Risks to the Provision of our Activity?

Strategic Risk Management

The objective of risk management is to identify realistic possible risks faced by Council, analyse, and evaluate these risks. The outcome of this evaluation is to be used to:

- Emphasize the importance of continuing to provide our core services and manage inherent risks.
- Continually identify improvements required to our services to avoid risk events or minimise their impact or to realise identified opportunities.

The risk management policy also defines the responsibilities of Council managers and staff to form and maintain the framework. And to use it to make sound decisions in alignment with business objectives.

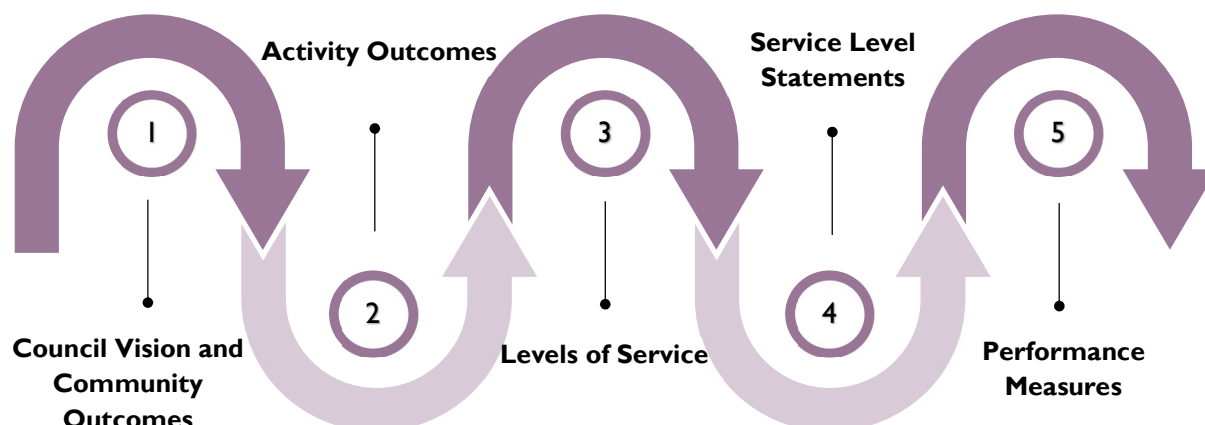
Key Strategic Risks

Council policy and operation cannot influence all the factors contributing to these events. However, we have a responsibility to assess the risks to best manage the assets with the resources available. This would avoid and mitigate the effects of any event this is covered in more detail in Part 4 Risk Management Planning.

4. Community Groups Associated with Delivering our Activity

Currently, the solid waste activity does not have any official community groups, however there are plans to directly involve the community in some of the future Resource Recovery Centre (RRC) and Community Recycling Centre (CRC). This will ultimately give the community a greater feeling of pride for our home.

5. Investment Drivers



5.1 How is the asset programme developed?

Part 7: Lifecycle Asset Management provides details of the programme development for maintenance, operation, renewal, and new project work for the activity. Lifecycle Asset Management enables us to; identify issues, determine appropriate response options, identify strategies and programmes for response to identified issues/opportunities, to deliver Levels of Service and achieve both asset and organisational goals and objectives.

of works is carried out to:

- Meet the short- and long-term needs of our community, as driven by our vision and community outcomes,
- Offer value for money,
- Deliver levels of service in a sustainable manner to the least whole-of-life cost.

The prioritisation of planned maintenance, renewals and new capital projects is based on:

- Level of Service requirements
- Criticality and risk assessment associated with investment levels that potentially change the level of service
- Age and condition of the infrastructure
- Budgetary constraints
- Opportunities to introduce cost savings through innovation and improvement to drive efficiency
- Growth – required by and supporting population and economic growth

Part 3: Levels of Service provides a framework which shows the line-of-sight from national, regional, and local strategy through to the levels of service to be achieved. This also shows the link of the proposed level of investment with risk management

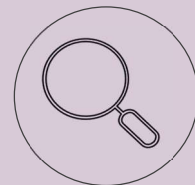
6. How is the Plan laid out?

SECTION	DESCRIPTION
<i>Part 1 – Introduction</i>	This section provides an overview of all the elements of the assets within the AMP. It also provides sound justification for owning and operating the assets covered, and the reasons for preparing the AMP.
<i>Part 2 – Activity Overview</i>	This section explains how Council manages the activity and detail of the assets required to deliver the activity.
<i>Part 3 – Levels of Service</i>	This section defines the levels of service provided by the activity and the basis for these levels of service and how service performance will be measured, using both customer and technical measures. New works are based on the information outlined in this section.
<i>Part 4 – Risk Management Planning</i>	This section describes how risks are identified and managed, and lists the specific risks identified for the Solid Waste activity.
<i>Part 5 – Managing Growth</i>	This section provides details of growth and demand forecasts that affect the management, provision and utilisation of Three Waters services and assets. New works will be based on information outlined in this section.
<i>Part 6 – Sustainability</i>	This section focuses on social, cultural, and environmental sustainability, including climate change. It provides detail of initiatives underway and planned.
<i>Part 7 – Lifecycle Management</i>	This section outlines what is planned to manage and operate the assets at the agreed levels of service while optimising lifecycle costs. It includes an asset renewal and replacement plan.
<i>Part 8 – Financial Summary</i>	This section provides a summary of the total value of the activity and the investment that Council has planned to make over the next 10 years. This section captures all the new works and operating needs, providing a prioritisation based on their strategic outcomes.
<i>Part 9 – Continuous Improvement</i>	This section provides details on planning for improvement to activity management practices, which will improve confidence in the activity management plan.

Part 2: Activity Overview

This section explains how we will manage the activity. The focus is on the day-to-day delivery of the service, what we are doing now to ensure we can provide the service in the future, and the impact on our natural, community and financial resources.

Provides an overview of the major assets including their condition, capacity, and performance.



1. Our Activity at a Glance

We manage a range of solid waste services and facilitates across a large area. The district is mostly rural with several key urban centres distributed within the Waikato River corridor. The notable exception is Raglan.

There are six solid waste facilitates and one major service spread across the district. They provide access to kerbside collection; transfer stations and recycling drop off centres with the supplementation of zero waste education for residents of our district. Solid Waste services and facilities are important features as they:

- Health and Safety of people and environment
- Waste avoidance
- Waste to resource
- Community engagement and share social capital/flows of information

1.1 What are our Solid Waste Services



Figure 5: Solid Waste Service Area Coverage Map

It is important to note that there is recycling drop off centres located in Te Uku and Te Mata, there is also a monthly recycling drop off point for the Glen Murray residents; .

These drop off centres have not been included in the map for the purpose of reducing traffic for the intended users. Transfer stations outside of the district have also been tagged as we acknowledge our communities use them.

The Solid Waste space undergoes a review on a regular basis as per the section 17A Local Government Act 2002, this document purpose is:

- We want to give the community and key stakeholders the opportunity to contribute to the review of solid waste services.
- Early engagement is basically a fact-finding mission as to what the community's thoughts are around how their rubbish and recycling is picked up.
- It is important reach different segments of the community – ie urban v rural, older v younger, informed v uniformed – as opinions and needs will vary greatly.
- The early engagement phase should also be used as an opportunity to raise awareness and educate about issues in the waste industry that do, and will, effect kerbside collection.
- The key objective is to get as many people to participate in early engagement as possible to provide meaningful information that can be used further down the track.

1.2 Contracts and Agreements Associated with Delivering our Activity

Table 6: Current Contracts

Contract	Contractor	Value	Term Ending
Kerbside Collection	Metro Waste	\$25 500 000. 00	Exact date with contract team - June 2021
Kerbside Collection	Xtreme Zero Waste	\$4 670 944. 74	Exact date with contract team - Jan 2021
Kerbside Collection	Smart Environmental	\$6 402 684. 00	Exact date with contract team - June 2021
Education	EnviroSchools	\$25 000. 00	Yearly Contract
Education	Para Kore	\$5 000. 00	Ongoing - yearly
Education	Zero Waste	\$109 592. 64	Yearly Contract
Active Landfill	EnviroWaste Services	-	Ongoing (no contract)

The Solid Waste activity is undergoing a rollover process towards the end of the contracted period.



Renew kerbside contracts

1.3 How do we look after our data?

SPM Assets

SPM Assets is the asset management tool we use to manage our fixed assets. It provides an end to end system that simplifies best practice asset management.

Beginning with the collection of condition and building performance data, the tool then:

- provides a detailed analysis of asset performance
- provides for the allocation and prioritisation of asset related projects

Using SPM assets, our activity can see and understand performance shortfalls. And the different cost scenarios to remedy them.

Having accurate and confident forecasting of costs of ownership helps manage the activity in a proactive manner. An analysis of renewals can be used to consider different expenditure drivers, apart from deteriorating condition.

How reliable is our data?

The following grading guidelines, shown in Table 7 have been used to assess the data reliability for our assets. An assessment of the data reliability is shown below.

Table 7: Data Reliability Grading Scale

Confidence Grade	Description Grade
A Very High	Highly Reliable <2% uncertainty Data based on sound records, procedure, investigations and analysis, documented properly and recognised as the best method of assessment.
B High	Reliable ± 2-10% uncertainty Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example the data is old, some documentation is missing, and reliance is placed on unconfirmed reports or some extrapolation.
C Medium	Reasonably Reliable ± 10-25% uncertainty Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings' for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or significant extrapolation.
C Low	Uncertain ± 25-50% uncertainty Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B is available.
D Very Low	Very Uncertain > 50% uncertainty Data based on unconfirmed verbal reports and/or cursory inspection and analysis.

Table 8: Data Confidence on our Assets

Data Classification	Attribute	Rating	Comment
Portfolio	Hierarchy	B	A new hierarchy has been set up as part of the move of our assets into SPM
Asset Inventory	Quantity	B	Quantity derived from on-site surveys and as-builts
	Location	C	GPS coordinates are available for most assets
	Date of Construction	C	Dates supplied by the finance team

	Unit Rates	B	Unit rates are based on industry costs and past renewal costs and reviewed by SPM Assets on an annual basis
	Base Life	B	Base lives are based on industry standards and supplied by SPM and suppliers
Condition	Condition Rating	C	As supplied by Finance from the Finance I system. A rolling condition assessment programme will need to be developed to ensure currency.
	Comments & Photos	B	Photos are added at the time of the condition assessment and as required.
Maintenance	Details	D	Maintenance data is limited and is based on reports received from external contractor.
Demand / Use	N/A	E	Not currently captured within SPM Assets.
Risk	Criticality Ratings (Appearance, Consequence, Safety)	C	Analysis of the criticality ratings has not recently been undertaken. Default ratings of componentry have been used.
	Property Importance	C	Importance levels have been reviewed for sites which have been noted as having critical assets. The remainder of the sites have the standard importance level of medium. No formal review has been undertaken.

1.4 What is the reporting structure?

Business Plans

In August 2019, People Leaders from across the business came together for a sharing session at Waikato-Tainui College. They each had two minutes to share the key focus areas of their plans and celebrate the work their teams had invested in putting a plan in place to support Gearing for Growth & Greatness.

This coming together of our leaders provided the space for them to network, to connect and to get a greater understanding of what is being focussed on across our vast and varied business. It was evident how much commitment is being given to bring our vision of Liveable, Thriving & Connected Communities to life.

The solid waste business plan sets out internal operational objectives and tasks, it also identifies the business strengths, weaknesses, opportunities, and threats for the Activity.

Each team within the activity identified the following information to drive their tasks and measure performance:

- What the team does and why
- Current approach
- Future approach
- Proposed actions; and
- Proposed KPI's

The team plan for our activity was undertaken and completed in 2019.

Reporting to Council, Community Boards and Committees.

Regular reporting of our activity is provided to Council via the Infrastructure Committee. Monthly dashboard reports tracking budgets are reported as well as planning and strategy documents, and capital projects progress.

Community Board and Committee meetings are attended by a member of the executive team and our staff as required. Often the committees request reports that are relevant to our activity or our staff update the committees on operational matters as they arise. An annual report is received from each Community Board and Committee following their AGM.

Our operational staff provide support at the:

- Te Mata Recycling Drop-off Centre
- Te Uku Recycling Drop-off Centre
- Glen Murray Monthly Recycling Drop-off
- Raglan Transfer Station
- Huntly Transfer Station
- Te Kuawhata Transfer Station

They are also on hand to discuss the day to day operations of these groups.

Who are the External Parties we report to?

We report to the below:

- Ministry for the Environment
- Waikato Regional Council
- Waste Minz

2. What assets do we have?

We do not a great deal of the assets we use, this has found to be the most efficient and beneficial method to provide this service. This relationship between assets and services is been governed by the mentioned contracts. These contracts have been categorised as per the provided services:

- Kerbside Collection
- Transfer Stations
- Recycling Drop-off
- Education

Although these assets involved within the solid waste activity are governed through contracts, council does own and monitor the following assets:

- Monitoring Closed Landfill

The continuation of this system is subject to change, due to the Solid Waste review *explained at length in Part 2: Activity Overview*.

2.1 Our Assets

Delivering our activity in an effective and sustainable manner requires us to own, manage and maintain a range of solid waste services and facilities. Portfolio snapshots providing an overview of our assets is provided below. The appendices provide detailed information on all our reserves and sites.

2.2 What are the Solid Waste assets worth?

Section 111 of the Local Government Act 2002 requires that local authorities comply with “generally accepted accounting practice”. This is taken to mean the principles of the General Accepted Accounting Practice that is prepared by the New Zealand Society of Accountants (ICANZ) and included in the New Zealand Accounting Standards.

A summary of the valuation for Solid Waste assets is shown in Table 11. This information is extracted from the Solid Waste Valuation that was undertaken as of 30th June 2020.

Table 9: Solid Waste Activity Overview

Asset Class	Optimised Replacement Cost (\$)	Optimised Depreciated Replacement Cost (\$)	Annual Financial Depreciation (\$/yr)	Data Row Count
Refuse landfill	558,008	413,325	144,683	9,753
Refuse Pump Station	228,339	72,356	155,983	5,508
Refuse Transfer Station	2,408,735	1,352,538	1,056,197	62,934
Total values	3,195,082	1,838,220	1,356,220	79,195

Note that:

- **Optimised Replacement cost (ORC)** is the cost of the modern equivalent asset that replicates the existing asset most efficiently.
- **Optimised Depreciated Replacement Cost (ODRC)** is the optimised replacement cost after deducting an allowance for wear or consumption to reflect the remaining or economic service life of an asset.

2.3 What is Asset Condition?

Condition and Performance Overview

The condition of an asset is a measure of an asset’s physical integrity. Knowing the condition enables more accurate prediction of:

- asset development
- maintenance
- renewal / replacement requirements

Grading of assets is per PRAMS National Asset Condition Grading Standards Manual 1998. Failure to maintain levels of service, will lead to a decline on the standard of the assets. This indicates a physical degradation of assets.

Table 10: PRAMS National Asset Condition Grading Standards

Condition Grade	1 – Excellent	2 – Good	3 – Average	4 – Poor	5 – Very Poor
Estimated proportion of life remaining	Above 55%	55%-37%	37%-25%	25%-11%	Below 11%
Description	Sound physical condition. No work required.	Acceptable physical condition; minimal short-term failure risk but potential for deterioration. Only minor work required (if any).	Significant deterioration evident; failure unlikely in near future but further deterioration likely. Renewal likely to be required in the medium term – 5 to 10 years.	Failure likely in short term. Renewal likely to be required in the short term – 2 to 5 years.	Failed or failure imminent/ safety risk. Refurbishment, replacement, or removal required as a priority.

Source: PRAMS National Asset Condition Grading Standards Manual

The reliability and performance of our services and assets is reasonable with no major issues of unavailability. The quality of service delivery is aligned across the district, but still mixed in some of the more remote areas.

Monitoring the Condition of Assets

Inspections of reserves are carried out by:

- Council staff
- Maintenance Contractors
- Specialised consultants

to identify the condition of specific asset components at intervals specified by the Asset Owner or upon request.

To identify the condition of our assets we undertake the following targeted inspections:

- Closed Landfill

Our Solid Waste Contractor and the Solid Waste Officers conduct joint maintenance audits. Maintenance audits are undertaken to ensure that completed scheduled maintenance is compliant. Compliance is with level of service specifications.

Maintenance audits are undertaken on:

- Closed Landfill

A condition assessment gives a clear understanding of the condition of assets and their performance.

An asset register including general condition has been compiled. This register forms the basis for:

- understanding future expenditure patterns
- management decisions regarding maintenance, replacement, and renewals

It is important to note council does not own the assets involved in the delivery of Solid Waste, this is possible through several contracts.

2.4 How reliable are our assets?

Assessment of asset performance for our portfolio has not been undertaken. A review of maintenance history for each site has been done. This indicates our assets generally fulfil their functions to an acceptable standard.



Incorporate current and emerging technologies into services to bring improved operational practice

3. Solid Waste Snapshot

A summary page for each of refuse transfer stations, landfills and pump stations has been provided on the following pages.

Refuse Transfer Station – Solid Waste Snapshot



Condition Grade Index: 2.39
% Components Poor or Very Poor: 0%
Average Capex Renewal Cost pa: \$75,750
Average Capex New Capital Cost pa: \$113,271.70

KPIs



Optimised Replacement Cost: \$1,489,411
Optimised Depreciated Replacement Cost: \$685,571

Value

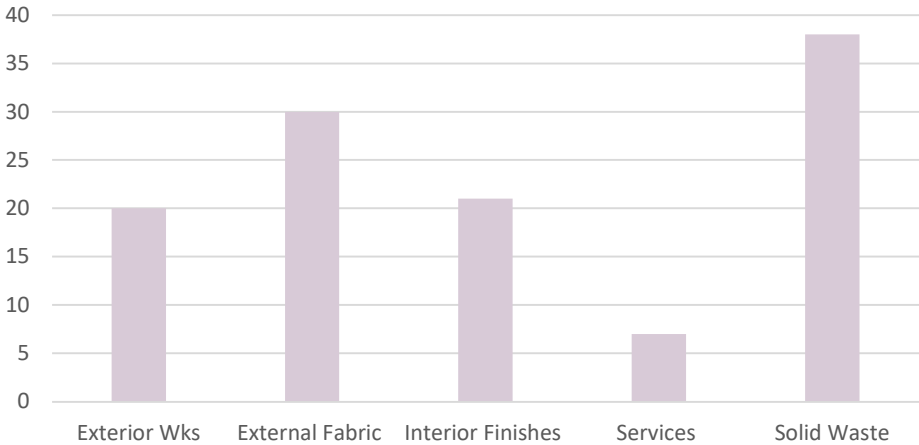


Wards

- Huntly
- Raglan
- Whangamarino

Condition of Components

Asset Count



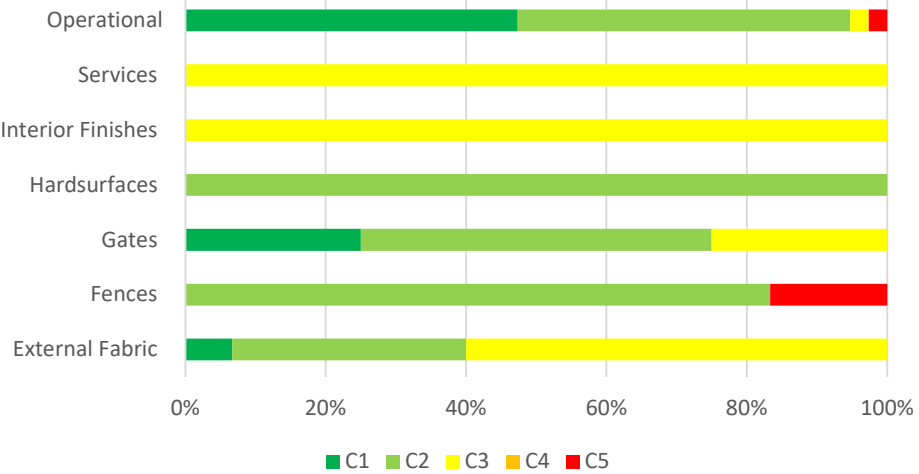
Description

Refuse Transfer Station assets are predominantly a combination of external fabric and solid waste making up 58% of this asset class.

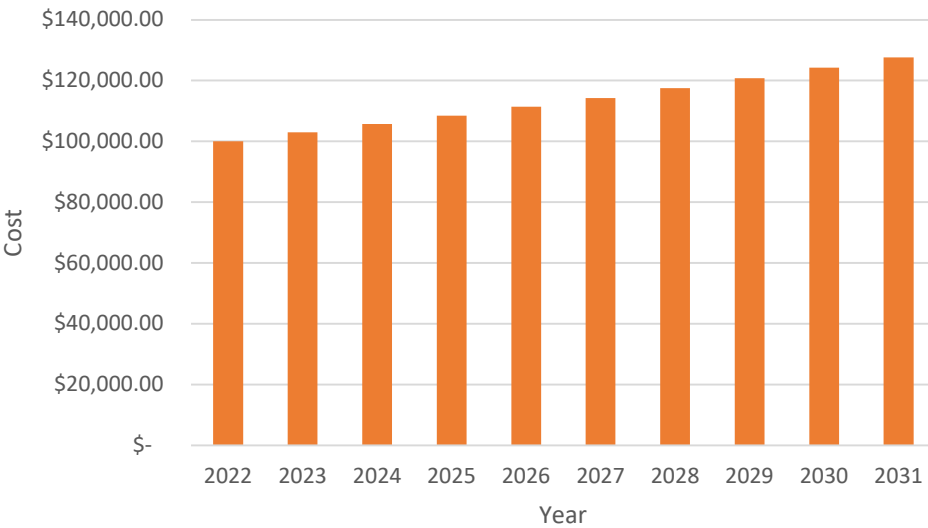
Overall, there are 2 assets in a very poor condition with an approximate value of \$141,052. These assets would be considered a priority for the renewal programme.

The average capex spend over the 10-year period is \$1,132,717 including renewals and new capital works to improve levels of service and allow for growth.

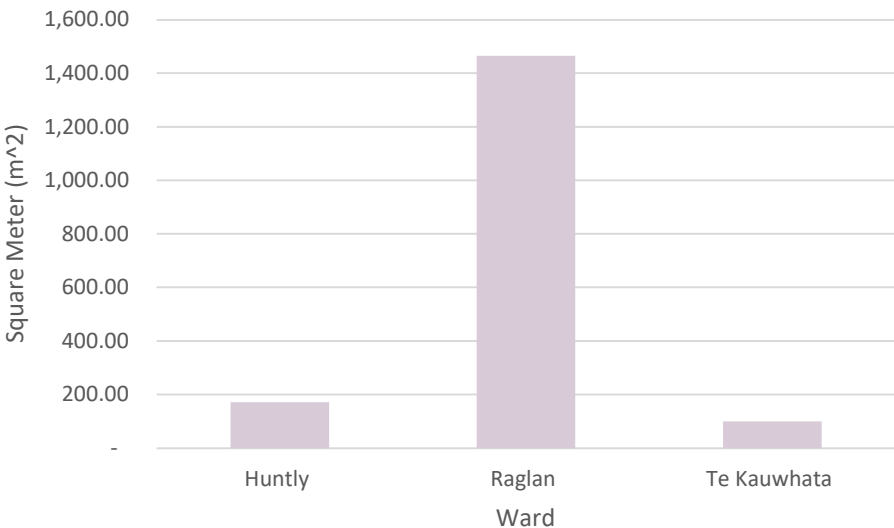
Condition of Components



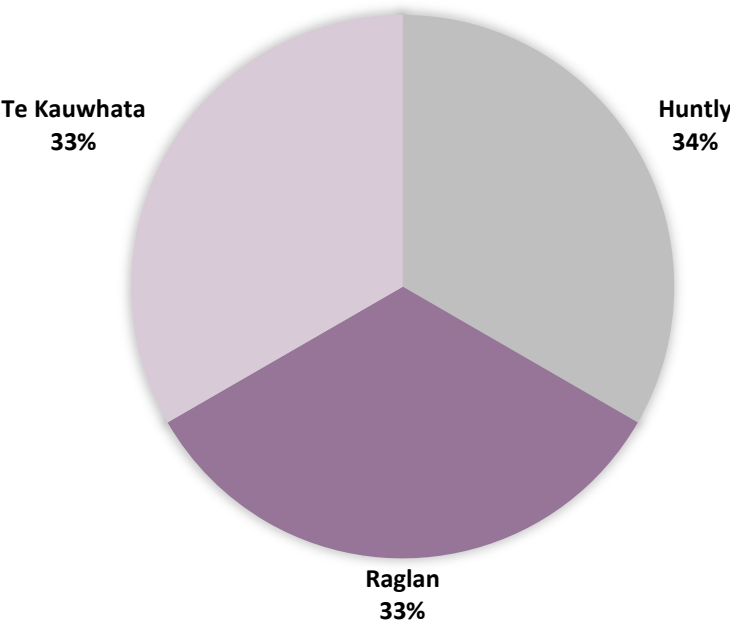
Transfer Stations Capital Work



No. of Square Meters by Location



Number of Buildings: 13
Number of Components: 116



Landfill – Solid Waste Snapshot



Condition Grade Index: 1.00
% Components Poor or Very Poor: 0%
Average Capex Renewal Cost pa: \$40,271.40

KPIs



Optimised Replacement Cost: \$494,735
Optimised Depreciated Replacement Cost: \$489,665

Value

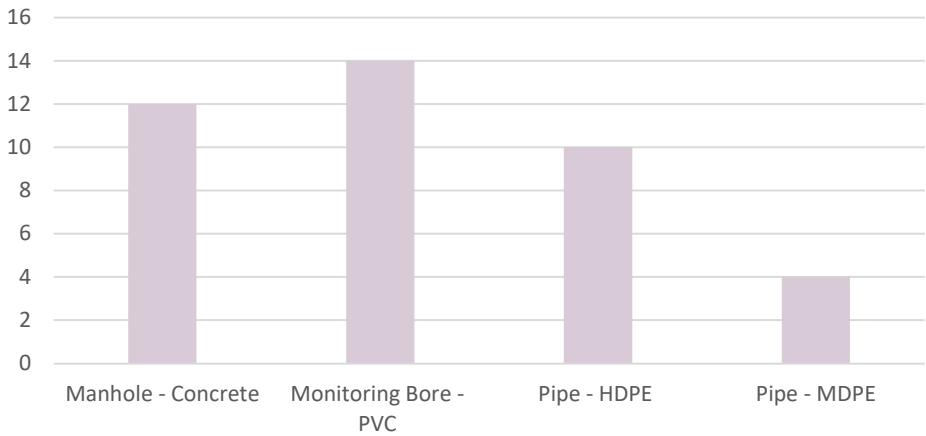


Wards

- Huntly
- Ngaruawahia
- Awaroa ki Tuakau
- Whangamarino

Condition of Components

Asset Count



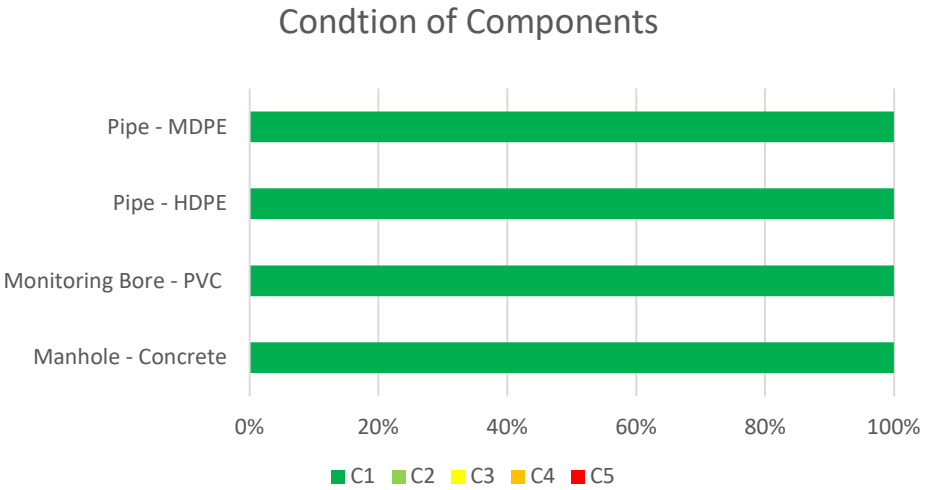
Description

The components for the Landfills contained within the SPM database include manholes – concrete, monitoring bore and Pipe – HDPE, MDPE. All of these components are in a fairly good condition.

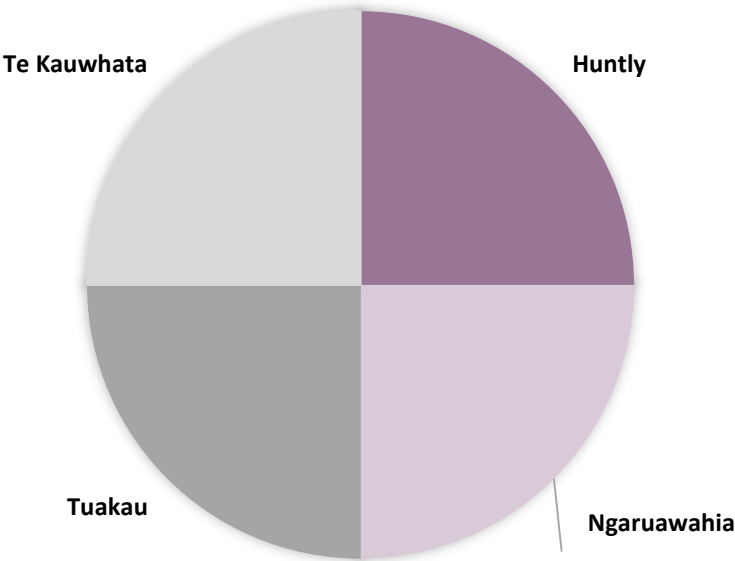
Overall, there are 0 assets in a very poor condition, for the time being there are no plans to renew any of these components.

The renewal spend over the 10-year period is \$402,714 including renewals and new capital works to improve levels of service and allow for growth.

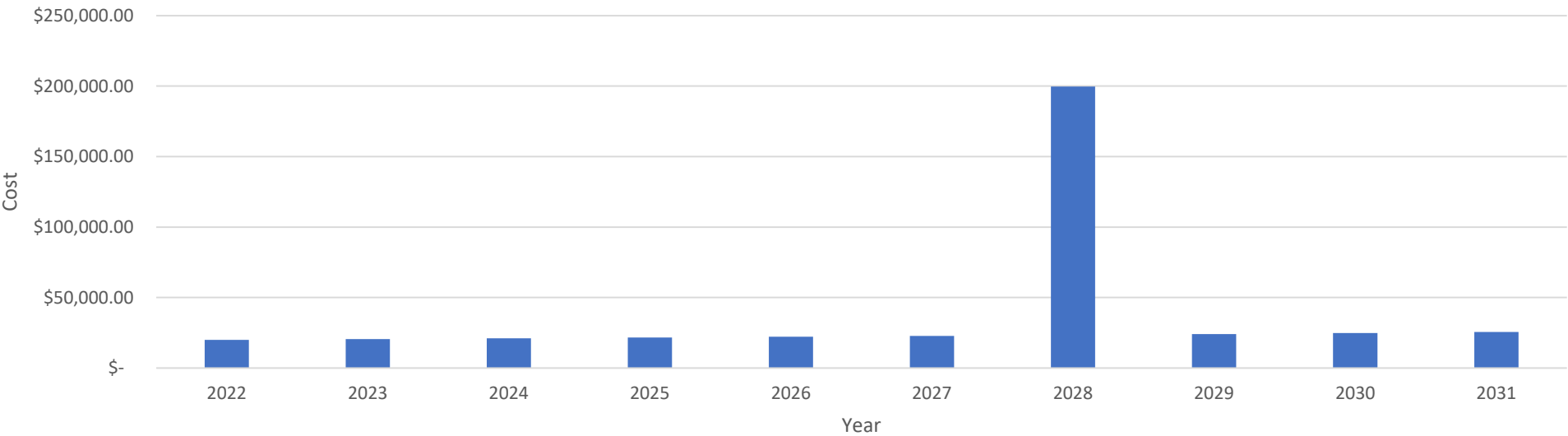
Condition of Components



Number of Components: 40



Landfill Renewals Programme



Pump Stations – Solid Waste Snapshot



Condition Grade Index: 1.00
% Components Poor or Very Poor: 0%
Average Capex New Capital Cost pa: \$12,506.90

KPIs



Optimised Replacement Cost: \$210,360
Optimised Depreciated Replacement Cost: \$202,629

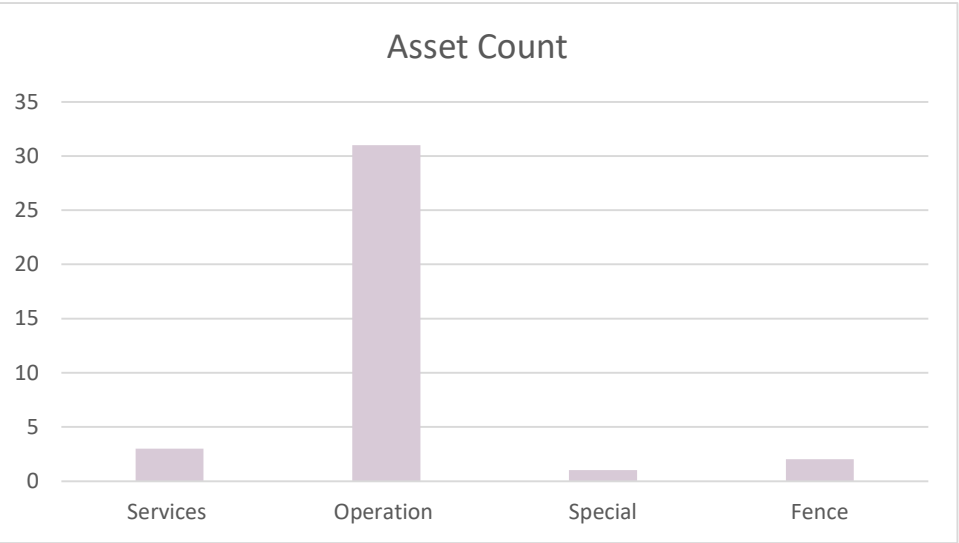
Value



Wards

- Huntly
- Awaroa ki Tuakau
- Whangamarino

Condition of Components



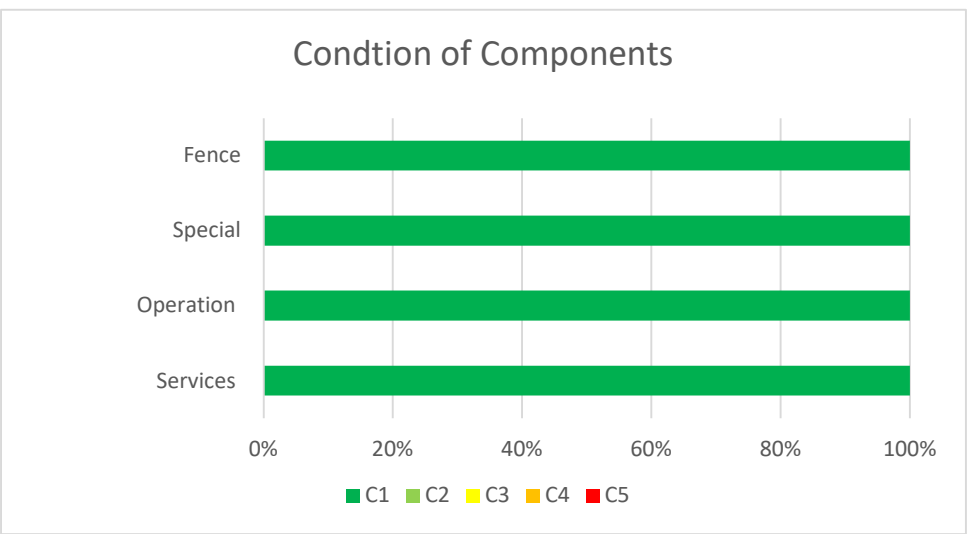
Description

Refuse Transfer Station assets are predominantly a combination of external fabric and solid waste making up 83% of this asset class and containing a value of \$136,850.

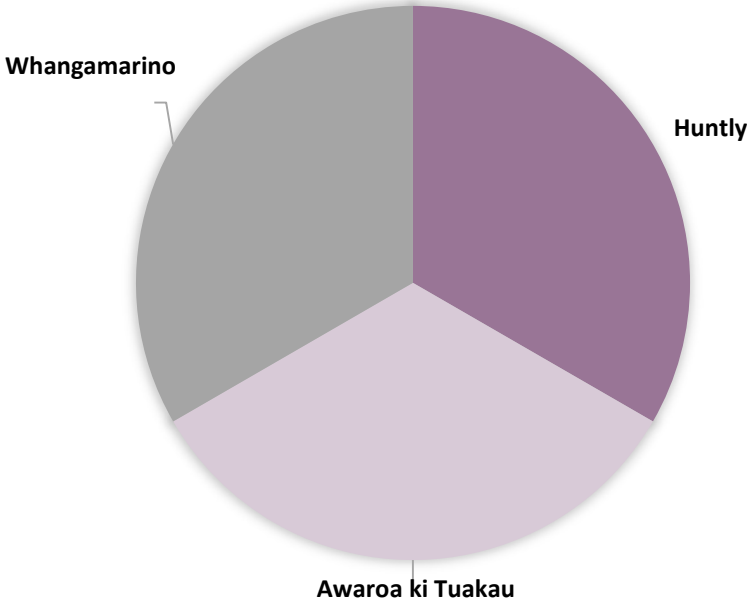
Overall, there are 0 assets in a very poor condition, for the time being there are no plans to renew any of these components.

The capex spend over the 10-year period is \$125,069 including renewals and new capital works to improve levels of service and allow for growth.

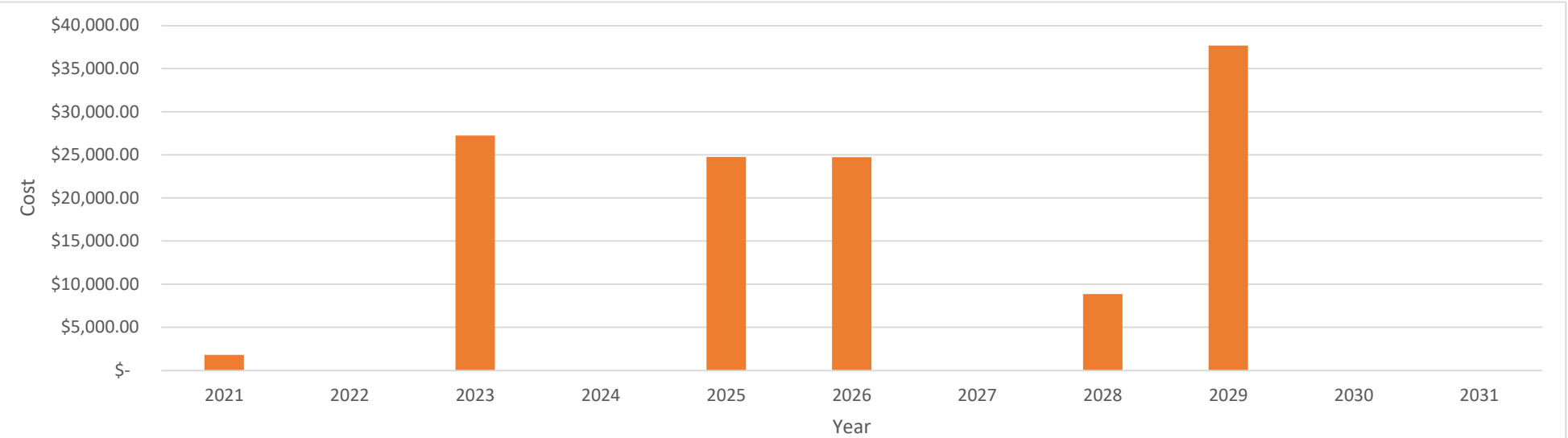
Condition of Components



Number of Components: 37



10-year Pump Stations Capital Expenditure



What is a Condition Grade Index (CGI)?

The CGI is the average condition grade of assessed components weighted by their gross replacement cost.

Table 11: Confidence Grade Index

CGI Range	Colour	Description
1-1.19	Dark Green <i>Excellent</i>	A CGI of less than 1.5 suggests that the site is in an excellent condition without any component in poorer condition.
1.2-1.49	Light Green <i>Good</i>	
1.5-1.99	Yellow <i>Average</i>	If less than 2.0 it is likely that the site is in good to excellent with only a few components in a poorer condition.
2-2.99	Orange <i>Poor</i>	If greater than 2.5, then there is a high proportion of components in a poorer condition.
3-5	Red <i>Very Poor</i>	Majority of components are in a poorer condition.

Condition Grading – Solid Waste

Asset	Location	CGI Score
Landfill	Huntly Landfill	1.00
	Ngaruawahia (SH1) Landfill	1.00
	Tuakau (Parker Lane) Landfill	1.00
	Te Kauwhata Landfill	1.00
Pump Stations	Huntly East Leachate Pump Station	1.00
	Tuakau (Parker Lane) Leachate Pump Station	1.00
	Te Kauwhata Leachate Pump Station	1.00
Refuse Transfer Stations	Huntly Refuse Transfer Station	3.65
	Raglan Refuse Transfer Station	1.83
	Te Kauwhata Refuse Transfer Station	1.93
Average		1.76

4. Solid Waste Review

The Solid Waste Review is a requirement under 17A of the Local Government Act 2002 to conduct a cost effectiveness review of services every 6 years and within 2 years of contracts expiring. This review serves as a method to identify our strengths and work towards improving our shortfalls.

- All waste services and infrastructure need to be assessed
- Public consultation and facilitated engagement required with community and industry

There are a number of key features of the solid waste activity in the Waikato. These key features and the factors that contribute to them are discussed below:

Subsequent to the review in 2020 two clear phases have been identified.

Phase 1

The short term proposed “transformation of contracts in situ” will re-set the contracts and service provision for the collection of waste (in which Council control in the district) and recycling as a priority.

In June 2020 Council approved the Phase 1 re-negotiation of waste contracts.

This will place the focus on the main issues and risk faced by WDC which are:

- Safety performance
- Consistency in level of service
- Consistency in commercial terms
- Moving toward best practise to ensure recycling can be processed and further recycled
- Affordability
- Flexibility to adapt to the future legislative requirements
- Innovation and how we embrace it in the service approach

The intent in its simplest form may look like the below;

- *No change in level of service*
- Regenerate contractor agreements (with changes) until 2024
- Potential to increase targeted rate through the long-term plan
- Behaviour change programs to inform future decisions
- Ensure communities are empowered and engaged through various programs and initiatives
- We have working partnership in place with business, rural community, residential community and Tangata Whenua to ensure we are meeting our goals
- We are innovating right business, right place, right outcome
- Contracts are best practice and aligned with the purpose of Local Government
- Accessing all possible funding

Phase 2 (towards 2024)

Engagement on our approach needs to commence with the community, as will be specified in the Project Communications plan.

Waikato District Council aims to work closely with community to support road mapping

There is a need to clearly define desired service to the community. This is an aspirational target which will inform the short-term approach to some extent but the longer-term opportunity. It is likely this will morph through time in light of changing legislative, commercial, social and environmental factors.

The likelihood of sub-regional projects is rising and WDC can leverage its geographic location to take waste streams as an economic development opportunity.

On 15 July 2020 the following release was made by the Government.

- \$124 million Government investment in recycling infrastructure
- Plans confirmed to increase and expand the waste levy to divert material from landfill, and recycle revenue into resource recovery and waste minimisation

The Government has decided to:

- Level the playing field by expanding the waste levy to cover additional landfill types, including construction and demolition fills (progressively from 1 July 2022). At present the waste levy only applies to municipal landfills that take household waste, with no levy on the remaining almost 90 percent of landfills throughout the country.
- Progressively increase over four years the levy on waste to landfills that takes household waste from the current \$10 per tonne – set in 2009 – to \$60 per tonne. The current plan is for first changes to the levy to take effect from 1 July 2021. Current economic conditions will be considered before implementation timelines are confirmed later this year. (Cabinet final Oct-Nov)
- Collect better data about the waste we are creating, and how we are disposing of it, so ensuring our waste can be better managed.
- Invest the additional revenue from the waste levy in initiatives that support waste reduction, such as building New Zealand-based recycling infrastructure. This includes helping businesses which take construction, commercial and industrial waste materials and re-purposes them, so reduced amounts of waste reach landfill.



Investigate the viability of food waste services in urban areas



Align a standardised recycling services to cover the district as per WMINZ recommendations



Investigate the viability of additional rural services including service area coverage

4.1 Way forward:

Resourcing and project management of the two phases is critical to success. Project Managers will be assigned to both phases and work alongside the steering committee to provide structure and certainty of delivery.

Data Licensing

For some time, local authority waste officers across the Bay of Plenty and Waikato have been working collaboratively on waste issues. As one of a number of collaboratives projects delivered during 2016, a solid waste bylaw template was developed. A key feature of the bylaw is a comprehensive approach to licensing of waste operators.

A key goal of the licensing and data collection system is to access data that is aligned with the national waste data framework. This will mean that data can easily be collated and analysed at a number of levels, without concern about whether categories have been applied in a consistent way, due to a large amount of cross boundary movement of waste, a regional approach would be most effective.

Waste Data

It is widely acknowledged that NZ lacks comprehensive, reliable waste data. Better waste data will allow benchmarking of performance, identify performance improvements, and enable effective planning and better monitoring and reporting.

The Ministry included consultation on waste data proposals as part of its consultation on the Waste Disposal Levy in late 2019. Other work includes a joint licensing and data collection project underway with Waikato and Bay of Plenty councils which aims to collect a full range of waste data.

Good waste data can inform opportunities and challenges, indirectly supports waste minimisation outcomes. It is a vital enabling factor for waste initiatives and provides an evidence-base to measure progress.

Government is strongly encouraged by stakeholders to formally establish a national waste data system, use the already established Waste Data Framework and build on other work in the sector and make reporting mandatory.

National Sword

China used to be the main market for the world's recycling. In July 2017 China announced it was restricting imports of recyclable materials with changes taking effect from the end of 2017. These changes started having a major impact on recycling markets from early 2018, (in particular for grades of paper and plastic collected from kerbside), which now have virtually no market value. It is worth noting that paper typically makes up the largest fraction of material collected for recycling by weight, and so the downturn in the paper markets is having the biggest impact on the costs and viability of recycling in NZ.

Initially, recyclers sought other end markets such as Indonesia, Malaysia and Thailand, but in some cases these markets are not legitimate or may not be able to deal with the same quantities or have also certain restriction on what they will accept and how they will accept it.

Further to this, NZ has signed the Basel Amendment which takes effect in Jan 2021. This involves international requirements (under the Basel Convention) for the trade in plastic waste. The Government is proposing amendments to the Imports and Exports Order to meet this international requirement. Under these amendments, imports and exports of most mixed plastic waste will require a permit.

Waste Education

Waste education is seen as a fundamental to reducing waste to landfill in the long term. WDC funds three programs, Xtreme Zero Waste, Para Kore and Enviroschools, who provide waste and environmental education to all interested schools including Kura, Kindergartens, and Marae in the Waikato District.

Xtreme Zero Waste and Para Kore programme incorporates school based learning as well as site visits to the waste recovery centre at Raglan. Para Kore also support community events in the diversion of waste

Enviroschools is a nationwide programme supported by Toimata Foundation. Early childhood centres and schools commit to a long-term sustainability journey, where tamariki/students connect with and explore the environment, then plan, design and take action in their local places in collaboration with their communities.

The Enviroschools kaupapa is about creating a healthy, peaceful, sustainable world through learning and taking action together. Para Kore works both with Marae, community, and schools. The Para Kore programme works to increase the reuse, recycling and composting of materials thereby helping to reduce the extraction of natural resources and raw materials from Papatūānuku.

Along with the current education programs, council is hoping to introduce behaviour change programs which aim to offer practical skills and advice towards waste minimisation.



Introduce community behaviour change program

Waste Diversion Levels

A performance indicator for solid waste is the amount of waste that is sent to landfill. In Raglan, there has been a high level of diversion of waste going to landfill since 2007, measured in tonnes. Other important indicators will be the diversion services and facilities available that enhance the goal of reducing waste to landfill.

Council Controlled Kerbside Services

Council's position as the primary provider of kerbside waste collection services is not unique in the country. However, it will be a significant factor in the waste minimisation options that Council can consider. Council contract will endeavour to provide appropriate services that are both cost efficient and enable communities to reduce waste and increase diversion.

Resource Recovery

Zero waste and resource recovery are an integral part of our community is the vision set down in the WMMP 2018-2024

The purpose of Resource Recovery Centres is to provide the opportunity to divert waste that may potentially be landfilled. This would happen through processing availability, innovation of materials, repurposing or remaking products, sharing skills and repairing, by being a location for product stewardship programmes.

Council owns three sites, Raglan, Huntly and Te Kauwhata. Raglan is currently running as a resource recovery, Huntly and Te Kauwhata are run as drop-off /transfer stations with very little diversion in place. The northern part of the district is currently in growth and has been identified as a location that would benefit from a Community Recycling Centre [CRC] or Resource Recovery Centre [RRC].



Create a mechanism that allows community groups to access community solid waste grants



Apply for the community grants scheme to access WMFE funding, when appropriate

4.2 Waste Levy

Ministry for the environment Increases and expands the nation waste disposal levy

The Government has confirmed its plans to increase and expand the national waste disposal levy to divert more material from landfill. It will use the revenue gathered from the waste disposal levy for resource recovery and waste minimisation.

The plan includes the following.

- Progressively increasing over four years the levy rate for landfills that take household waste from the current \$10 per tonne – set in 2009 – to \$60 per tonne.
- Expanding the waste levy to cover additional landfill types, including construction and demolition fills. At present the waste levy only applies to municipal landfills that take household waste, with no levy on the remaining almost 90 percent of landfills throughout the country.
- Collecting better data about the waste we are creating, and how we are disposing of it, so our waste can be better managed.
- Investing the additional revenue from the waste levy in initiatives that support waste reduction, such as building New Zealand-based recycling infrastructure. This includes helping businesses such as Green Gorilla, which takes construction, commercial and industrial waste materials and re-purposes them, so they are not thrown away.

The current plan is to phase in the changes over four years as outlined in the table below. The dates will be confirmed later this year.

Table 12: Proposed waste disposal levy increases

LANDFILL CLASS	JULY 2021	JULY 2022	JULY 2023	JULY 2024
Municipal landfill (class 1)	\$20	\$30	\$50	\$60
Construction and demolition fill (class 2)		\$20	\$20	\$30
Managed fill (class 3)			\$10	\$10
Controlled fill (class 4)			\$10	\$10

Increasing and expanding the levy will help recognise the real costs of waste, make it fairer for everyone and incentivise materials reuse and recycling rather than just ‘taking it to the tip’.

The proposed levy increases are likely to have a minimal impact on a family’s weekly budget. The Ministry for the Environment estimates that when fully implemented, the new levy could increase the cost of the weekly council kerbside rubbish bag by about 25c, depending on individual council decisions.

Despite the relatively low impact on households, the Government is mindful that many families are facing difficult economic circumstances at present. Economic conditions will be considered again before implementation timelines are confirmed later this year.

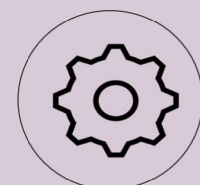
What does this mean for us?

With an increase in the national waste disposal levy, this will increase the current value of our contracts. Provisions are been put in place to ensure the most cost-effective service for our communities.

Part 3: Levels of Service

Levels of Service (LoS) define the form and quality of service that Council provides to the community. They are the balance between what the community wants and what the community is willing to pay for. This section:

- Highlights the current LoS provided by the Council
- Defines the desired LoS for the future
- Outlines performance measures that will be used to track the delivery of the agreed LoS



1. Customer Research and Expectations

Determining levels of service is by our understanding of customer needs. This determined through interaction with the users of our activity.

Delivering services in the most cost-effective manner, and to encourage community involvement. Assists in the setting of service levels. Legislation drives some service levels, like those addressing health and safety considerations.

Customer expectations change over time, so a periodic review of service levels is key.

To understand our customers' needs and expectations better Council undertook a blueprint process. The aim was to provide a high level 'spatial picture' of how the district could progress over the next 30 years:

- address the community's social, economic, and environmental needs
- respond to its regional context.

The blueprint has provided us with an effective and legible tool to move from vision to strategy. Then from strategy to action by setting out specific, prioritised initiatives at the district and local level.

From the consultation there has been the development of nine district-wide themes. They cover the main themes from the district. Table 15 shows the nine themes and a series of associated initiatives. Details of the initiatives relating to our activity is in Table 27 of Part 8: Financial Summary.

Table 13: Blueprint Initiatives

1	Identity	Create a world class Waikato River corridor identity and strengthen Raglan's local character
2	Nature	Protect and support enhancement of the natural environment with re-vegetated biodiversity links and clean waterways
3	Iwi	Build on the Joint Management Agreements and other agreements, celebrate Maori culture, and promote the use of Te Reo
4	Communities	Strengthen, enable and connect local communities and citizens, and support those most in need

5	Growth	Direct cohesive growth outcomes which support all community needs
6	Economy	Support the rural and urban economy, and attract more visitors, entrepreneurs, and employment uses
7	Transport	Leverage value off accessibility, help those disadvantaged by lack of transport options, prepare for future passenger rail
8	Infrastructure	Develop and maintain efficient infrastructure that is environmentally clean and will serve the community well into the future
9	Governance	Devolve some decision making and engage more effectively at a whole of community and Hapuu level.



Upgrade solid waste website, create online look up for residents to identify the available services within their area

2. What are our Strategic and Corporate Goals?

2.1 Management Strategies

The overall management of infrastructure will be driven through strategies aimed at:

- Complying with legislative and strategic requirements;
- Meeting customer expectations and agreed levels of service; and
- Delivering value for money for ratepayers, funding partners and the Council.

The strategic direction of the Solid Waste activity is governed by the Solid Waste Review.

3. Legislation, Industry Guidelines and Strategies that guide our activity

A variety of national legislation regulates our activity. The acts mentioned below are described for convenience by their original title, but all amending acts are considered in accordance with the original act, they were not specified in this text. Go to <http://www.legislation.govt.nz> for the latest information on the Act.

3.1 What legislation influences our activity?

Legislative requirements form the minimum level of service that we must undertake to comply with these. The key legislative requirements that help to determine the levels of service for our are outlined below.



Local Government Act 2002



Hazardous Substance and New Organisms (HSNO) Act 1996, 2015 Amendment Act and HSNO Reforms



Resource Management Act 1991



Health and Safety at Work Act 2015



Litter Act 1979



Climate Change Response (Zero Carbon) Amendment Act 2019



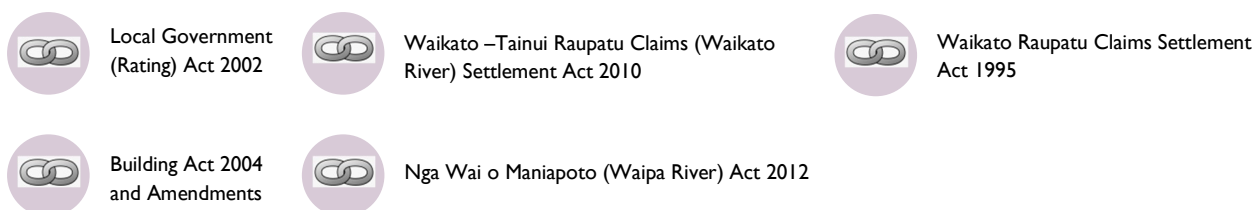
Waste Minimisation Act 2008



The Climate Change Response (Emissions Trading Reform) Amendment Act 2020



Civil Defense Emergency Management Act (CDEM) 2002



3.2 What are the Key Regional Policies?

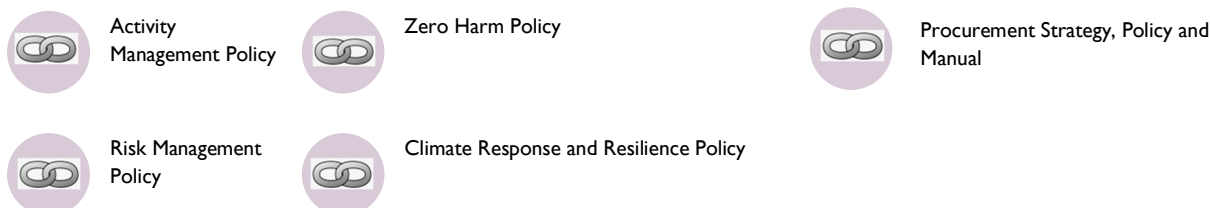


3.3 What key Council Bylaws, Policies, Plans and Strategies that influence our activity?

There are various policies and works prepared in partnership with other agencies. When establishing our programmes we must be aware of these documents.

A list of Policies, Strategies, Bylaws and Plans that impact on the levels of service for delivering our Activity is listed below.

Key Council Policies



Develop a wheelie bin policy

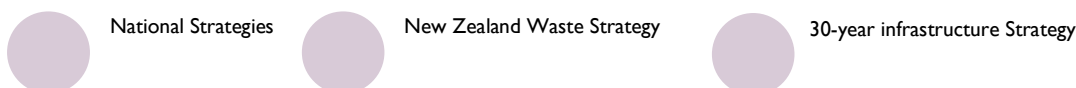


Investigate (and potentially develop) the usefulness of a kerbside collection private roads policy / SOP



Develop public litter bin policy, create map identifying the location and ownership of litter bins

Key Council Strategies



Key Council Bylaws



Waikato Trade Waste and Wastewater Bylaw



Develop Solid Waste bylaw, to enforce initiatives

Key Council Plans



Annual Report



Waste Management & Minimisation Plan



Team Business Plan



Long Term Plan (LTP)



Annual Plan

3.4 Industry Standards and Guidelines

For all New Zealand Standards, refer to www.standards.co.nz.

4. How do the Levels of Service link to Community Outcomes?

Section 10 (1) of the Local Government Act 2002 defines the purpose of local government:

- (a) *To enable democratic local decision-making and action by, and on behalf of, communities; and*
- (b) *To promote the social, economic, environmental, and cultural well-being of communities in the present and for the future.*

The previous values that had been implemented were repealed by section 6(1) of the Local Government (Community Well-being) Amendment Act 2019 (2019 No 17), hence reinstating the four well-beings or as they are best known as community outcomes.

A review of the Levels of Service framework was undertaken to provide a deeper connection between our performance measures and community outcomes. The new Level of Service framework is divided into 5 parts:

1. Community Outcomes
2. Activity Outcomes – how the activity contributes to the community outcomes
3. Levels of Service – the defined quality for a particular service area
4. Service Level Statements – the level of service the customer will experience
5. Performance measures – the metric and target used to measure achievement of the service level

The current Levels of Service that Council is aiming to achieve in the future are shown on the following pages and following a standard asset management hierarchy are grouped into three categories. These are:

1. Strategic – requires significant capital investment to solve problems
2. Tactical – linked to renewal investment
3. Operational – Focus on the operations of our activity

A review of the Level of Service statements and their performance measures were undertaken as part of the framework review and amended to provide a clearer understanding and measurement of the Levels of Service being provided to the community.

It should be noted that the Levels of Service are not intended as a formal customer contract. Rather Council's responsibility is initially to achieve these levels and then to achieve them more cost effectively through a process of improvement where it can be met within current budgets.

5. What are the links between Levels of Service to the Organisation?

The wider organisational context for levels of service is given in the figure below:

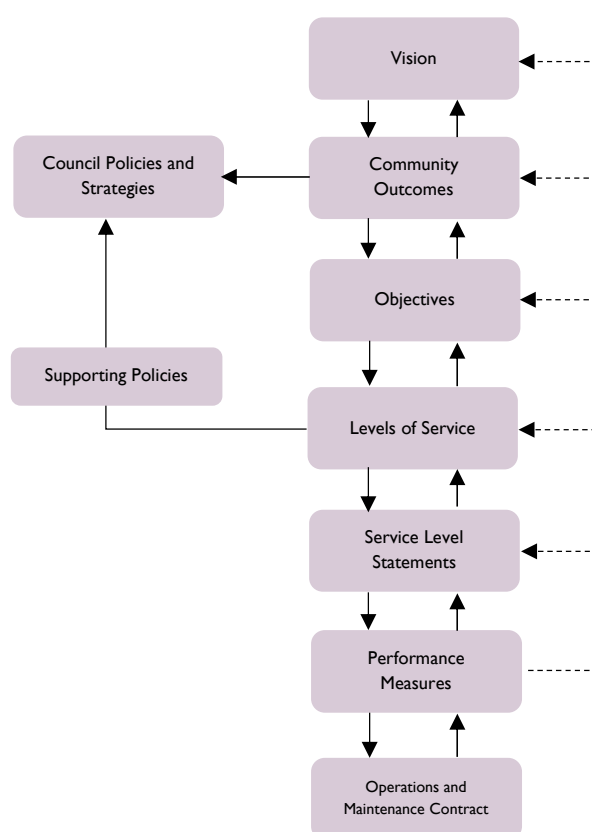












Figure 6: Levels of Service Linkages

Table 14: National, regional, local objectives and linkage to Solid Waste activity levels of service

National Objectives	WMA / Regional Objectives	Local Objectives		Levels of Service	
Community Well-being Outcomes	Waikato Plan	Community Outcomes	WMMP Objectives	WDC Solid Waste Activity Outcomes	Level of Service
Human 	We want a stronger, resilient Waikato region which is responsive to the changing needs of our people and our communities. We want Iwi to have a powerful voice so that Māori aspirations are expressed and integrated through successful joint initiatives.	 Supporting our communities We consider the well-being of all our people	Waste management practices manage social, cultural, spiritual, economic, health and environmental impacts of waste.	Provide solid waste service that; encourages waste reduction, avoidance, and diversion outcomes for our community.	Education and Behaviour Change
					Zero Harm – Critical Risks
Social 	We want the Waikato to be nationally and internationally connected so we can continue to contribute to New Zealand and the world.	 Working together with you Collectively focussed on the right things	Our communities are actively engaging in waste avoidance and minimisation and becoming “Zero Waste communities”.	Facilitating waste minimisation and behaviour change programs to support communities and stake holders to achieve “zero waste”.	Solid Waste Information
					Customer Satisfaction
					Event Waste Minimisation
Natural 	We want our land, water and natural environment and heritage places to be recognised as precious and finite.	 Sustaining our environment We are a community that believes in environmental sustainability	Partnerships with others to achieve efficient and sustainable waste minimisation and management, including joint working and co-operation with territorial and regional councils, and central government.	To ensure that our waste and recycling services are efficient and effective and protect our natural environment.	Circular Economy
					Compliance
Financial 	Advancing Regional Economic Development: Waikato Means Business.	 Building our economy We attract diverse business, creating jobs and opportunities	Development of community facilities and key infrastructure which provide social and economic opportunities for our communities.	Solid waste services provide employment for residents and revenue for our district.	Community Grants
					Financial
Physical 	We want a region with the right infrastructure in the right place, at the right time, to enable us to succeed and prosper.	 Providing value for money Residents and ratepayers get value for money	Waste diversion is increasing and waste to landfill is decreasing including Council's waste generating activities.	Suitable Solid waste Services and infrastructure is available, well maintained, and provides value for money for community.	Infrastructure Condition
					Services and Facilities

6. Current and Target Levels of Service

We propose the following current and new approved Levels of Service outlined in the table below. These have been developed to give a clear link to the reinstated community outcomes. These have been confirmed following council consultation through the Long-Term Plan 2021/31 process.

6.1 Strategic Level of Service Statements

- Developed to deliver on the major challenges that our district faces.
- Relate to the quantity or capacity of infrastructure, that is required to deliver on strategic outcomes for the community
- Need significant capital investment to solve problems.

Within our activity there is strong strategic direction with the development of many strategies and policies. Development of the level of service frameworks and performance measures were defined. Outlined in the table below:

Table 15: Strategic Levels of Service

Level of Service	Service Level Statement	Performance Metric	Target
Circular Economy	Solid waste initiatives encourage and promote a circular economy for the district	Number of media releases per quarter supporting circular economy and/or WMMP initiatives.	1
Education and Behaviour Change	Community wide zero waste behaviour change programs	Number of unique classrooms that receive zero waste education programs in the previous year. Xtreme Zero Waste reports.	120
Event Waste Minimisation	All Events in WDC follow Zero Waste Management Guidelines	Percentage of events booked through council that receive support through Zero Waste information pack.	100%
		Number of Zero Waste event workshops per year.	4
		Percentage of events booked through Council over '50 people' on their Zero Waste Plan obligations audited.	10%
Financial	Encourage the development of local enterprise by utilising social procurement methods	Percentage of new waste recovery activities are that are community driven.	80%
Zero Harm – Critical Risks	All work contracted works comply with Council's Zero Harm Commitment	Percentage of contractors report monthly on Health and Safety.	100%
		Percentage of contractors that have an approved contract specific Health and Safety Plan.	100%
		Percentage of contractors that have an approved and working Traffic Management Plan.	100%

6.2 Tactical Level of Service Statements

- Focus on maintaining or improving the condition of the existing Solid Waste assets
- They relate to renewal programmes of work,
- They link to renewal investment.

Table 16: Tactical Levels of Service

Level of Service	Service Level Statement	Performance Metric	Target
Customer Satisfaction	Customer satisfaction levels meet current performance targets	Percentage of customers satisfied with waste and collection services as obtained from resident satisfaction survey.	75%
Infrastructure Condition	Solid Waste assets condition is maintained , asset consumption is stabilised, and asset stewardship is maintained	Proportion of solid waste assets in poor and very poor condition.	0.02
Community Grants	Provide a Grants Scheme for waste minimisation projects/initiatives through the WMMP	Percentage of allocated budget used within community grant programme	50% [50 y1, 75 y2, 90y3]

6.3 Operational Level of Service Statements

- Focus on the operations and maintenance of our activity.

Table 17: Operational Levels of Service

Level of Service	Service Level Statement	Performance Metric	Target
Services and Facilities	Increase availability to service and facilities district wide	Number of new waste diversion services within the district	2
		Distance within which non-served areas have available services and facilities (WDC or otherwise.	15km
Compliance	Meet annual targets set within WMMP.	Measured (using internal records) annually through the action plans set within WMMP.	30% [30y1, 60y2, 90y3]
Solid Waste Information	Information on Councils solid waste services and waste minimisation is available to communities	Percentage of time website is available and up to date providing access to solid waste services information.	100%

7. Levels of Service and how the Council will measure them.

Identification of performance measures and targets have been completed.

The performance measures fall into four categories:

- **Customer performance measures** – allow the community to measure performance and are found in public facing documents, such as the Long-Term Plan.
- **Business performance measures** – allow us to measure performance of our activities in relation and are found in internal documents, such as business plans.
- **Process performance measures** – are used in the day-to-day operation of an activity.
- **Financial Measures** are used to monitor the financial performance of a group, business unit, project and process where financial targets or budgets have been set.

7.1 Network design

Provision of the Solid Waste Activity within the community gives us a sign of how adequate the waste service and facilities are. The adequacy is based on the given population among other factors.

An important factor is the spread across the urban environment. It is critical:

- to ensure that people have reasonable access to a waste service or facility that offers waste diversion
- develop a community culture of waste reduction *through zero waste education and behaviour change programs*

A variety of reasonably accessible solid waste services or facilities accompanied by a comprehensive zero waste education within schools and community including appropriate communication along with behaviour change programs is available district wide. Achieving the goal of waste reduction will in turn benefit the both the environment and the community with a greater sense of “liveability”.

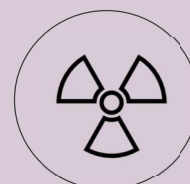
Distribution of future Solid Waste services and facilities will be based on the following guidelines:

Waste service and facilities are predominantly located throughout the district, based on both small communities that have a domain as their hub. E.g. Onewhero, Taupiri and Tamahere. Also, at the larger towns of Tuakau, Huntly, Ngaruawahia and Raglan.

- Kerbside collection is offered throughout the district predominately within urban, this service involves placing your refuse and recycling on the kerbside on a specified day to be collected. for the community this is the most convenient service provided; and has limited availability.
- Transfer stations are located within major towns of our district, these facilitates serve the rural communities that do not receive a kerbside collection service. These facilitates operate by privately transporting your refuse and recycling and sorting it accordingly.
- Recycling drop-off centre can be found within rural farmland areas and give the surrounding community the ability to dispose of recycling. Drop-off centres work by privately transporting your recyclables and sorting them accordingly.
- Closed landfill are historically active landfills; that have been decommissioned due to reaching capacity or the end of the resource consent. These sites will continue to be monitored by council staff.

Part 4: Risk Management Planning

The purpose of risk management is to identify the risks associated with our activity and our assets. This requires considering potential risks from many perspectives, which may include financial, operational, organisational and public health and safety considerations to name a few.



1. Overview

Risk is the uncertainty on objectives. Risk events are events which may compromise the delivery of the organisation's strategic objectives.

The main risk to asset management planning is the inability to deliver on agreed Levels of Service due to unplanned events and situations. This section outlines Waikato District Council's risk management strategy and process. It identifies negative effects and hazards linked to the activity and infrastructure assets. It also identifies critical assets and our approach to emergency response and zero harm.

2. How are critical assets defined?

Critical assets are defined as those assets that are likely to have more significant consequences than other assets if they fail. Failure of critical assets has the potential to have significant:

- economic
- social
- environmental impacts
- for the community and Council.

Critical assets are essential items to our activity.

2.1 Asset Criticality Criteria

Asset criticality is rated from 1 to 5 as outlined in Table 18.

Table 18 - Asset Criticality Criteria

Criticality Rating	Asset Criticality	Consequence of failure
5	High The asset serves the most important district-wide function for this network or asset portfolio and is essential to ongoing operation (eg single water treatment plant, a single bridge link,	Catastrophic Failure could result in: <ul style="list-style-type: none"> • Essential services unavailable (>1 day) • Life threatening injury/fatality (Severity 1) • Financial exposure per annum ≥ \$1.5M

Criticality Rating	Asset Criticality	Consequence of failure
	regionally significant park, Council HQ building, etc).	<ul style="list-style-type: none"> Sustained high profile adverse national or local media campaign or irreversible loss of community confidence Breach of policy, process or legislation requiring external investigation and resulting in significant tangible loss Significant environmental disaster causing widespread environmental degradation/damage and/or irreversible pollution or affecting future generations Significant prolonged effect to service levels/business function
4	Medium-High The asset serves a major function within the network (eg. an arterial road, large trunk main, one of a small number of water reservoirs etc).	Major Failure could result in: <ul style="list-style-type: none"> Essential services unavailable (<1 day), non-essential services unavailable (<7 days) A WorkSafe NZ notifiable injury or illness (Severity 2) Financial exposure per annum ≥ \$500k but <\$1.5M High profile adverse national or local media attention or loss of confidence from significant portion of community sector Breach of policy, process or legislation requiring external investigation and resulting in a tangible loss Major but localised environmental degradation/damage/pollution with long term effects or major off-site release Major but short-term effects to service levels/business function
3	Medium The asset serves an important suburban function (eg. a Collector road, minor pumping station, distribution main, public pool, park, housing or community building).	Moderate Failure could result in: <ul style="list-style-type: none"> Essential services unavailable (<4hrs), non-essential services unavailable (<3 days) Lost Time Injury (Severity 4) Financial exposure per annum ≥ \$100k but < \$500k Adverse local media coverage/business practice resulting in complaints/prolonged unresolved dispute requiring legal oversight Breach of policy, process or legislation requiring internal investigation including moderate treatment for the purpose of damage control Moderate localised environmental degradation/damage/ (medium term effect) or contained off site release Moderate short-term effects to service levels/business function
2	Low-Medium	Minor

Criticality Rating	Asset Criticality	Consequence of failure
	The asset serves a primarily local function (eg a local road, pipe serving several streets, small community facility).	<p>Failure could result in:</p> <ul style="list-style-type: none"> Non-essential services impacted (<1 day) Restricted work injury or medical treatment injury or potential for medical treatment is required (Severity 5) Financial exposure per annum \geq \$10k but < \$100k Minor adverse local media coverage/social media comment leading to localised complaints Breach of policy, process or legislation requiring internal investigation requiring minor treatment for the purpose of damage control Minor localised environmental damage/pollution Minor effects to daily business function
I	<p>Low</p> <p>The asset serves a minor local function (e.g. a water pipe serving a single street, small local reserve, etc).</p>	<p>Insignificant</p> <p>Failure could result in:</p> <ul style="list-style-type: none"> No tangible impact on services to customer (monitoring maybe required) First aid injury or potential for a person to seek first aid (Severity 6) Financial exposure per annum < \$10k Social media comment/questions but no subsequent public interest or event affecting an individual or small group Minor breach of policy or process requiring no investigation and only an approval or variance to prevent any damage control requirement Negligible localised environmental damage Negligible effects to daily business function

2.2 What are our critical assets?

No formal criticality assessment has been carried out; however, Council considers that the majority of solid waste assets are of minor critical importance and assets outlined below are considered to be critical assets.

Critical Assets

Council does not own any assets identified as critical within the solid waste activity; however the solid waste activity is considered critical. In the scenario of a natural disaster affecting the solid waste levels of service, replacement services would be of great importance in terms of maintaining public health.

The continuation of kerbside services is deemed to be an essential activity and can be conducted under CDEM. The recent COVID-19 Public Health Response Act 2020 considers Solid Waste as an essential service for the health and wellbeing of our community, and environment. From the recent global pandemic we have learnt how to adjust the delivery of our activity for resilience.

NOTE: Further information on these assets is provided in Part 2: Activity Overview.

3. What is the Risk Management Framework?

Waikato District Council has adopted a corporate level risk framework using the AS/NZS ISO 31000:2009 Risk Management – Principles & Guidelines as a basis.

The objectives of the Council’s Risk Management framework are to develop a comprehensive and organised approach to risk management across the Waikato District Council, and to integrate risk management activities into business, strategy, preparation, and core operations to ensure that key risks are defined, controlled and communicated.

Benefits from applying effective risk management include:

- Identifying and managing existing and new risks in a planned and coordinated manner;
- Developing a “risk aware” culture that encourages all staff to identify risks and associated opportunities as part of their business as usual activities; and
- Improved achievement of Council’s vision, values and strategies – with the Executive Team having an active and informed knowledge of the range and priority of the risks that need to be managed by the organisation.

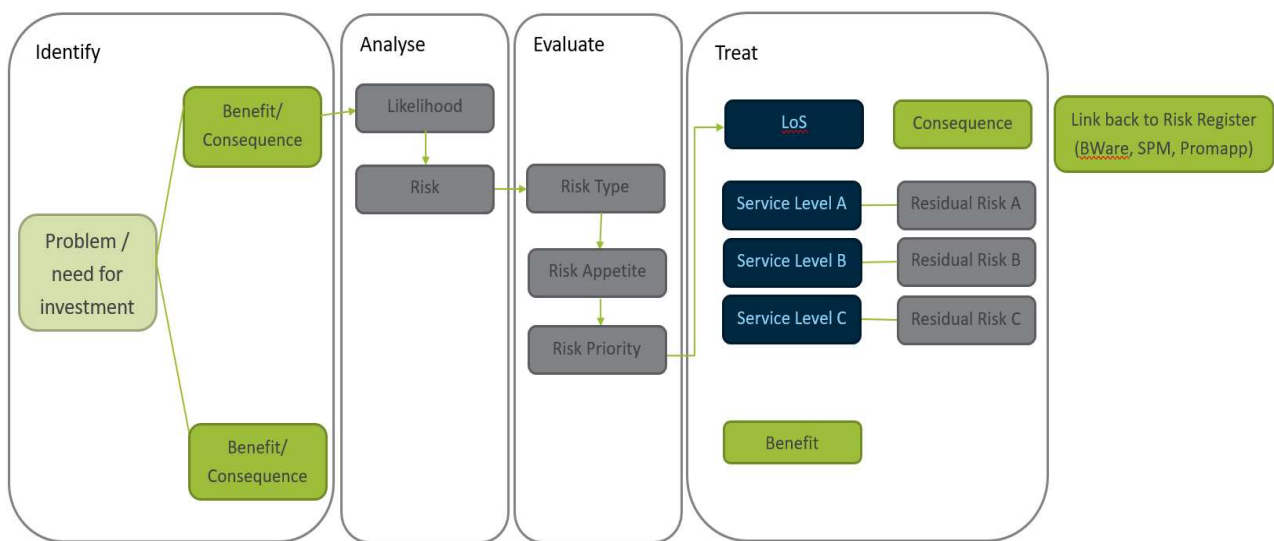


Figure 7: AMP approach to Programme Development and Investment Prioritisation using a Risk Management Framework

3.1 Risk Management Policy

The Waikato District Council Risk Management Policy and associated Risk Management Framework were originally adopted in March 2014. This policy describes the systems that the Council has in place to identify and manage risks which could prevent the Council from achieving its strategic objectives. The policy was reviewed and updated in March 2018.

The Council’s approach to risk management, the risk management process, and the main risk reporting procedures are set out in detail in the Risk Management Framework.

3.2 What is our Risk Appetite?

The Council have documented the levels of risk they will tolerate in its Risk Appetite Statement, published 14 September 2020.

Risk appetite is the conscious decision about which risks, and how much of each, the organisation is willing to take on as it delivers on the vision of liveable, thriving, and connected communities. Councils risk appetite reflects our:

- business model,
- our risk capacity
- our internal risk management capabilities
- culture

Our appetite for risk is influenced by several factors including (but not limited to):

- the business environment
- our people
- our community needs and wants
- our business systems and our policies

Having a clearly defined risk appetite gives clarity to the wider organisation about the nature and degree of risks that can be taken with our:

- strategic
- operational
- project work

Defining risk appetite is intimately linked to defining the overall strategy of an organisation and is therefore a task for the Executive Leadership Team and Council through the Audit & Risk Committee.

Benefits of Communicating Organisational Risk Appetite

Defining and articulating risk appetite has a positive influence on our culture and behaviour. It gives us an improved understanding of what risk management means to our roles. It also helps us to apply effective risk management practices.

Risk appetite is a key component of effectively communicating risk expectations and ensuring a common approach across the three identified 'lines of defence':

- those managing risk
- those setting and overseeing the risk management practices
- risk assurance providers

Discrepancies between the Council's agreed risk appetite and residual risk levels determine whether more controls are required to appropriately manage a risk. Or whether there is space for more opportunity to be sought.

Summary of Risk Appetite

Council is willing to take well defined risks at a moderate to high level where it will result in the achievement of strategic objectives specifically in:

- projects
- growth
- financial management
- internal culture areas

Council understands that the successful achievement of its objectives is significantly supported by its perceived reputation with its customers. Accordingly, Council is not willing to accept risks that would adversely impact its reputation, nor where there is employee or customer wellbeing is compromised.

3.3 What is the Hazard and Risk Management standard?

Councils Hazard and Risk Management Standard provides guidance on managing health and safety risks. Minimising or mitigating Health and Safety Hazards and Risks is essential to making our workplace safer.

From an Asset Management perspective, Managers and Team Leaders are responsible for:



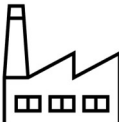
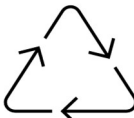
- Assisting with identifying, assessing, and managing hazards
- Reporting and providing assurance to the Executive Leadership Team on the outcome of hazard and risk management activities
- Ensuring that hazards and their risks in their area of control are effectively managed with prioritised corrective or mitigated action aimed at preventing events and harm
- Ensuring all hazards are reported, and that systems are in place to notify key stakeholders within specified timeframes
- Ensuring that adequate health and safety risk management activity records are retained and filed
- Ensuring that workers are given the opportunity to participate in and are consulted as part of the hazard identification and risk control process;
- Allocating appropriate resources to identify and manage hazards and risks;
- Ensuring workers are provided with information about hazards and controls that are necessary to keep themselves and other safe
- Ensuring personal protective equipment (PPE) is available and worn by workers

Critical Safety Risks are activities regularly undertaken by a Person Conducting a Business or Undertaking (PCBU) that if not adequately controlled could result in a serious injury or fatality. For example working in a confined space or working at height. These are defined separately in the Critical Safety Risk Management Standard. The list of activities classified as Critical Safety Risks are:



Critical Safety Risks Relevant to our Assets are provided in the table below:

Table 19 - Critical Safety risks for the Solid Waste activity

Kerbside Collection	LANDFILLS	TRANSFER STATIONS	PUMP STATIONS
			
Critical Safety Risk: Medium	Critical Safety Risk: Medium-High	Critical Safety Risk: High	Critical Safety Risk: High
Related Risks:	Related Risks:	Related Risks:	Related Risks:
On Road Driving	Asbestos	Asbestos	Asbestos
Hazardous Substances	Hazardous Substances	Hazardous Substances	Hazardous Substances
Working on or Near Roads	Working at Height	Working at Height	Working at Height
	On-Road Driving	On-Road Driving	On-Road Driving
		Working with Energy	Working with Energy

It is important to note Solid Waste is a service that is provided through contractors, this means council staff are not directly impacted by operation Health and Safety risks. However, we are aware of the health and safety risks associated with the delivery of the solid waste services.

3.4 Risk Management Process

The Risk Management Process for management of council's assets focusses on ensuring that risks are identified, and treatment plans are in place for all associated activities. This enables the development of activity management programmes that address risk to align with Council's risk appetite. Figure 8 provides a guide on how risk is balanced against Levels of Service and Cost of Service. This is to ensure that the appropriate:

- treatment,
- maintenance,
- renewal plans

are achieved for best value for money outcomes:

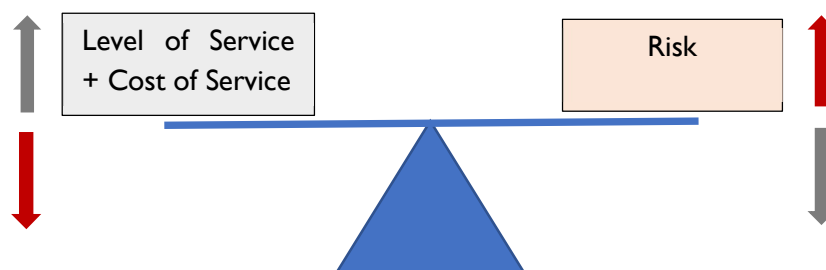
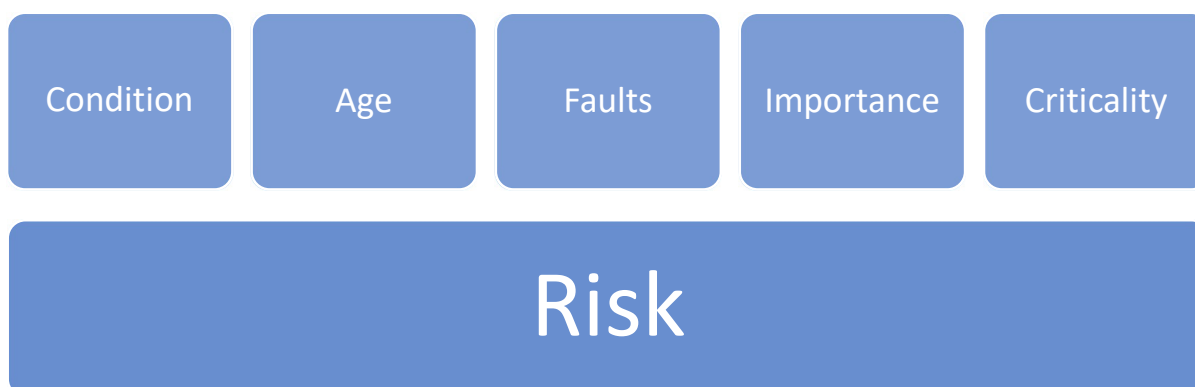


Figure 8 - Balancing risk vs levels of service

The data management processes through SPM enable the consideration of many risk factors to better understand the condition and needs of the asset components. At a high level, this includes the following:



As an example of what this will achieve, the programmes proposed in Part 8 of this AMP include details of the condition and risk rating to enable clear understanding of the priority needs for each activity.

Risk Monitoring

Where risks are not mitigated through investment, the community assets team follow the following risk monitoring process to continually check for change and action accordingly.

Table 20: Risk Monitoring and Review Requirements

Report to	Period	Content
Council	Annually (start of financial year)	Report to council on top 10 strategic level risks facing the organisation. Full status report with information on current or revised strategic level risk profile, treatment plans in place, effectiveness of treatment plans, audit history of treatment plans, risk management tools
	6-monthly	Report to council on trends of top 10 strategic risks, any changes to strategic risk profile, management of risk profile, any emerging risks
Audit and Risk Committee	Quarterly	Top 10 strategic risks, key operational and project risks . Effectiveness of risk treatment plans, risk trends, emerging risks.
Executive Leadership Team	Monthly	Overview of strategic risk profile, key operational and project risks . Effectiveness and priority of risk treatment plans,

		risk trends, new and emerging risks, organisational risk activity (engagement).
Business Units	As part of regular team meetings	Operational risk should form part of team meetings to review and monitor the management of identified risks. Discuss and review the effectiveness of treatment plans along with any emerging risks. Where necessary, decisions should be made what risks may need to be escalated for ELT knowledge.
Project Teams	As part of regular team meetings	Project risk management should form part of project team meetings to review and monitor the management of identified risks. Discuss and review any emerging risks and report / review status of risks as project work progresses. Where necessary, decisions should be made what risks may need to be escalated for ELT / project Portfolio Owners knowledge.

4. Risk Registers

4.1 What are our Corporate Risks?

Within Council the Executive Leadership Team maintain a Strategic Risk Register which contains critical business level risks that have effect across the whole business. This level of risk is also monitored by the Audit and Risk Committee. Treatments and actions associated with these risks are managed in Promapp and progress is reported on a quarterly basis. Appendix A details the strategic risks.

4.2 What are our Activity Management Risks?

The risk registers for the current and future solid waste activities are recorded in Promapp (risk module) and have been developed in consultation with key staff.

The risk registers will be reviewed annually, however there will be a requirement by:

- risk managers (*people assigned overall responsibility for each risk*) and
- treatment owners (*people or persons assigned responsibility to confirm treatments are operational and effective*)

To ensure proactive risk management is being conducted. The frequency of these actions for each risk is specified and managed via the Promapp risk module.

Treatments and actions are managed in Promapp. Actions that are required to achieve the desired improvements are indicated along with how progress on these actions will be monitored and reported. Where applicable, action tasks detail timeframes for achievement, and responsibility for these actions.

For most registers there is some work required to match the risks to mitigation measures and then specific actions. The latter two are listed under the treatment field in Promapp.

5. What are our risk responses?

There is a suite of response strategies for the potential risks identified above, they include avoiding, exploiting, transferring / sharing, reducing, or accepting the risk. These response strategies are summaries in Table 21 below.

Table 21: Risk Responses

Response	Definitions
Avoid	To terminate exposure to a potential risk, generally the organisation needs to exit the activity which gives rise to the risk, or not start an activity which would give rise to the risk.
Exploit	For risks which present an opportunity for Waikato District Council, a legitimate approach is to increase Waikato District Council's exposure to the risk; generally this would represent a situation where Waikato District Council can gain an advantage through their management of this risk.
Transfer / Share	Risk transfer is getting another party to undertake the activity.
Reduce	For risks which present a threat to Waikato District Council, but which cannot be avoided, the development of additional controls or mitigation strategies
Accept	Accepting the risk by informed decision. This means continuing with the business activity / project as currently defined, aware of how much risk is involved, monitoring changes in overall risk is involved, monitoring changes in overall risk, and ensuring appropriate levels of contingency at the Waikato District Council level.

6. How does Council respond in an Emergency?

6.1 Civil Defence Emergency Management

Civil defence emergency management is the collective resilience of our Council, our partners and stakeholders, and our communities to manage a disaster in our district.

How well we prepare ourselves and understand the likelihood and consequence of our hazards will determine how well we respond and recover from any event. CDEM is Council business. All of the planning, management and activities that we do as part of our business-as-usual contributes to how we will manage an impact of any size on our assets, and provide support to our communities when normal services are disrupted.

In an emergency of any scale we will have a specialist team in our Emergency Operations Centre (EOC) coordinating and prioritising Council's response to the areas of impact within our community. Council staff will be working collectively with stakeholders to coordinate emergency response through the event, and then to get our organisation, services and community back up and running.

We have developed a Local Civil Defence Emergency Management Plan that outlines specific activities and arrangements for the Waikato District.

Emergency Management of our Assets is managed through the following arrangements:

- Kerbside Collection
- Transfer Stations
- Recycling Dropoff Centres

6.2 Business Continuity Plans

In the event of an emergency we may not be able to maintain a full level of service due to the disruption that we could experience. Business continuity planning supports Council to maintain a minimum service level to our community and stakeholders during and following an emergency.

The Business Continuity Plan (BCP) for us is located within the document management system (ECM), and speaks on our activity under civil defense declaration or other emergencies.

Core Services for our operations are:

1. Essential services (must keep operating)

- Kerbside refuse
- Class I Landfill

2. Services which ideally need to be continued.

- Kerbside Recycling
- Transfer Stations Access
- Contract / Invoice Payments
- Council contact [CRM response]

3. Non-Essential Services.

- Education
- Behaviour change programs
- Face to face contract meetings

6.3 Resilience

The National Infrastructure Unit defines resilient infrastructure as

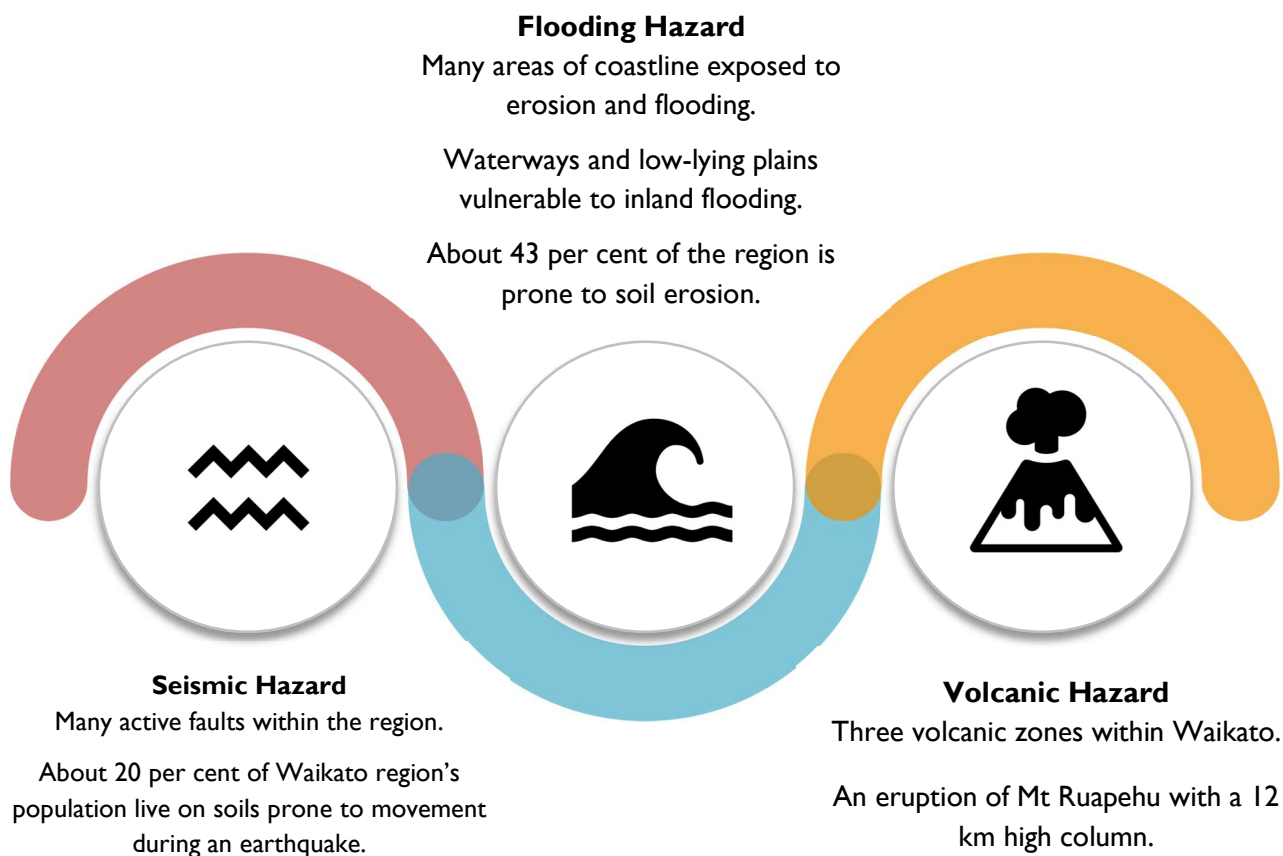
“infrastructure that is able to deal with significant disruption and changing circumstances such as natural hazards and shock events or events which evolve over time such as changing demographics.”

The focus for resilience within this plan will be on the ability to provide essential services following a high consequence event such as a natural disaster. Resilience of critical assets is particularly important for continuation of service delivery.

Organisational aspects of resilience are outlined in the previous sections. Technical aspects of resilience are:

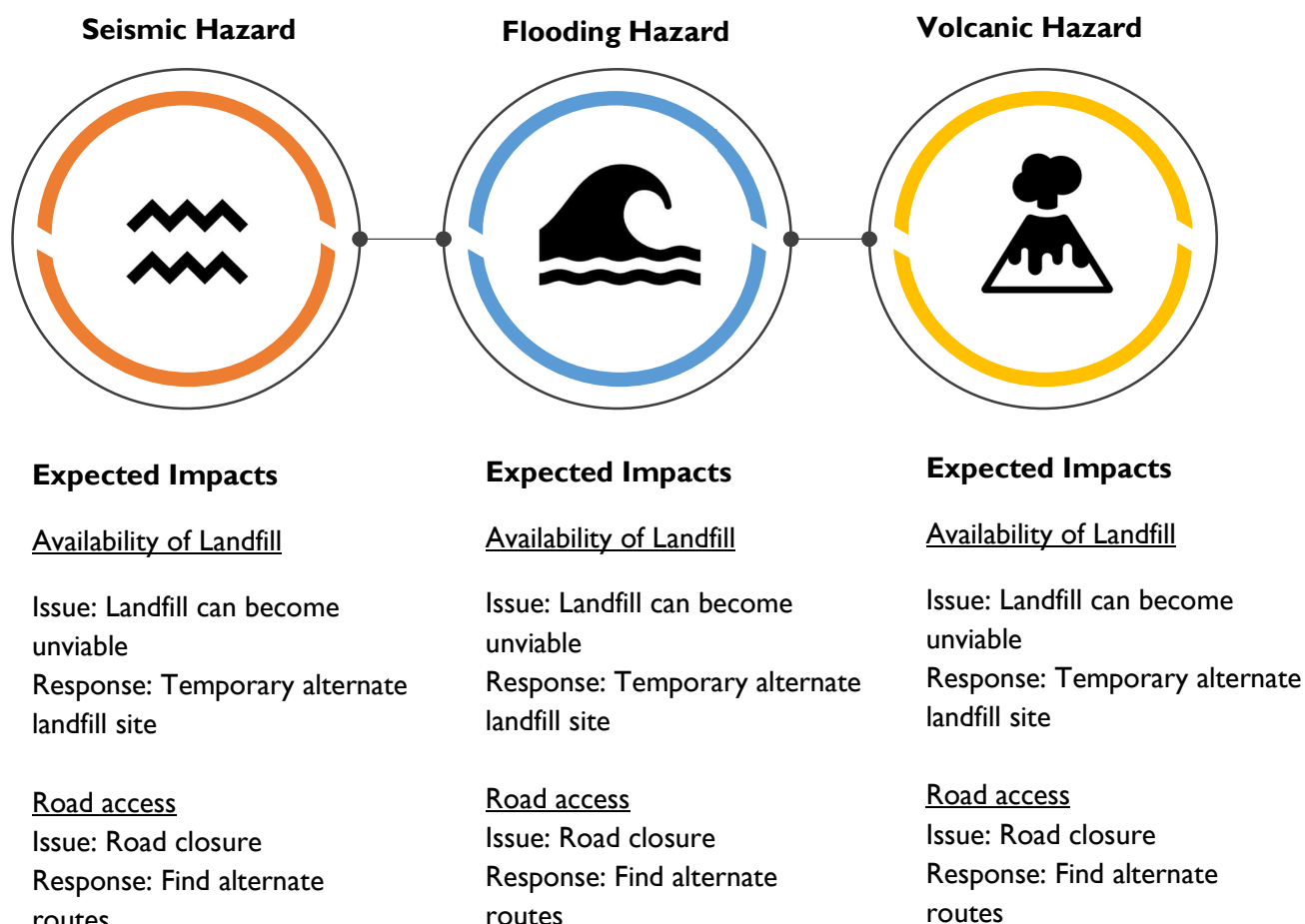
- **Robustness/Resistance** - The strength or the ability of elements, systems, and other units of analysis, to withstand a given level of stress or demand without suffering degradation or loss of function.
- **Redundancy** - The extent to which elements, systems, or other infrastructure units exist that are substitutable, i.e. capable of satisfying functional requirements in the event of disruption, degradation, or loss of functionality.
- **Reliability** - The extent to which the infrastructure components are inherently designed to operate under a range of conditions and hence mitigate damage or loss from an event.

The events and hazards considered relevant to the district are those outlined below:



Build emergency resilience into facilities and services

The following sections further discuss the hazards and assess the resulting impacts on critical assets and potential mitigation measures.



6.4 Other Natural Hazards (Landslides, Wind, Snow, Lightning etc.) Expected Impacts

Availability of Landfill

Issue: Landfill can become unviable
 Response: Temporary alternate landfill site

Road access

Issue: Road closure
 Response: Find alternate routes

7. Risk Insurance

7.1 What insurance is held for our activity?

Council insures assets as part of the Local Authorities Shared Services (LASS) group. This is outlined in the Local Authorities Shared Services Manual 2015-16. The type and level of insurance cover taken is dependent on the level of risk associated with the activity. Insurance policies taken out by the Council cover infrastructural assets above and below ground. Types of cover include property and business interruption such as material damage because of fire, storm, explosion, flooding etc., and the consequential loss of profits from that event. Council employees are also covered for liability risks of a work-related injury that is not covered under ACC.

All contractors who undertake work for the Council are required to show that they hold adequate insurance for Public Liability, Professional Indemnity and Contract Works. The level of insurance cover for the contractor is dependent on the nature of work and associated risk exposure.

Under the insurance programme, Council has the following insurance policies:

- Material Damage – Excluding Fire
- Material Damage - Fire
- Business Interruption
- Boiler Explosion
- Material Damage - Infrastructure
- Forestry
- Aviation Airport Owners and Operators Liability
- Employers Liability
- Statutory Liability
- Crime
- Personal Accident
- Marine Hull
- Motor Vehicle
- General Liability and Professional Indemnity – RiskPool
- Cyber Liability

The underground assets are only insured for material damage because of a natural catastrophe including Earthquake, Natural Landslip, Flood, Tsunami, Tornado, Windstorm, Volcanic Eruption, Hydrothermal & Geothermal activity and Subterranean Fire and Business Interruption

Part 5: Managing Growth

The ability to predict future demand for services enables Council to plan 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 an overview of the key drivers of demand the demand management measures Council has planned to put in place.



1. What are Growth and Demand Implications?

The following defines the implications of both growth and demand regarding the ongoing function/delivery of asset management.

Growth - In relation to the asset management activities, growth mainly refers to the growth in population or areas that are growing due to new residential or commercial developments, e.g., new connections due to additional properties.

These changes increase the demand for services and assets, which essentially leads to requirements around transport, three waters, open space, and public facilities. Growth can also relate to increases in commercial/industrial activities, particularly if they are reliant on the above.

Demand – Demand for services can be influenced by several factors besides growth. Climate change, type of developments (e.g., commercial development will generally have greater requirements), customer expectations and trends (e.g., roading connections, inefficient water usage versus environmental awareness, seasonal demand, and household technology) also have implications for the level of service.

Growth and demand planning highlights areas within the activity that are likely to face long term pressures from changes in the status quo. The key drivers that are likely to change the operating landscape for the activity include:

- Population growth and demographics
- Geographical Demand
- Property utilisation
- Service delivery Requirements
- Community expectations and external Issues
- Requirements of legislation
- Climate Change

1.1 Waikato District Council's Vision

Liveable, Thriving and Connected Communities.

Our Vision and Community Outcomes set the goals we want to achieve in everything we do.

The Activity Management Plan (AMP) will enable the vision to be achieved through effective long-term planning.

1.2 Waikato 2070

The Waikato District Council Growth & Economic Development Strategy (Waikato 2070) was developed to provide guidance on appropriate growth and economic development that will support the wellbeing of the district. The document was prepared using the Special Consultative Procedure, Section 83, of the Local Government Act (2002) and adopted by Council in May 2020.

Waikato 2070 is a guiding document that the Council uses to inform how, where and when growth occurs in the district over the next 50-years. The growth indicated in Waikato 2070 has been informed by in-depth analysis and combines economic, community and environmental objectives to create liveable, thriving, and connected communities. The growth direction within Waikato 2070 will ultimately inform long-term planning and therefore affect social, cultural, economic, and environmental wellbeing.

The strategy takes a broad and inclusive approach to growth over the long term, considering its economic, social, environmental, cultural, and physical dimensions. Waikato 2070 is concerned with the growth and development of communities throughout the district, including rural and urban environments.

Also, Waikato 2070 informs the Council of the timing of release for each growth cell identified in the development plans and therefore provides an indication of what and where infrastructure and services will be required to ensure growth cells go online in a timely manner. Therefore, Waikato 2070 feeds into and informs the:

- Activity Management Plans
- Long-Term Plan
- 30-year Infrastructure Strategy

to inform the need and timing for infrastructure and services throughout the district.

Growth cells identified in Waikato 2070 in each of the town or village development plans are in varying planning stages and fall under one or more of the following:

- Zoning is in place for development in the Operative District Plan,
- Area/s are proposed for a change in zoning in the Proposed District Plan,
- Area/s have submission/s seeking a change in zoning on the Proposed District Plan,
- The area is not yet identified in either the Operative District Plan or the Proposed District Plan.

1.3 Priority Focus Areas and Outcomes

As part of the development of the Waikato District Council Growth and Economic Strategy (Waikato 2070¹) four key themes were identified as priority focus areas they are:

- Growing our Communities
- Building our Businesses
- Embracing our Identity
- Empowering our People

These focus areas influence the Council's aspiration to achieve the following outcomes:

- Support growth in targeted areas as identified in the Waikato 2070;
- Maintain and manage existing assets, in accordance with statutory and regulatory requirements;
- Modernise and upgrade infrastructure, where it is prudent to do so;
- Ensure services and infrastructure are provided for and operate in a sustainable manner, to support the four community well-beings (Local Government Act 2002) economic, environmental, social and cultural;
- Ensure that assets are managed in alignment with planning, acquisition, operation, maintenance, renewal and disposal of assets;
- Achieve more within existing budgets by continuously looking at more innovative and efficient methods to deliver services;
- Move the cost of providing a particular service to those who use them, i.e. user pays.

¹ This has been subject to a Special Consultative Procedure under the Local Government Act 2002.

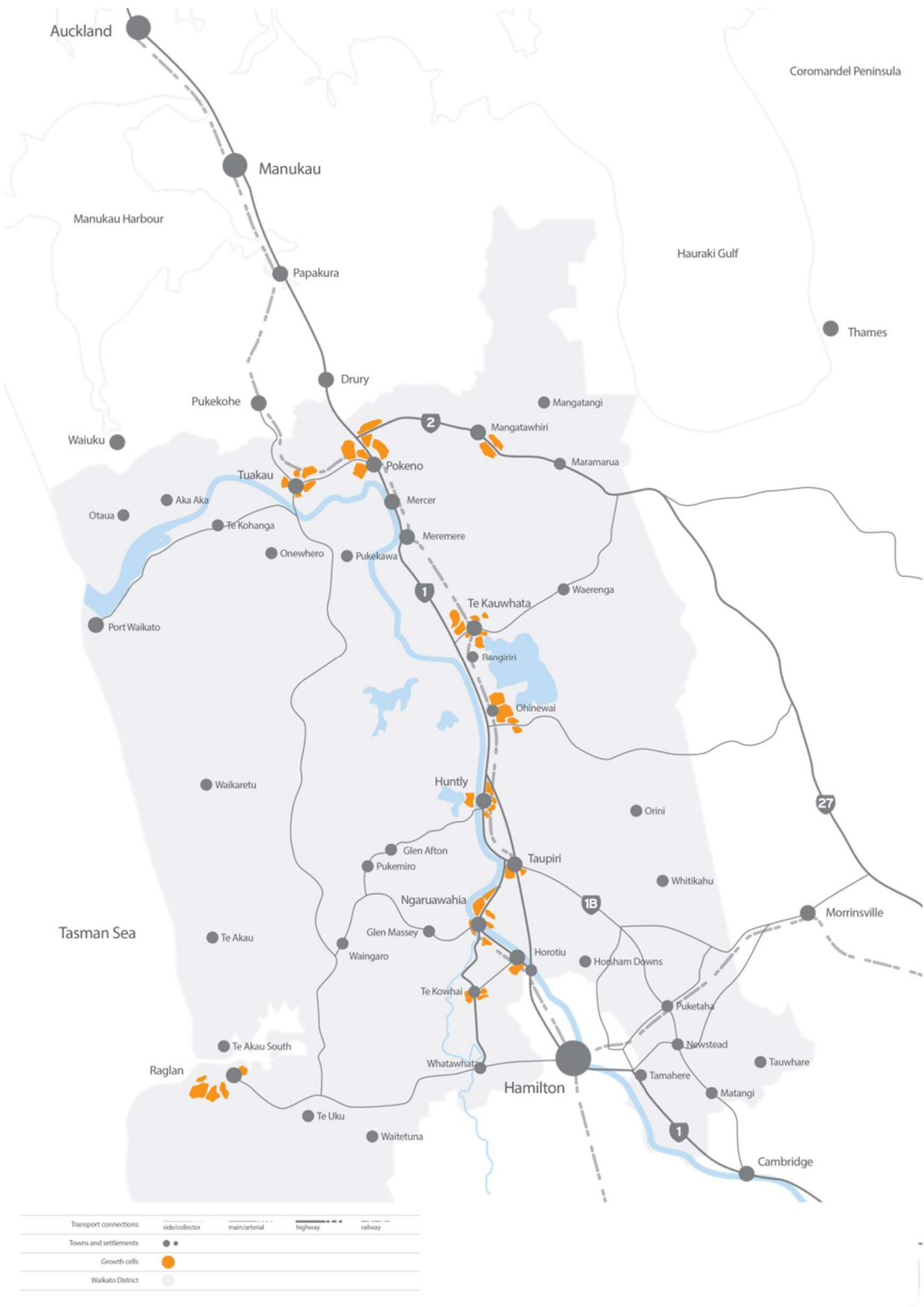


Figure 9 - Waikato 2070 Growth Areas Map

Table 22 - Waikato 2070 Focus areas and implementation methods

Key Focus Area Direction	Key Implementation
GROW OUR COMMUNITIES <ul style="list-style-type: none"> Deliver well-planned and people friendly communities Promote sustainable and cost-effective land use patterns 	<ul style="list-style-type: none"> Promote resilience through a range of measures; Involve iwi and the community in decision making on the different levels of service and affordability, and aspirations identified in the Waikato District Council Blueprints; Support sustainable economic growth and development in various Council policies and plans; Accommodate natural hazards and climate change in strategic land use plans and in manage development overtime. Promote a sustainable environment by maintaining existing infrastructure and services and aligning levels of service and affordability.
BUILD OUR BUSINESSES <ul style="list-style-type: none"> Support existing businesses to grow and attract new businesses to the district Help deliver inclusive growth 	<ul style="list-style-type: none"> Adopt an integrated and environmentally sustainable approach to planning and implementing development. Integrate the provision of supporting infrastructure and services with land use planning, including transport, water and open space. Ensure our towns offer employment and housing choices with high amenity environment that avoids development resulting in social isolation; Greater coordination and sharing in the planning and operation of supporting stormwater infrastructure and services
EMBRACE OUR IDENTITY <ul style="list-style-type: none"> Promote our culture Celebrate our history Protect our environment 	<ul style="list-style-type: none"> Obligations to continually improve water quality in the river in accordance with the Vision and Strategy for the river in the Regional Policy Statement and Regional Plan, as well as in terms of the Waikato Tainui Environmental Plan; Protect transport networks, strategic sites, corridors and areas for future development;
EMPOWER OUR PEOPLE <ul style="list-style-type: none"> Increase capability and capacity Build a resilient local workforce 	<ul style="list-style-type: none"> Encourage land uses that utilise our highly productive land by promoting agriculture production; Collaborate and connect communities with various agencies to ensure opportunities for communities; Protect our natural, cultural and historical heritage; Promote ecological and environmental protection and restoration.

2. National, Regional, Sub-Regional and Local Growth Documents

2.1 National Policy Statement on Urban Development

The Future Proof sub-regional area², described below, has been identified within a tier 1 high growth area in the National Policy Statement on Urban Development (2020) (“NPS-UD”), which came into effect in August 2020. The NPS-UD has been designed to improve the responsiveness and competitiveness of residential and business land development markets and requires local authorities to ensure adequate development capacity.

The key aspects of the NPS-UD include:

- Introducing directive intensification policies to enable people to live in areas of demand close to urban centres and well-served by public transport,
- Removing the ability to set car parking requirements in district plans (except accessible car parking),
- Requiring responsive consideration of plan changes, and
- Enabling greater focus on quality of capacity enabled through the development of a Future Development Strategy, Housing and Business Assessments, ongoing monitoring and using evidence.

Future Proof partners regularly track and monitor development to ensure that demand is met, and future housing and business trends are taken into consideration. This includes ensuring different housing typologies to provide choices for everyone in our communities are considered.

2.2 Waikato Regional Policy Statement

The Waikato Regional Policy Statement provides an overview of resource management issues in the Waikato region. It provides a range of policies to achieve integrated management of natural and physical resources across resources, jurisdictional boundaries, and agency functions. It guides the development of sub-ordinate plans (regional as well as district) and the consideration of resource consents. The Activity Management Plan consider the requirements set out in the Waikato Regional Policy Statement, to ensure the regional resource management issues identified are appropriately managed, remedied or avoided within our district.

2.3 Future Proof: Sub-Regional Growth Strategy

The Future Proof Growth Strategy and Implementation Plan is a 30-year plan specific for Hamilton City, Waipa District and Waikato District (Future proof sub-region) area shown in Figure 10 . The strategy was initially adopted in 2009 and updated in May 2017. The strategy provides a framework to manage growth in a collaborative way for the benefit of the future proof sub-region both from a

² Future Proof is a joint project set up by partners to consider future development and growth. The partners include Ngāa Karu Atua o te Waka, Waikato-Tainui, Tainui Waka Alliance, Waikato Regional Council, Waipa District Council, Waikato District Council, Hamilton City Council, Waka Kotahi, and Waikato District Health Board.

community and a physical perspective. The strategy is currently under review and will be released in December 2020.

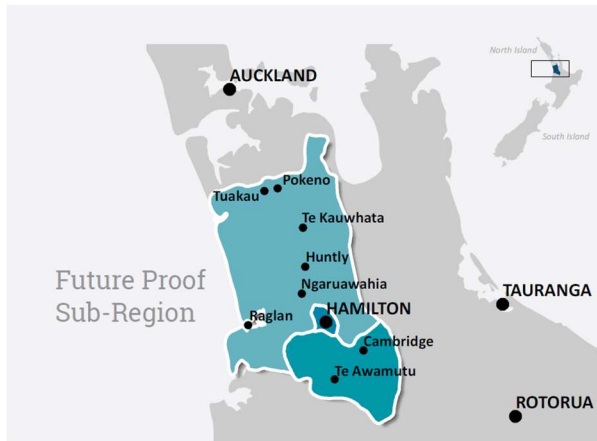


Figure 10 - Future Proof Sub-Region

Future Proof addresses the big picture and discusses what the region might look like in 50 years' time. Community feedback indicated that a 'business as usual' approach to growth was not sustainable. Therefore, the strategy aims to provide direction for a mixture of the following:

Compact Settlement – a managed increase in the number of households in urban areas and in some cases increasing the density of housing; and

Concentrated growth – a major shift to intensify housing, especially in Hamilton City.

The Future Proof Strategy vision is:

In 2061 the Hamilton, Waipa and Waikato sub-region:

- Has a diverse and vibrant metropolitan centre strongly tied to distinctive, thriving towns and rural communities;
- Is the place of choice for those looking for opportunities to live, work, invest and visit;
- Is the place where natural environments, landscapes and heritage are protected, and a healthy Waikato River is at the heart of the region's identity;
- Has productive partnerships within its communities, including tangata whenua;
- Has affordable and sustainable infrastructure; and
- Has sustainable resource use.

The Tangata Whenua vision for the Future Proof Strategy is:

- Kia tuku atu nga karu atua o te waka hei arahi, hei arataki, hei tiaki.
- To enable guidance, leadership, and nurturing, knowing our future by planning today.

2.4 Impact of Auckland Unitary Plan

Future Proof partners are responding to the effects of the Auckland Unitary Plan, which was adopted in July 2016. The unitary plan, which is under appeal, allows for the construction of 400,000 more houses in the Auckland area.

Over the next 30 years, Auckland Council anticipates zoning changes enabling around 50,000 dwellings and 30,000 jobs in the southern Auckland greenfield development areas which include the Drury-Opaheke and Pukekohe-Paerata structure plans area. It is anticipated the increased provision in south Auckland will result in some spill-over effects into the Waikato. These include:

- A demand for more housing in the northern Waikato so residents can be close to new employment opportunities in south Auckland, have a more affordable housing or an alternate lifestyle choice;
- A demand for employment land as industry is pushed out of the city limits;
- Greater pressures on rural land for subdivision;
- Displacement of horticulture out of Auckland and into northern Waikato which has an impact on our region's natural resources; and
- Growth pressures on existing townships, such as Tuakau, Pokeno and Te Kauwhata.

2.5 Waikato Blueprint: District Wide and Local Area Blueprints 2019

The Waikato Blueprint was developed in consultation with communities through local area workshops to provide a picture of how the district could progress over the next 30 years with a focus on addressing the communities' social, economic, and environmental needs.

The Blueprint was developed and delivered through a series of intensive consultation and Inquiry-By-Design workshops between July-November 2018 and adopted in June 2019. The aim of the Blueprint was to provide a high-level picture of how the community aspires the district to progress within the next 30 years. The Blueprint has been given consideration in several documents, including Waikato 2070, and subsequent planning undertaken by Council such as the development of the 2021-2031 Long Term Plan.

3. What are the impacts of COVID-19?

Although our district is in a growth phase, the impacts on asset management will be variable over the short, medium, and long term. The financial market and particularly the COVID-19 crisis could have short-term impacts on whether the residential, industrial, and commercial growth is maintained at its current rate of over 1.5 percent year on year.

In the short to medium term, the Proposed District Plan (PDP) review will have a significant impact on asset management and the requirements for new asset infrastructure and facilities, with the new areas zoned for development being a big driver for this.

Upgrades will be required in all the main towns in the district over various timeframes with key areas being:

- Tuakau, Pokeno in the north
- Huntly
- Taupiri
- Ngaruawahia
- Horotiu central
- Raglan in the west

Future Proof provides a vehicle for the sub-region to respond to government initiatives collectively as a sub-region, e.g. COVID-19 economic stimulus package made up of shovel ready projects.

The impact of COVID-19 has meant a reassessment of growth predictions for population and households in the District.

The population and household projections used as the basis for this AMP has shifted from the high to the medium forecasted figures in the Waikato 2070 strategy.

4. Population and Household Demand

Some parts of the district have had static population growth and historically declining economic and social indicators and high deprivation, whereas others have experienced the opposite.

Future growth, development and investment choices must respond to these trends and be facilitated in a way which promotes the advancement of the more disadvantaged through:

- housing
- employment
- education choices and opportunities.

Maintaining Council's existing assets and providing new ones will be critical to this future growth and investment.

The population in the Waikato District in 2020 was 81,473.

Overall, population in the Waikato District is increasing by 1.5% year on year, and the population is expected to continue growing in the following key towns and villages:

- **North Waikato (Tuakau and Pokeno)**, due to the proximity to Auckland, where there is a variety of employment options.
- **Mid Waikato (Te Kauwhata and Huntly)**; with the opening of the Waikato Expressway this brings challenges and opportunities for Huntly, which will see the township change over the coming years. Te Kauwhata is located just off the Waikato Expressway providing strong transport connections to the north and south. Ohinewai is a new area that could undergo significant change if a rezoning under the Proposed District Plan progresses to allow a new industrial and residential area.
- **Hamilton-Waikato Metropolitan Area (Taupiri, Ngaruawahia, Horotiu, Te Kowhai)**

- **West Waikato (Raglan)**, which has a high amenity environment 35 minutes' drive from Hamilton including the Whaingaroa Harbour and the West Coast with surrounding farm and bush areas.
- Hamilton peri-urban areas due to high demand for residential, lifestyle and industrial land within 20km of Hamilton.

The surrounding rural areas of the district towns have a mixture of high-quality soils, steep land and a range of forestry, bush and wetland areas which are serviced by several small villages such as:

- Port Waikato
- Eureka
- Meremere
- Onewhero
- Maramarua

Growth in these villages will be limited to current planning provisions.

The figures below show the population and household projections for the Waikato District for 2020 to 2060. Based on household projections prepared by the University of Waikato (Cameron, 2020) the Waikato District's population is projected to increase by approximately 15,500 - 19,000 additional people over the next 10 years.

To understand the distribution of the growth across the district Waikato District Council has a Spatial Distribution Model (2020) this has been used to inform the household projection numbers for each town or village.

By 2060 the District's total population is estimated to reach between 128,500 - 149,500.

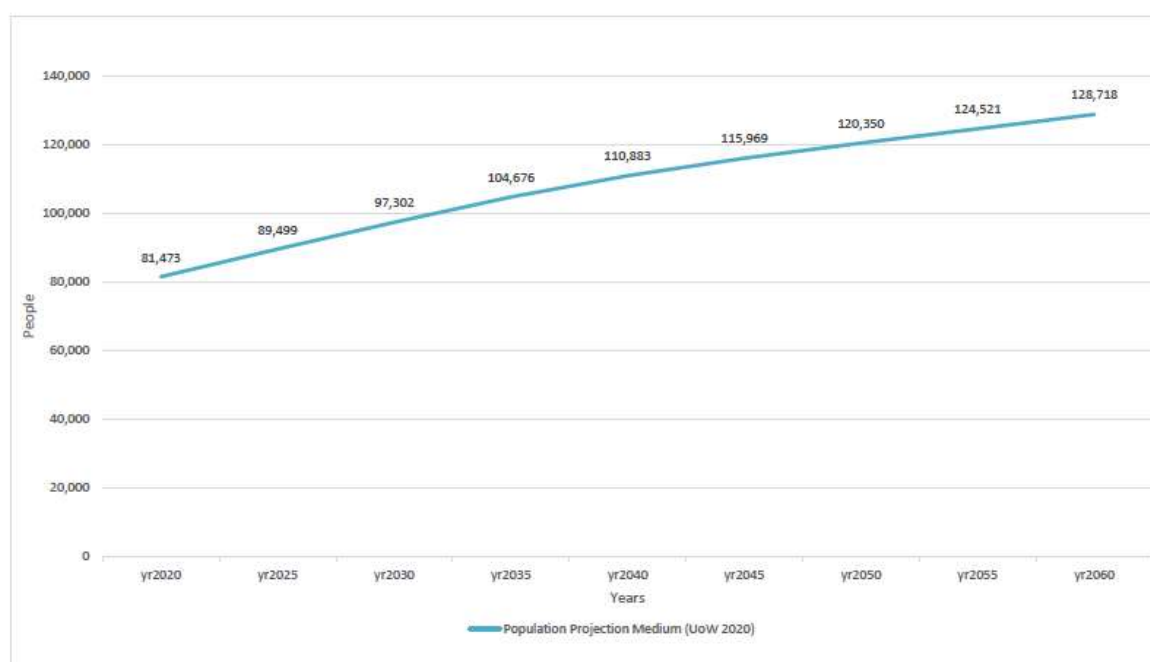


Figure 11 - Waikato District Population Projection 2020-2060 (medium) (Cameron 2020)

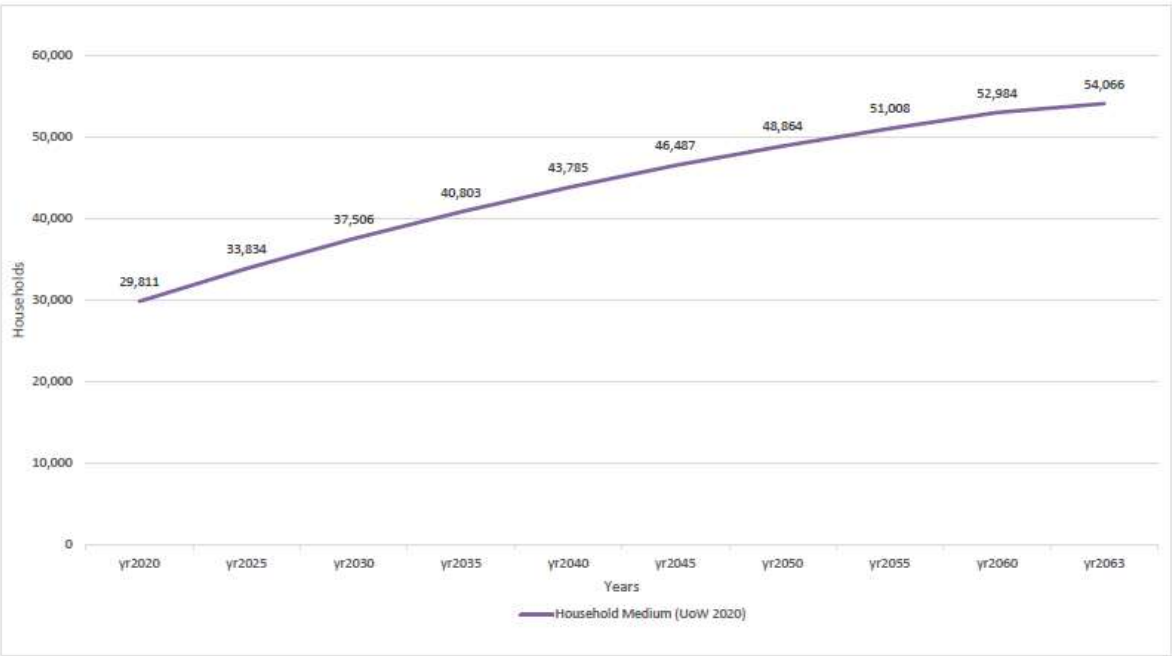


Figure 12 - Waikato District Household Projection 2020-2060 (medium) (Cameron, 2020)

Table 23 shows the medium projected population of the district by village / rural and township over the next 10 years:

Table 23: 10-Year Medium Projected Population by Village / Rural and Township

Settlement	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Towns												
Horotiu	916	941	985	1,035	1,078	1,121	1,164	1,206	1,248	1,290	1,333	1,374
Huntly	7,629	7,714	7,757	7,798	7,858	7,917	7,976	8,032	8,093	8,158	8,219	8,303
Ngaruawahia	7,910	8,093	8,245	8,328	8,418	8,512	8,622	8,755	8,882	9,007	9,132	9,260
Pokeno	4,228	4,492	4,997	5,216	5,513	5,837	6,119	6,418	6,700	6,946	7,200	7,451
Raglan	4,815	4,970	5,009	5,068	5,119	5,180	5,247	5,311	5,379	5,449	5,520	5,590
Tuakau and Surrounds	9,496	9,645	9,792	9,952	10,120	10,309	10,462	10,608	10,776	10,957	11,118	11,283
Te Kauwhata and Surrounds	3,110	3,411	3,486	3,641	3,793	3,943	4,091	4,237	4,381	4,521	4,658	4,789
Rural and Villages												
Eureka-Tauwhare	2,309	2,347	2,361	2,403	2,437	2,468	2,498	2,527	2,558	2,589	2,621	2,652
Gordonton-Kainui	1,810	1,824	1,833	1,863	1,891	1,913	1,939	1,965	1,991	2,017	2,042	2,063
Hamilton Park	1,719	1,734	1,739	1,755	1,769	1,782	1,794	1,807	1,819	1,832	1,845	1,857
Horsham Downs	996	999	1,000	1,003	1,006	1,009	1,011	1,014	1,017	1,019	1,021	1,023
Huntly - Rural	2,270	2,291	2,297	2,305	2,313	2,327	2,342	2,358	2,373	2,388	2,406	2,423
Mangatangi	1,136	1,158	1,164	1,193	1,209	1,224	1,239	1,254	1,269	1,284	1,299	1,314
Maramarua	1,645	1,686	1,714	1,761	1,801	1,837	1,872	1,908	1,943	1,978	1,999	2,002
Mercer	151	152	156	217	237	240	299	308	311	368	380	394
Meremere	451	452	452	452	452	452	452	452	452	454	470	503
Ohinewai	243	245	246	247	248	250	251	252	255	255	258	261
Onewhero	1,449	1,462	1,473	1,510	1,537	1,562	1,587	1,612	1,637	1,663	1,688	1,713
Pokeno - Rural	809	839	1,014	1,157	1,304	1,457	1,587	1,727	1,868	1,972	2,113	2,234

Settlement	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Port Waikato	990	997	1,001	1,013	1,023	1,032	1,041	1,050	1,059	1,068	1,077	1,086
Pukekawa	1,465	1,478	1,486	1,515	1,535	1,555	1,574	1,593	1,612	1,631	1,649	1,668
Pukemoremore	2,538	2,563	2,568	2,573	2,578	2,588	2,598	2,609	2,620	2,632	2,644	2,656
Rotokauri	1,139	1,159	1,163	1,184	1,195	1,205	1,216	1,226	1,236	1,246	1,256	1,265
Tamahere	6,319	6,447	6,476	6,509	6,546	6,581	6,630	6,677	6,727	6,779	6,832	6,881
Taupiri Community	1,910	1,969	2,005	2,049	2,091	2,134	2,175	2,229	2,291	2,350	2,410	2,465
Te Akau	2,293	2,320	2,335	2,366	2,402	2,433	2,464	2,495	2,527	2,560	2,593	2,627
Te Kowhai	1,901	1,935	1,943	1,970	1,993	2,015	2,035	2,049	2,066	2,087	2,107	2,129
Te Uku	2,098	2,125	2,131	2,142	2,158	2,170	2,183	2,195	2,208	2,221	2,235	2,248
Tuakau – Rural	1,136	1,191	1,307	1,408	1,506	1,592	1,693	1,797	1,884	1,969	2,066	2,157
Waerenga	1,039	1,046	1,049	1,058	1,065	1,072	1,079	1,085	1,092	1,098	1,105	1,111
Whatawhata	3,610	3,667	3,682	3,714	3,755	3,788	3,820	3,853	3,886	3,921	3,956	3,990
Whitikahu	1,943	1,957	1,962	1,968	1,982	1,993	2,004	2,015	2,026	2,038	2,051	2,063

Source: Council Analytics Team – WDC District Wide Projections Town Village 17.12.2020

4.1 Population Demographics

Figure 13 shows the expected difference in gender and age distribution from 2013 to 2038. By 2038, 22% of the population is projected to be aged 65+ years, up from 12% in 2013.

Conversely, the population aged 0-14 years is expected to decline from 24% in 2013 to 20% in 2038.

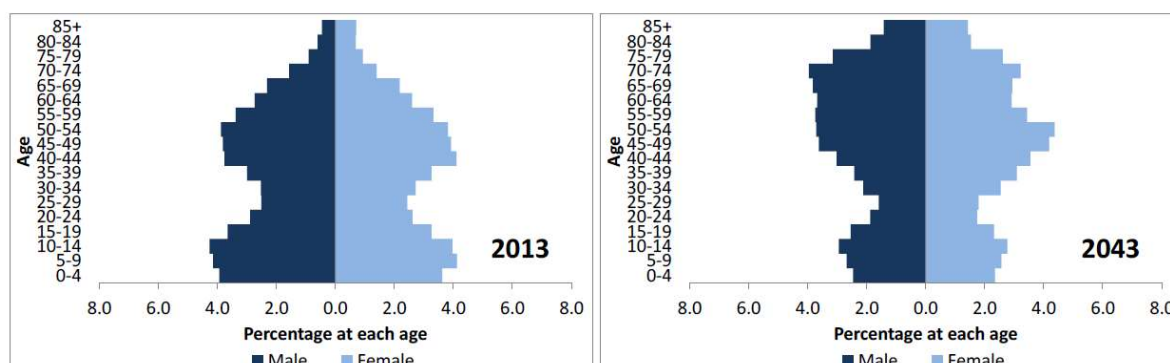


Figure 13 - Age-Sex structure for Waikato District, 2013-2043 (medium-variant projection) (Cameron, 2020)

There is unlikely to be any significant demographic changes to the Waikato District population other than the rise in the aging population. The impacts on infrastructure assets are likely to remain unchanged, but the types of services that the district provides may need an extension. The district will see growth in most urban areas and a requirement for the addition of infrastructure or upgrades to infrastructure, but this is not impacted by specific demographics.

4.2 Population Effects on the Assets

Although our District is in a growth phase, the impacts on asset management will be variable over the short, medium, and long term. The financial market and particularly the Covid-19 crisis could have short term impacts on whether the residential, industrial, and commercial growth is maintained at its current rate of over 3 per cent.

In the short to medium term, the Proposed District Plan (PDP) review will have a significant impact on asset management and the requirements for new asset infrastructure and facilities, with the new areas zoned for development being a big driver for this.

Upgrades will be required in all the main towns in the district over various timeframes with key areas being Tuakau, Pokeno in the north, Huntly, Taupiri, Ngaruawahia, and Horotiu central and Raglan in the west. These are described in more detail in Section 6.

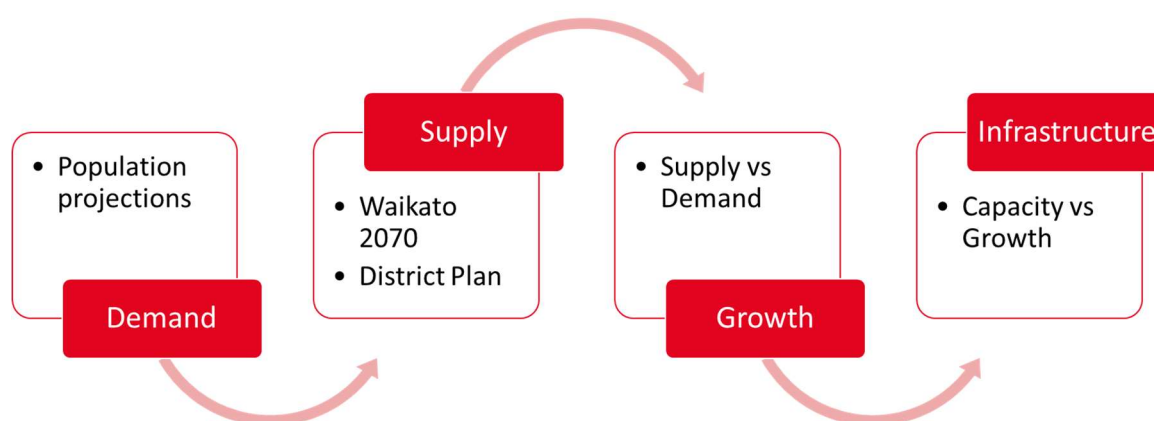
5. Aligning Growth and Infrastructure

Growth forecasting and strategic infrastructure planning processes need to be connected and tightly aligned to facilitate growth and stimulate economic development in an efficient manner. Waikato 2070 is an integrated growth and economic development district level strategy to support effective development and infrastructure planning.

The interaction between the growth and the provision of infrastructure is complex and nuanced. Creating a long-term programme of the infrastructure required to facilitate growth requires a thorough assessment process. We have defined this process by the following phases to move from a population forecast to an infrastructure programme:

1. Demand
2. Supply
3. Growth
4. Infrastructure

Assessment Phase	Data Sets	Tasks
Demand	Population projections	<ol style="list-style-type: none"> 1. District Wide Projections (med, high) 2. Disaggregate population to town (med, high)
Supply	Land projections	<ol style="list-style-type: none"> 3. Available land size and timing 4. Assessment of realistic proportion able to build on 5. 20% over capacity target
Growth	Growth forecast	<ol style="list-style-type: none"> 6. Compare demand and supply 7. Identify supply side constraints or excess supply 8. Inform District Plan to identify additional blocks or reallocation
Infrastructure	Infrastructure capacity	<ol style="list-style-type: none"> 9. Assess infrastructure capacity 10. Demand assessment based on growth forecast (not population demand) 11. Capital programme development to meet demand, \$ and year



6. Predicting Demand for Infrastructure

Predicting Infrastructure Demand is complicated. It follows a multiple phase assessment process with a set of assumptions for each for each piece of the analysis.

Providing the right amount of infrastructure at the right time is a balancing act:

- Providing too much infrastructure, or providing it too soon, places a large financial burden on Council, ratepayers, and developers.
- Not provisioning enough infrastructure may restrict growth, and mean Council is forced to provide infrastructure at short notice, shortcutting the appropriate planning and funding processes.

These two potential outcomes do not bear an equal risk to Council, however. The first outcome of allowing for too much infrastructure that may not be needed just yet is a lower risk option than not having enough infrastructure in the planning pipeline.

Development contributions cannot be calculated accurately without capital works projects for growth being included in the 10-year plan.

Having a high level of certainty of infrastructure need allows for more accurate financial forecasting, more robust delivery planning and better coordination with other works. The more accurate the growth predictions, the more accurate the infrastructure plan.

The timing of infrastructure interventions to satisfy demand needs to be planned carefully as some pieces of infrastructure have long lead times to procure, design, and build.

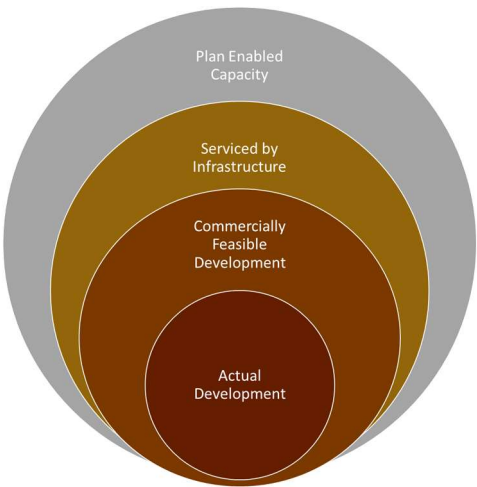
Not all infrastructure is created equal either when it comes to servicing growth areas:

- Core infrastructure in the form of connector roads and main water networks need to be in place to open growth cells for development.
- Other core infrastructure like water treatment plant capacity, or road network capacity can be planned to be delivered as the population grows.
- Community infrastructure such as playgrounds and libraries can be delivered as populations grow or as levels of service gaps appear.

These infrastructure types can be categorised as either:

- Leading Supply
- Leading Demand
- Lagging Demand

The following table describes some examples of infrastructure types and their relationship to growth forecasts.



Activity	Infrastructure	Lead/Lag	Growth Parameter
Transport	New roads	Lead	Supply
	Network Capacity	Lead	Demand
3 Waters	Pipe Networks	Lead	Supply
	Treatment plants	Lead	Demand
Solid Waste	Collection capacity	Lead	Supply
	Processing capacity	Lead	Demand
Open Spaces	Parks and playgrounds	Lag	Demand
Community Facilities	Community Hubs	Lag	Demand

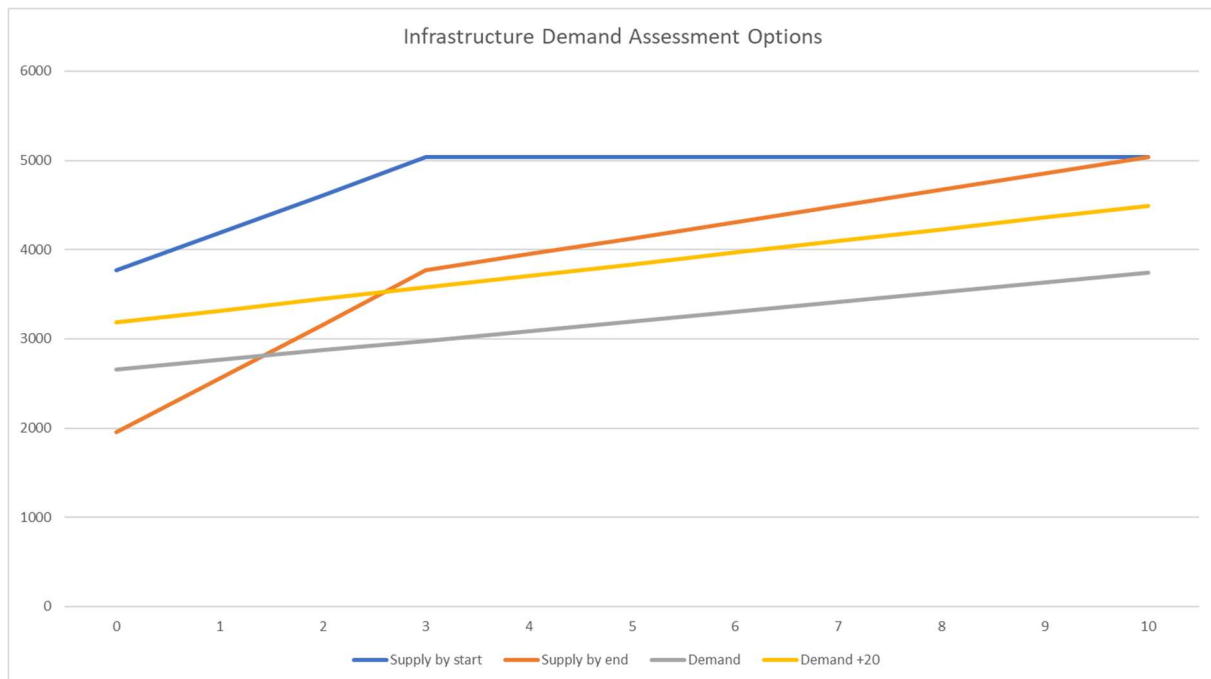
There is also a question of the staging of growth cell development. Waikato 2070 identifies growth cells and their potential timing, but many townships have multiple growth cells being developed in the same time, say in 3-10 years. In the real world, the most efficient way of provisioning for this growth would be to open growth cells in a logical sequence to spread the investment in infrastructure over multiple years.

For the supply side infrastructure demand assessments, we consider that the infrastructure will be in place to open the growth cells fully by the end of the period the cells are planned to be developed. For example, if there are 3 growth cells in Pokeno that will be opened in the 3–10-year period, we will assume these will be staggered over that time. This helps smooth out resource loads for the planning and delivery of the infrastructure.

The National Policy Statement on Urban Development Capacity (2016) stipulates that a buffer of 20% should be added to the demand line to ensure any unforeseen growth has been contemplated and can fit within planning processes.

So in our contemplation of the number of persons or households that infrastructure will need to be provided for, there are 4 potential lines of demand.

1. Infrastructure in place for the **start** of the indicated supply period
2. Infrastructure in place for the **end** of the indicated supply period
3. The **medium** population growth projection
4. The medium population growth projection + **20%**



The chart above provides an example of the differentiation in forecasts for the number of households based on the four different demand predictions.

We think using the following metrics is appropriate:

- End of the supply period to have the infrastructure delivered for supply side infrastructure types.
- Medium +20% demand line is appropriate for the demand side infrastructure as this is what the National Policy Statement encourages us to do.

Uncertainty in Predicting Growth

Times have potentially never been more uncertain than now. Undertaking long term planning during a pandemic is no small feat. Our underlying assumptions for the growth predictions cannot always be relied on in a fast-changing world.

To combat this uncertainty about the future we are proposing a much more frequent and robust process for reviewing actual growth, reforecasting growth projections and reassessing infrastructure demand.

The 3yearly LTP cycle is not frequent enough for our needs now, so we are proposing an annual review of actual versus planned growth, planning, and delivery.

- The annual report will assess achievement against plan
- Actual growth figures will be compared against our planned growth.
- Growth models will be revised to meet any changes in the underlying models.
- The annual plan will facilitate any changes needed, and any further consultation requirements.
- Asset Management Plans will be updated annually based on a revised growth forecast.

7. Residential Growth

For each of the Towns and Villages that have residential development areas identified in Waikato 2070 a graph is included in the following pages which outlines the following.

Demand

- The line on each graph represents the Medium Household Projection for each Town or Village (Cameron, 2020).

Supply

The stacked bars on each graph are made up of existing households, infill, and growth cells.

- The existing number of households is the total number of households within each town or village boundary (WDC, Dwelling Count, 2020.).
- The infill number is the theoretical plan-enabled number of the additional households that could be created within the town or village boundary but not within an identified growth cell. This number is calculated on the Proposed Waikato District Plan provisions and does not take into consideration market demand for infill housing or geographical and infrastructure constraints (Waikato District Council, 2020).
- The growth cells show the theoretical number of possible households in each growth cell if Waikato 2070 was realised. The timing of each growth cell is as follows.
 - Short term, 1-3 years (2020-2023)
 - Medium term 3-10 years (2023-2030)
 - Long term 10-30 years (2030-2050)
 - Beyond 30 years (2050+)

The growth cell numbers are an estimate of the total number of households expected within each growth cell. These numbers have been informed by a variety of methods such as indicative developer plans, Proposed Waikato District Plan provisions or possible future plan provisions. Where a growth cell has been identified in an already developed area, the number reflects the additional number of possible households (Waikato District Council, 2020).

The total supply number is the total theoretical supply of households and is the sum of the existing households, infill, and growth cell numbers. It is important to note that the supply numbers provide a general indication of what is likely to happen and are subject to numerous assumptions.

7.1 North

In the north of the district, subdivisions within residential zoned areas have continued at a fast rate to meet the demand for housing close to Auckland. These areas also include new commercial and industrial developments in this area of the district.

Activity Management Plans consider how to cater for the future growth in Tuakau, Pokeno and Te Kauwhata. The rezoning (as part of the proposed district plan) intends to provide for urban and some rural- residential growth in a staged manner over 30 years, which allows for coordination of infrastructure alongside planned development.

Tuakau

Residential and commercial growth has been mainly static due to the poor access to SH1 and limited residential land use zoning. The last three years have seen Tuakau experienced in-fill development occurring in the town urban limits and on the fringes. As property prices continue to increase in Auckland and the surrounding areas, the attractiveness for Tuakau will increase.

Growth planning at Tuakau has been underway for several years, with the initial preparation of the Tuakau Structure Plan, with which a plan change to the Operative District Plan (notified in June 2016) was developed and later withdrawn to have the change in land use zoning incorporated into the Proposed District Plan:

- Tuakau has short term commercial, and industrial areas (Whangarata Business Park) and residential development in the south of Tuakau programmed for 1-3 years.
- Medium-term residential land along Dominion and Barnaby/Harrisville Roads is programmed for 3-10 years.
- Long terms to the west future, residential areas are programmed for 30 years or beyond depending on the rate of growth.

Lately, Tuakau has been taking the overflow of residents from Pukekohe or directly from Auckland as it has shown rapid growth. The proposed future population of Tuakau will likely reach 8000 people in the next 50 years as these new residential areas open in combination with new industrial areas and employment.

This will require a range of infrastructure from water and wastewater, new roads, and upgrades to existing ones, longer-term the addition of a rail station and new passive and active recreation opportunities.



Figure 14 - Development Plans Key

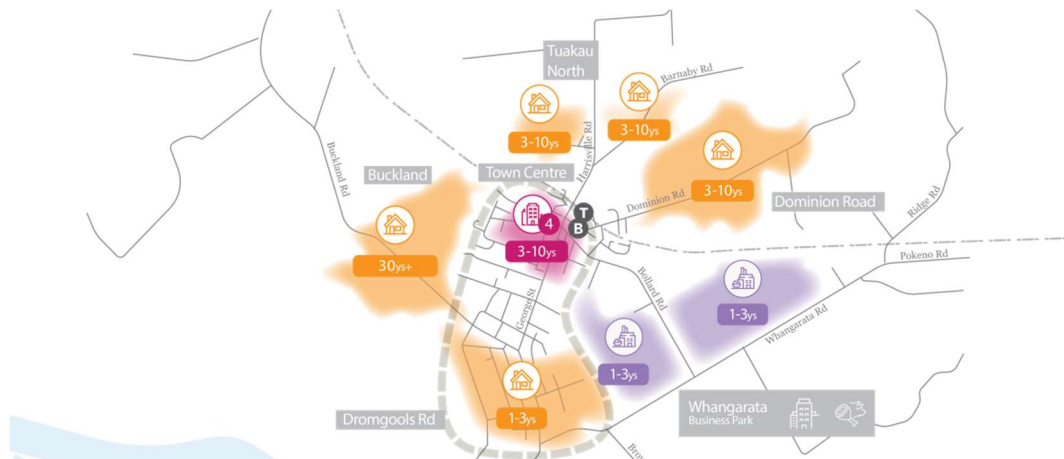


Figure 15 - Tuakau Town Development Plan

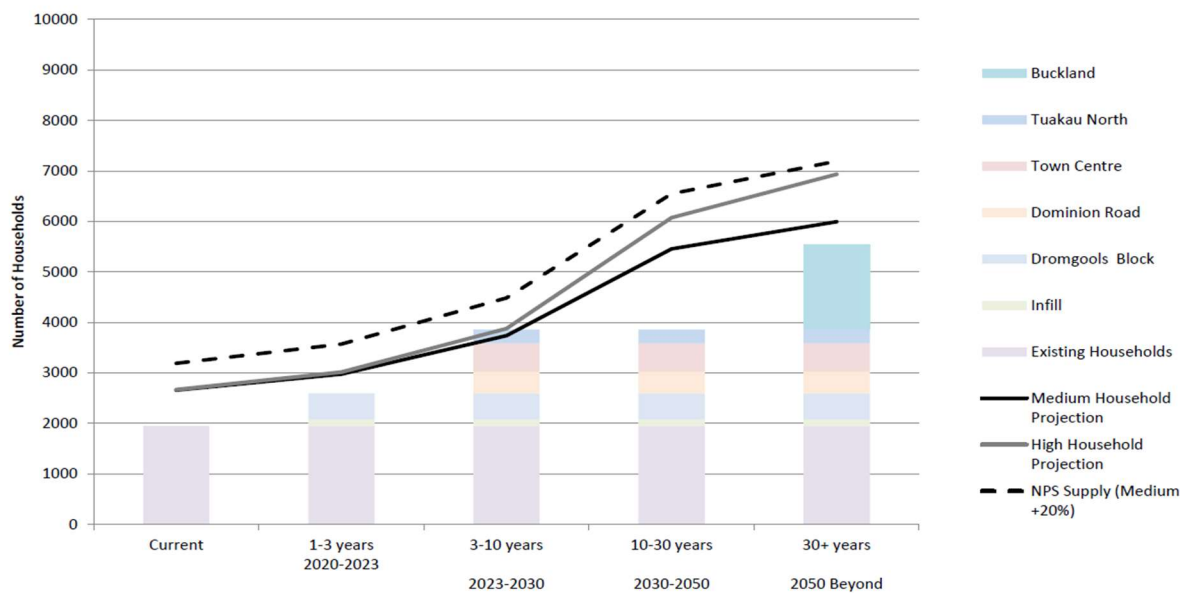


Figure 16 - Tuakau household projection and supply numbers (Waikato District Council, 2020)

Pokeno

Pokeno is located to the north of the Waikato River, near the boundary of the Waikato District and east of Tuakau with an interchange at SH1 near the junction of SH2. Pokeno has seen rapid growth from its small village origins in both large residential subdivisions and industrial areas in a short space of time. This has been driven by Auckland's growth and the proximity of Pokeno to the Waikato's agricultural production.

The surrounding land consists of mainly steep to moderate farmland, bush areas, the main trunk line passes through Pokeno, between Tuakau and Mercer. Pokeno experienced rapid growth with earlier plan changes, allowing for increased residential development with most residents working in Auckland, rural-residential and industrial zoning within the strategic growth nodes.

Given this rapid population growth, there is an expectation for appropriate recreation, educational and community facilities. SH1 splits the eastern growth areas from the rest of Pokeno and as the village grows the challenge will be to maintain this connection (roading and pedestrian) and effectively servicing these future growth areas (water/wastewater). Protecting the rural landscape and wetlands to the east will also be a key requirement.

Applications for additional growth within the town have been received by Waikato District Council by way of submissions on the Proposed District Plan and submissions through Waikato 2070.

- Short term residential growth areas for Pokeno include the Hitchen Block to the south west and Hillpark Drive adjacent to SH1 to be progressed in the next 1-3 years.
- The medium-term residential growth areas to be progressed over the 3-10 years are Havelock Village to the south and Pokeno East.
- The Munro Block to the west is a mix of smaller residential blocks scheduled with 3-10 years and a larger block scheduled for 10-30 years.
- The Pokeno East commercial cluster north of SH2 is likely to be progressed in the long term of 10-30 years. This is to provide for further employment opportunities as the residential development grows.

The Town Centre of Pokeno will see an intensification of buildings that are 2 to 4 stories of mixed-use activity including a large supermarket. The intensification will be driven by increased land values and require a range of infrastructure upgrades.

The key benefits of Pokeno and why it has seen high industrial growth in recent years is proximity to the SH1 and SH2 a key benefit over the neighbouring town of Tuakau and its proximity to Auckland and Hamilton. The possible future population of Pokeno is expected to be 16,000 people as these new residential areas open.

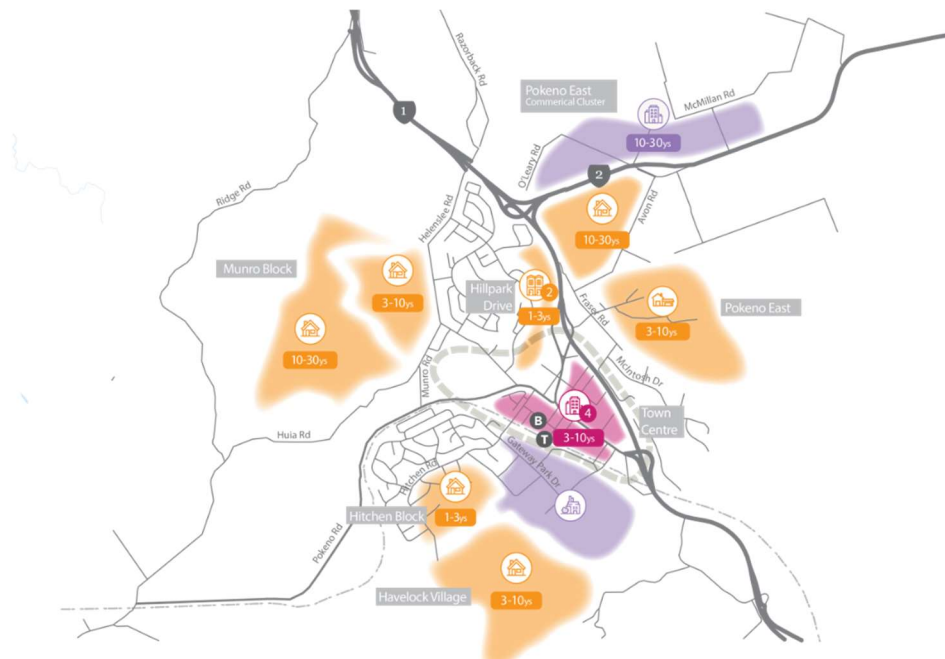


Figure 17 - Pokeno Town Development Plan

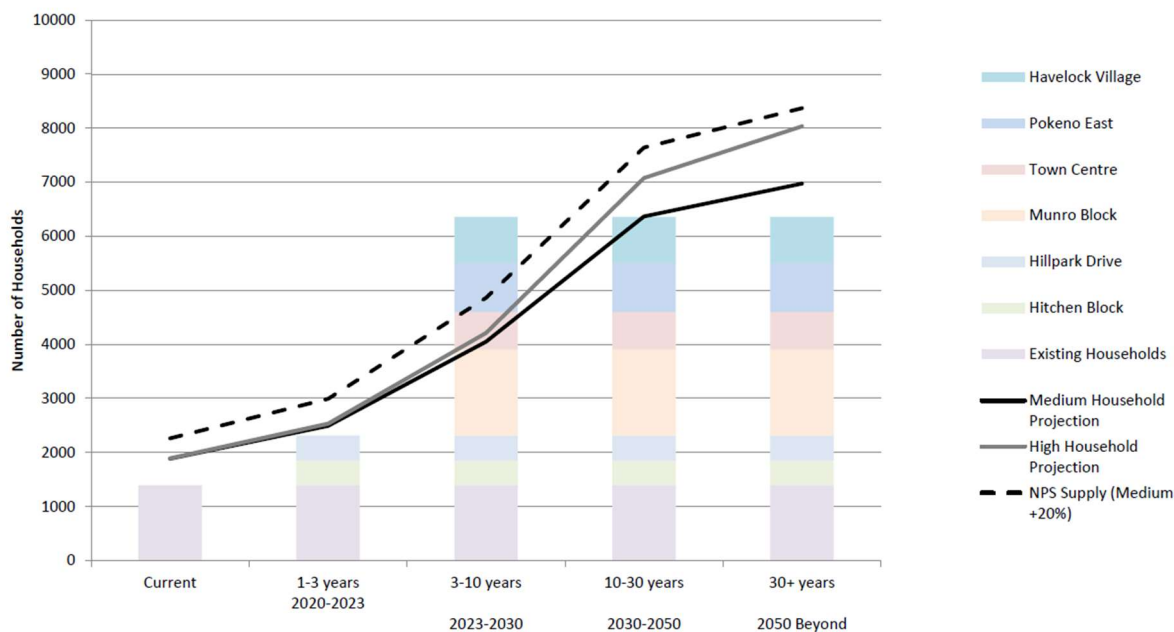


Figure 18 - Pokeno Household Projection and Supply Numbers (Waikato District Council, 2020)

Mangatawhiri, Mangatangi and Maramarua

The Mangatawhiri and Mangatangi area has a Development Plan in Waikato 2070. Development is proposed in the long term beyond 30 years. A future employment area has been identified due to the proximity to the State Highway connections between the Auckland, Waikato, and Bay of Plenty regions.

Future upgrades of SH2 would be essential to the development and could be developer-led with larger self-contained lifestyle lots in the surrounding area. The possible future population of these combined areas and the surrounding rural area is expected to be approximately 6,000 people.



Figure 19 - Mangatawhiri and Mangatangi Development Plan

Mercer, Meremere and Hampton Downs

Mercer, Meremere and Hampton Downs are peri-urban areas and population is anticipated to stay relatively static, no growth cells for these areas are proposed. Mercer, Meremere and Hampton Downs development plans will experience localised growth allowed for under district plan rules.



Figure 20 - Mercer, Meremere and Hampton Downs Development Plan

Other Northern Villages

It is not anticipated that other small areas in the north will increase in population significantly beyond what is currently existing.

Pukekawa, Onewhero and Port Waikato villages are anticipated to remain relatively static and will receive some small-scale localised housing developments permitted under planning rules. No growth cells for these areas are identified in Waikato 2070.

7.2 Mid Waikato

Te Kauwhata

Te Kauwhata is situated at the northern edge of Lake Waikare and south of the Whangamarino wetland, east of SH1 and accessed by an interchange. Te Kauwhata has had an earlier structure plan and plan changes, allowing for increased residential, rural–residential and industrial zoning within these strategic growth nodes.

Te Kauwhata has seen lifestyle drivers contributing to its overall growth, given its locational advantage between Auckland and Hamilton. With no major industries other than a long-established vineyard Rongopai Wines and now Invivo Wines, Te Kauwhata has supported agriculture in a rural landscape.

Waikato 2070 noted that applications for additional growth within the town are scheduled at:

- Short term identifies to the south the Lakeside growth cell which will be developed over the next 1-10 years and a small residential area to the north in Blunt Road of 1-3 years. Residential and Lifestyle development in the northwest on Travers Road with a small commercial area will continue to progress.
- Medium term two small residential areas to the south east near Mahi Road and north east near to Swan Road are programmed for 10-30 years.
- A future commercial or industrial area for employment is identified to the south of Te Kauwhata Road north of Lake Kopuera and is programmed for the long term beyond 30 years.

With the increase in housing and commercial areas, future upgrades to the town centre will be required. Te Kauwhata will also have to manage active and passive recreation opportunities as the population increases. Waikato 2070 signals that the possible future population of Te Kauwhata will likely reach 10,000 people in the next 50 years.

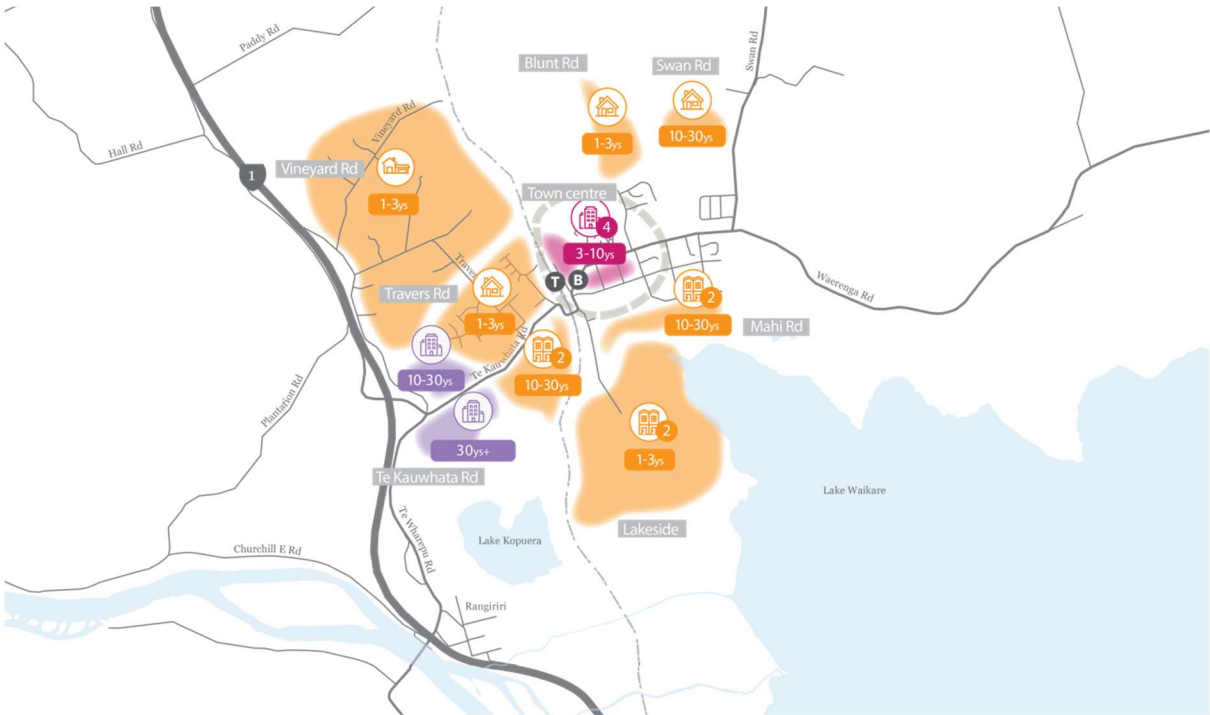


Figure 21 - Te Kauwhata Town Development Plan

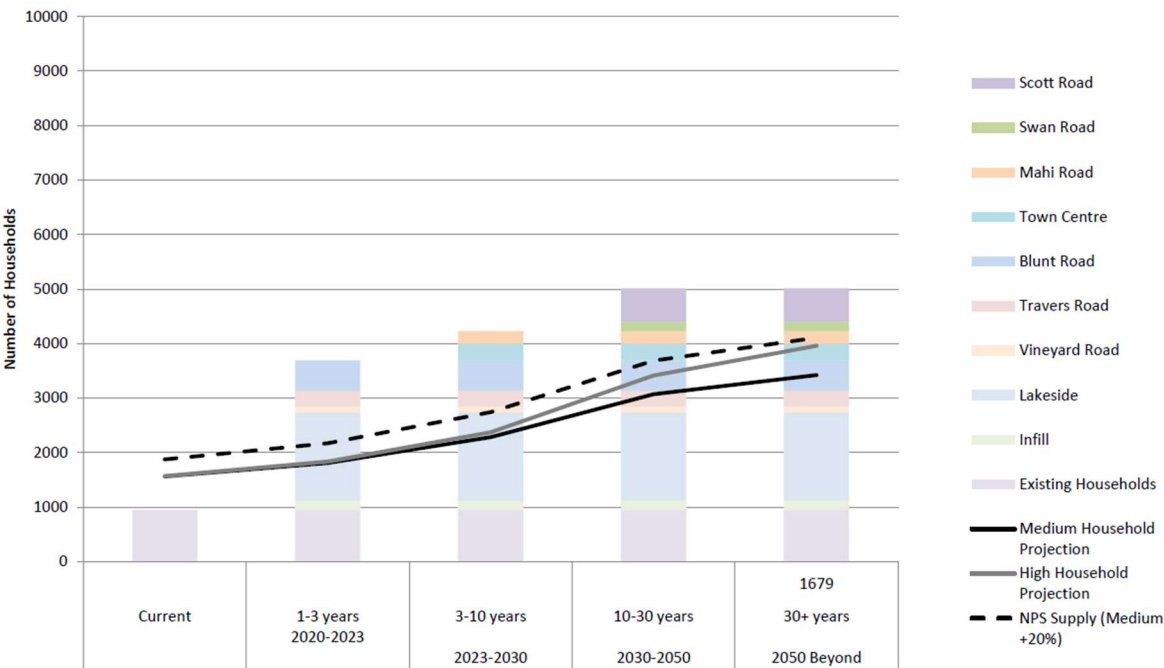


Figure 22 - Te Kauwhata Household Projection and Supply Numbers (Waikato District Council, 2020)

7.3 Central

Ohinewai

Ohinewai is located on the eastern bank of the Waikato River and accessed by an adjacent SH1 interchange near the main trunk line adjacent to the expressway located between Rangiriri and Huntly. Ohinewai is strategically placed, and there is potential for large scale development to occur whilst avoiding flood-prone areas.

Waikato 2070 has indicated that Ohinewai could expand to a large industrial node over the next 30 years. This strategically protects the land allowing it to attract future industrial uses and ensuring that the Waikato does not run out of industrial land (D Kemp 2019).

- Ohinewai is programmed to receive a mixture of growth of mainly commercial and industrial with potential for residential in a 1–10-year time frame subject to proposed rezoning (as part of the district plan review).
- The intention is to provide for the growth in a staged manner over the next ten years to allow the coordination of infrastructure alongside proposed development. Further north a large commercial and industrial area could be progressed in 10-30 years as part of the Ohinewai North Industrial Cluster identified in the Waikato 2070.

Given Sleepyhead are investigating the area and their business will be based around manufacturing, a cluster focused on manufacturing, furniture, house fittings, machinery and equipment could have good synergies with a more construction orientated Huntly.

This would be supported by the access provided along Great South Road into Huntly and the rail link that passes through both areas. There has been a shortfall in manufacturing jobs of up to 77% in 2017 throughout the Waikato (D Kemp 2019). Ohinewai residential development could add another 1,000 people to the small village.

Huntly

Huntly is located on the banks of the Waikato River and is at present the largest town in the Waikato District. Although Huntly is severed by the river and the railway (main trunk line) there are good opportunities for commercial, industrial, and residential development.

Waikato 2070 identifies the following growth areas within Huntly. Some areas covered by a growth cells also are covered by submissions on the Proposed Waikato District Plan.

- In the short term, an area east of Lake Hakanoa on the surrounding hills is zoned for development and this could take place in 1-3 years.
- In the medium term, a mix of commercial and industrial areas located to the north of the township is identified within the 3–10-year timeframe, along with the East Mine Business Park and the Kimihia Lakes recreation development. Residential development around Kimihia is also identified to take place in the 3–10-year timeframe.

- Huntly West across the Waikato River is identified in the 3–10-year timeframe and is proposed to have a higher density of 2 stories.
- The Town Centre could see an increase in density over the next 3-10 years, with height levels of up to 4 storeys proposed. Mixed use development is encouraged to occur within proximity to the future rail station.
- The Brickworks growth area located south of the town is identified in the 10–30-year timeframe.

There may be redevelopment opportunities for housing on the western side of the river. The start-up rail service from Hamilton to Auckland, for which Huntly is a stop via an upgraded platform, also gives live and work opportunities to new start-up businesses. Increasing commercial and industrial opportunities with a focus on construction could raise employment and support Ohinewai. Waikato 2070 signals that the possible future population of Huntly will likely reach 12,500 people, this could see a combined possible future projection for Huntly and Ohinewai of 13,500 in the next 50 years.

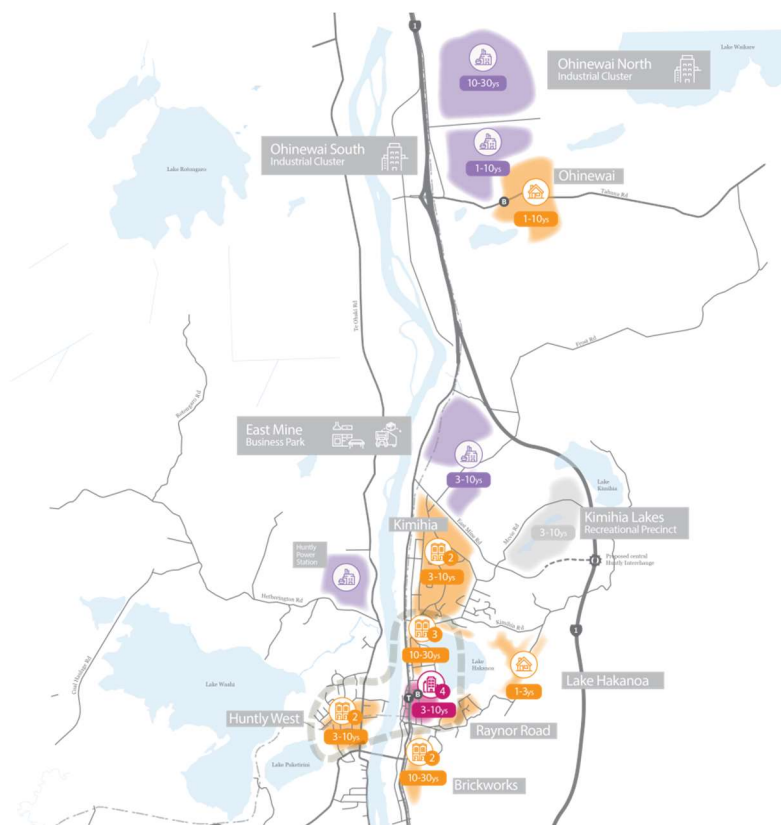


Figure 23 - Huntly and Ohinewai Town Development Plan

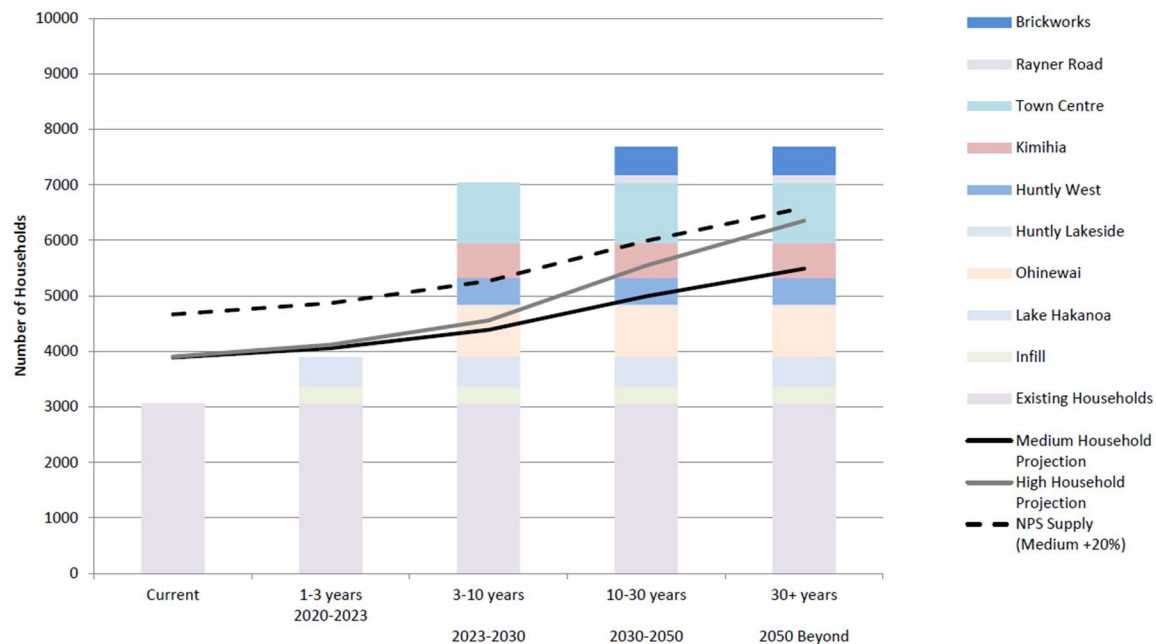


Figure 24 - Huntly and Ohinewai household projection and supply numbers (Waikato District Council, 2020)

Taupiri

Taupiri is located east of the Waikato River and Hakarimata Ranges and is connected to Huntly and Ngaruawahia by Great South Road, as well as being situated on an interchange of the Waikato Expressway. Since the opening of the Waikato Expressway, Taupiri has seen a developer-led demand for more residential housing, most likely driven from the spill-over in growth effects associated with Hamilton and the increase in rural employment.

Waikato 2070 identifies the following growth areas within Taupiri. Some areas covered by growth cells also are covered by submissions on the Proposed Waikato District Plan.

- The Waikato expressway now sits to the east of the Taupiri Village, and a residential area is identified in the 1–10-year timeframe near Te Putu Road.
- South of the town centre are large areas identified for residential development within the 10–30-year timeframe.
- Adjacent to these residential areas identified are three new areas as part of a commercial and industrial employment cluster, being Taupiri East identified in the 3–10 years and Taupiri West identified in the 10–30-year timeframe.
- The Taupiri Town Centre is identified to have an increased density of up to 4 stories in the 10–30-year timeframe.

Care needs to be taken if Taupiri shows rapid expansion in residential development due to its proximity to the Waikato Expressway and Hamilton as a satellite village. The development of appropriate services in roads, footpaths, water infrastructure and passive/active recreational activities will be required. Waikato 2070 signals that the possible future population of Taupiri will likely reach 4000 people in the next 50 years as these new residential and employment areas open.

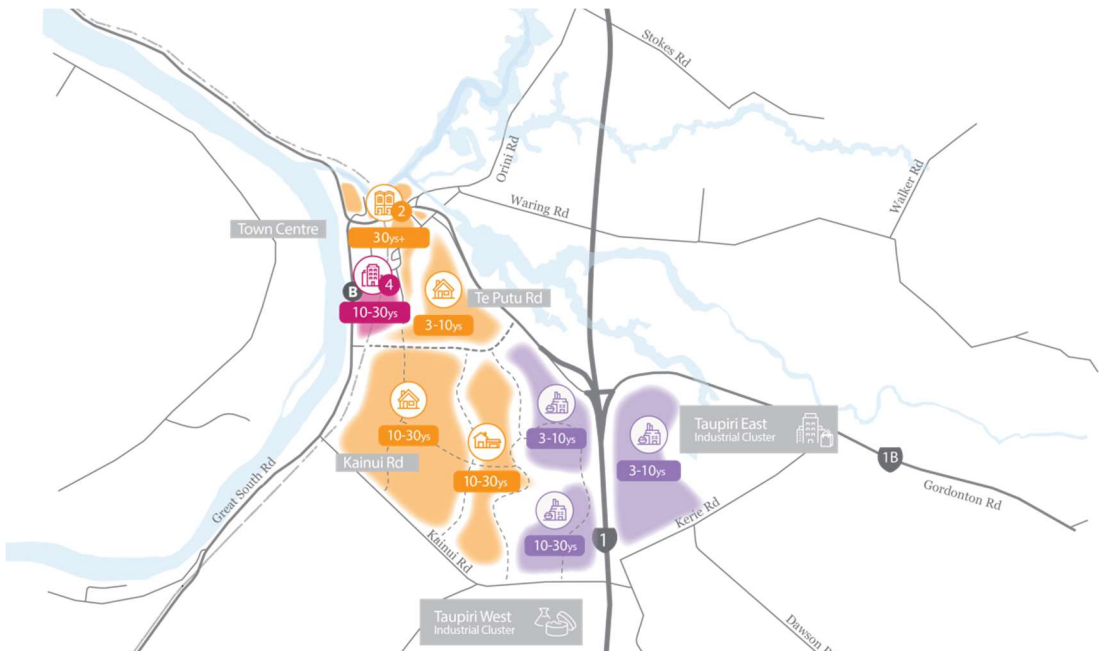


Figure 25 - Taupiri Town Development Plan

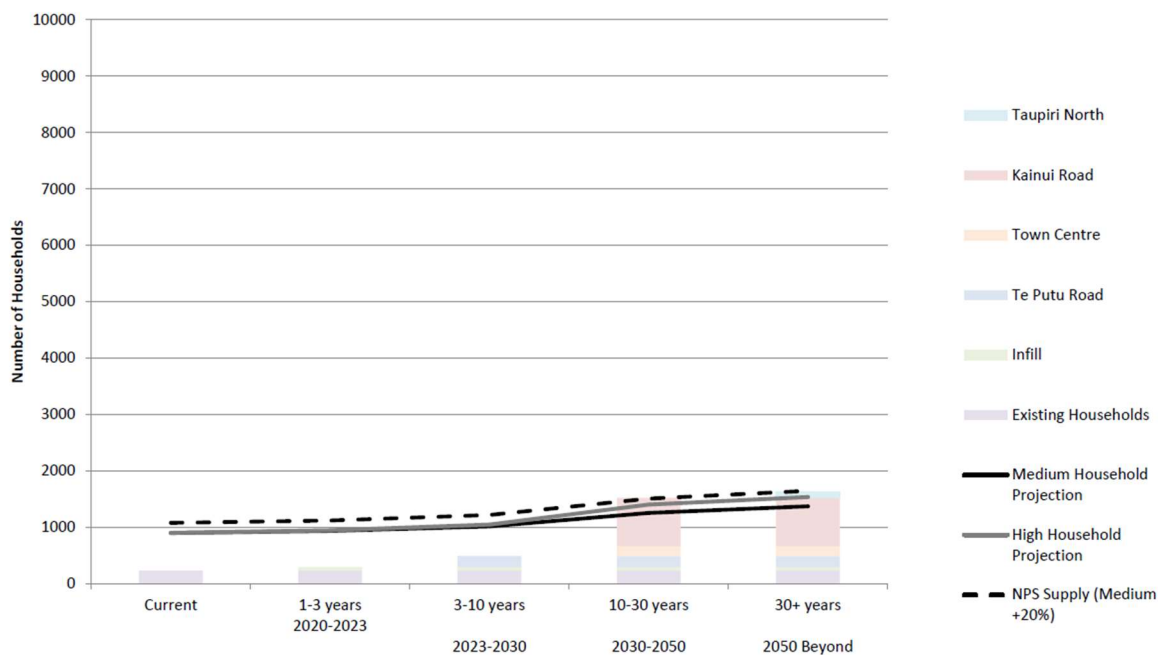


Figure 26: Taupiri household projection and supply numbers

Ngaruawahia

Ngaruawahia is located at the confluence of the Waikato and Waipa rivers at the foot of the Hakarimata Ranges. Ngaruawahia can be accessed from SH1 at Horotiu interchange and is located on the rail line between Huntly and Horotiu. Ngaruawahia including Hopuhopu and some of the surrounding villages have a completed structure plan that was adopted in 2017. Stage one of the structure plan was approved as part of a District Plan change. Subsequent stages of development were included into the Proposed Waikato District Plan.

Waikato 2070 identifies the following growth areas within Ngaruawahia. Some areas covered by a growth cells also are covered by submissions on the Proposed Waikato District Plan.

- In the short term, new residential growth has been identified to the north across the Waikato River on Galbraith Street in the 1–3-year timeframe.
- Northeast at Star Road is a residential area identified in the 10–30-year timeframe, and to the west adjacent to the Waikato River residential growth is also identified in the 10–30-year timeframe.
- North of Ngaruawahia is the Hopuhopu Business Park, a commercial or industrial area identified for local servicing in the 10–30-year timeframe.
- The Town Centre is identified to increase in density over the next 10–30 years to an approximate height of 4 stories, and southeast and west of the Town Centre are two higher residential areas also identified within the 10–30-year timeframe.
- Further South at Saalbrey Road is a residential area identified in the 3–10-year timeframe.

Ngaruawahia has opportunities for regeneration to cater for more services and retail given its proximity to its location in the landscape that includes the river, hills, and proximity to Hamilton. The start-up rail service from Hamilton to Auckland will pass through Ngaruawahia, and a stop in the future will give live and work opportunities along with strong access to the Hopuhopu business park. Waikato 2070 signals that the possible future population of Ngaruawahia will likely reach approximately 10,500 people in the next 50 years as the new industrial, commercial, and residential areas open.

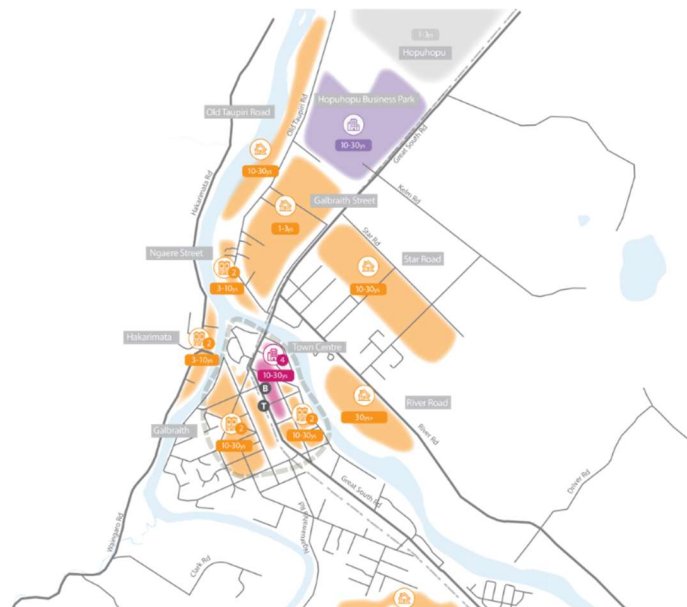


Figure 27: Ngaruawahia Town Development Plan

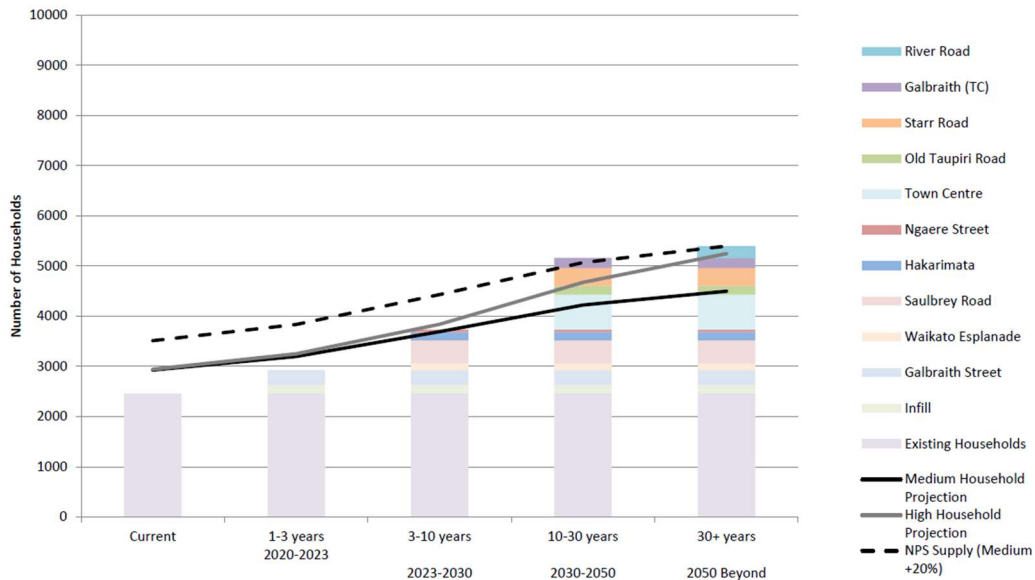


Figure 28: Ngaruawahia Household Projection and Supply Numbers

Horotiu

Horotiu is situated on the northern boundary of Hamilton City and has seen rapid development of its industrial node. Waikato 2070 identifies a further 50ha of employment land in Horotiu to cater for demand for industrial land. There will be localised residential growth as permitted under planning provisions. The Kernott Road residential growth cell is dependent on the Te Awa Lakes development within the Hamilton City boundary which is currently under appeal.



Figure 29: Horotiu town Development Plan

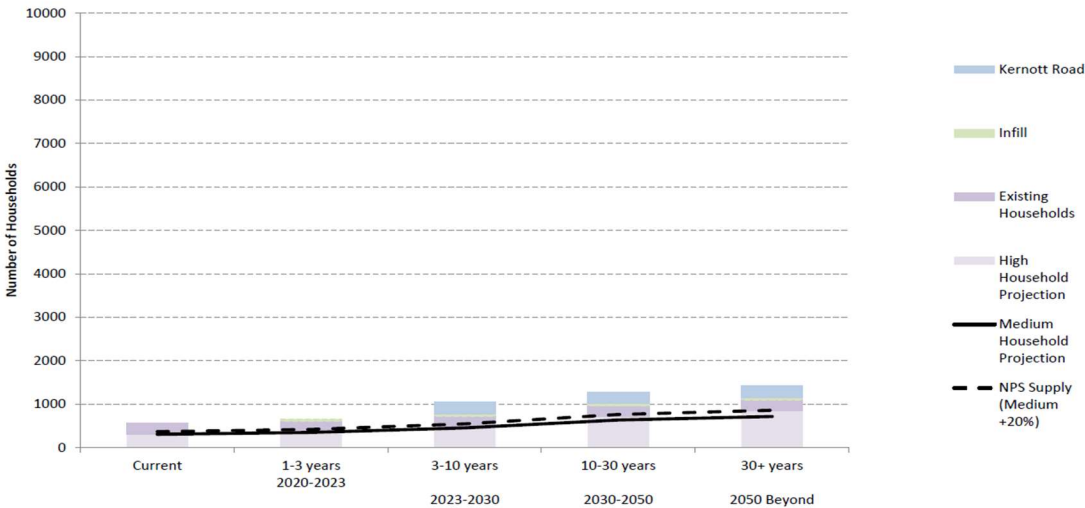


Figure 30 - Horotiu Household Projection and Supply Numbers (Waikato District Council, 2020)

Te Kowhai

Te Kowhai is located off SH39 on Horotiu Road about 6km southwest of Horotiu and east of the Waipa River. Te Kowhai is identified to have two residential areas, both identified in the 10–30-year timeframe. The Airpark Precinct is identified to be developed in the next 3-10 years.

How Te Kowhai transitions from a small hamlet to a larger village will require an understanding of where and when key infrastructure is needed. Additional water and wastewater may need connections back to Horotiu and the existing network, and passive/active recreational facilities and areas will need to be provided for. Waikato 2070 signals that the possible future population of Te Kowhai will likely reach 4000 people in the next 50 years.

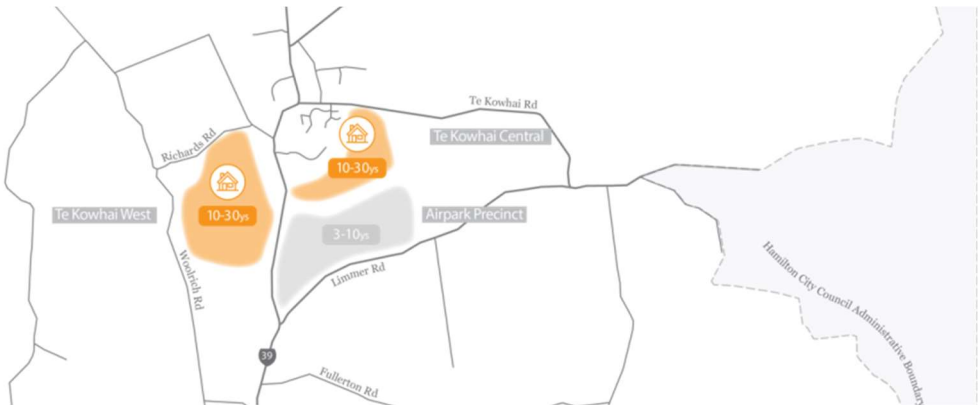


Figure 31 - Te Kowhai Village Development Plan

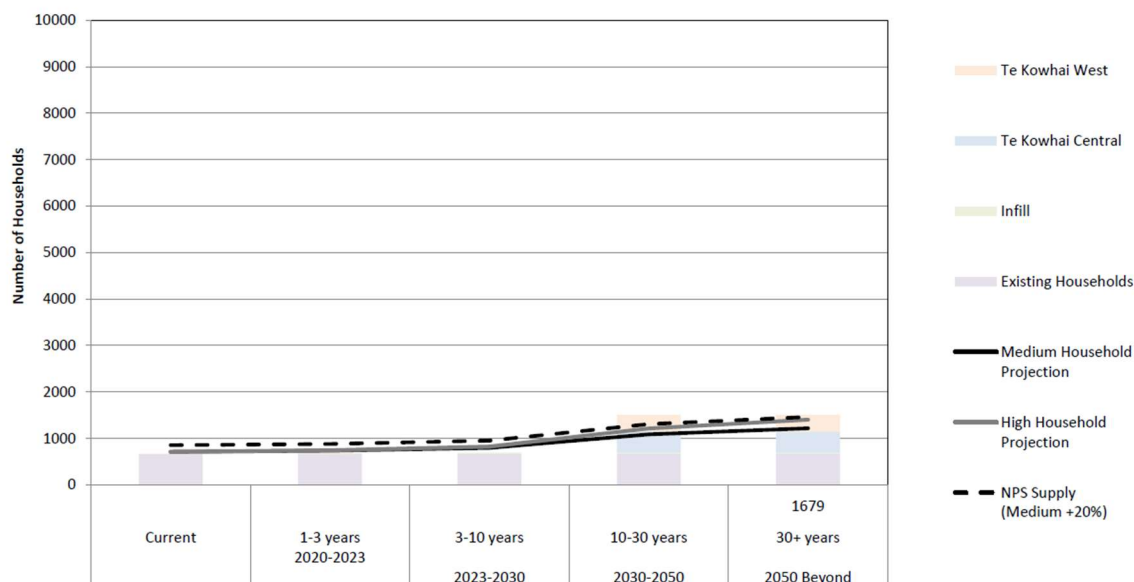


Figure 32 - Te Kowhai Household Projection and Supply Numbers (Waikato District Council, 2020)

7.4 West

Raglan

Raglan is located on the West Coast of the Waikato District at the Whaingaroa Harbour and is accessed by SH23. The local population is very environmentally conscious and is seeking comprehensive treatment solution to their wastewater management. Given the high tourism numbers that support the town, public facilities and spaces will also need to be of high quality and capacity to meet visitor demand (for example, through Raglan Wharf upgrades).

Waikato 2070 identifies the following growth areas within Raglan. Some areas covered by a growth cells also are covered by submissions on the Proposed Waikato District Plan.

- To the east of Raglan at Lorenzen Bay, residential development is identified in the 1–10-year timeframe and at Flax Cover in 3–10 years.
- To the south of Raglan, stage 1 of Rangitahi Peninsula development is progressing, with the whole area identified to be residential within 1–10 years.
- South and west of the Peninsula the Afon Oporu growth cell is identified for residential in the 10–30-year timeframe, and further west and north at Te Hutewai and Rakaunui, residential areas are identified beyond 30 years.

The business capacity assessment shows the demand for industrial land is stable, so more people are involved in work from home, cottage industry or commuting (D Kemp, 2019). The uptake of housing in Rangitahi is a split of 55% residents and 45% non-residents (ref Waikato 2070 submission). If this growth continues, then half of the population growth will be a lifestyle choice commuting to Hamilton with a smaller proportion to Auckland (remote working may exacerbate this).

Improvements in connector and local roading, and footpaths (walking/cycling) will be required. Waikato 2070 signals that the possible future population of Raglan will likely reach 12,500 people in the next 50 years.

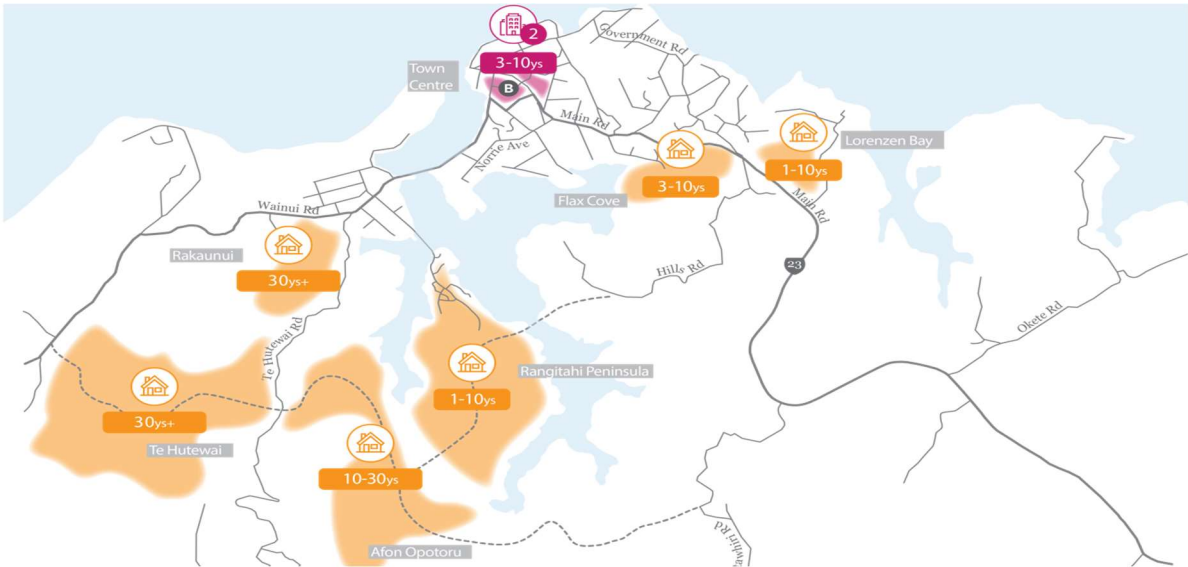


Figure 34: Raglan Town Development Plan

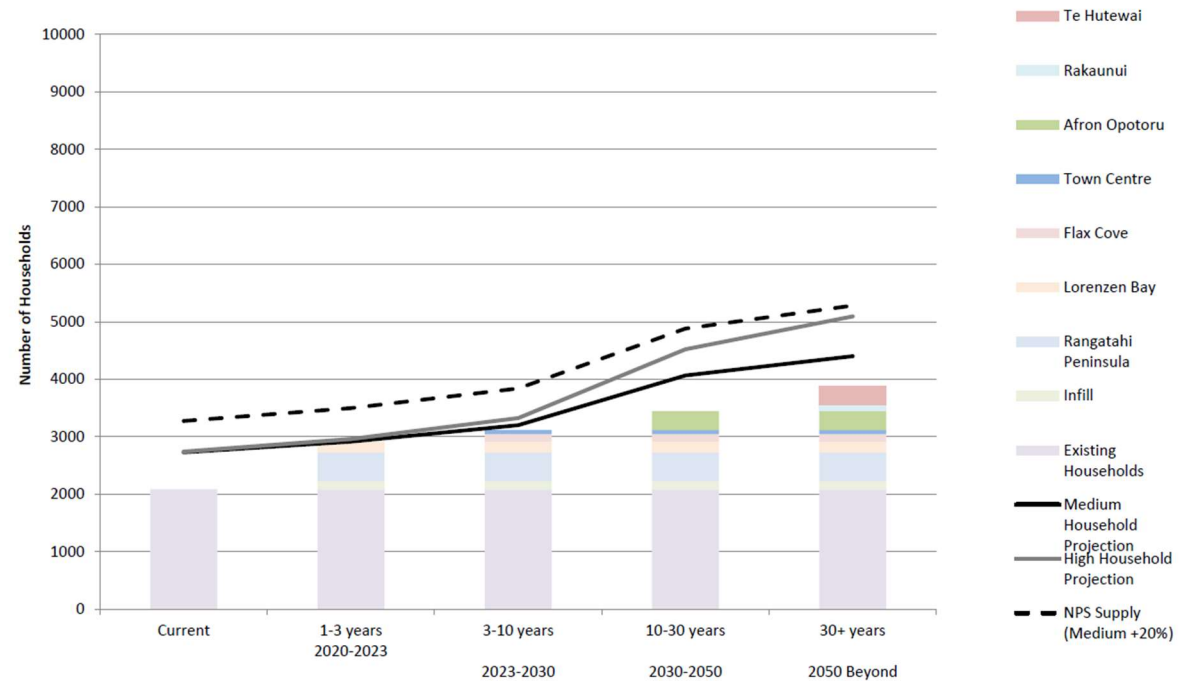


Figure 33: Raglan and Whale Bay household projection and supply numbers (Waikato District Council, 2020)

Other Western Villages

It is not anticipated that other small areas in the central area will increase in population significantly than currently what is existing.

Whatawhata, Te Uku and Te Mata villages are anticipated to remain relatively static, and will receive some small-scale localised housing developments permitted under planning rules. No growth cells for these areas are proposed.

7.5 South

Tamahere, Matangi and Gordonton will continue to see increases in Countryside Living and strengthening of the Village centres, but no specific residential areas are proposed to be developed other the Tamahere Country Club retirement village. The population should remain relatively static or will have small increases, and no growth cells for these areas were identified in Waikato 2070.

8. Employment Growth and Development

8.1 Industrial

The Waikato District is predominantly a rural area with only a small proportion of land currently zoned for industrial use. The two key areas of industrial development in the district are Pokeno and Horotiu, both of which are food processing clusters (dairy, meat). These will be strengthened with freight, logistics and manufacturing, and Horotiu will become an inland port.

There is an increase in the demand of commercial and manufacturing/industrial land in the Waikato District as land supply becomes short for large suitable sites in Auckland and Hamilton cities. Waikato 2070 identifies several new growth cells, and these are clustered around our existing towns and villages to help diversify the district's economy and provide employment opportunities for the Waikato District's communities.

Without these new employment opportunities to match the growing population, the district risks becoming a dormitory commuter district with people travelling between Auckland, Hamilton and Tauranga for work and services, which would have negative long-term impacts on our communities.

As D Kemp notes in his Industrial Land Evaluation report to Waikato District Council (Kemp, 2019) there is a projected need for industrial land, and if this land is not available, businesses will go elsewhere. The report identifies likely demand for industrial land under three scenarios of existing, recent, and high growth in Figure 24 below (Kemp, 2019).

Table 24: Likely demand for Waikato 'Industrial Land' under each scenario

The Likely Demand for Waikato 'Industrial Land'
Under Each Scenario

	Existing Economy		Waikato 'Recent Growth'		High Growth	
General industries	40		46		86	
Food & Clean Production	41		52		64	
Construction & Utilities	40		78		126	
Total Industries	121		176		276	
Transport & Storage	9		10		40	
Wholesaling	21		47		124	
Total Logistics	30	20%	57	24%	164	37%
Total Industrial Land	151		232		440	
Vehicle and Parts Sales	0		0		0	
Bulky Goods & Hire Services	1		2		11	
Retail Services	0		0		0	
Office Based Services	2		5		9	
Retail & Support Services	3		7		20	
TOTAL Ind Land Demand (Ha)	154		239		460	
Showroom Space (ha)	4		8		40	

* 'High Growth' = highest of Waikato and Regional North Island recent growth
(calculated as increased jobs/1000 resident population increase from 2000 to 2017)

Regional North Island defined as North Island excluding Metropolitan Areas
(of Auckland, Hamilton, Wellington, Lower Hutt, Upper Hutt TLAs)

Home based businesses have been deducted from each activity (such as the building & construction industries)

Waikato 2070 identifies and seeks to provide industrial/commercial areas for development in Tuakau, Pokeno, Mangatawhiri, Te Kauwhata, Ohinewai, Huntly, Taupiri and Horotiu. These areas are either zoned in the Operative District Plan (Waikato 2013 and Franklin 2000 sections), under consideration within the Proposed District Plan and identified in the development in 1-10 years or identified for later timeframes and subject to future planning processes. Some of the key land use changes are noted in Table below.

This industrial growth (with the accompanying residential growth) will impact on the assets of the Waikato District. Additional demand from these growth areas will necessitate a range of capital upgrades and new infrastructure in critical areas of transport (roading/rail) and water, wastewater management.

The impacts of any future industrial development on roading and water use will need to be reviewed when:

- Structure plans are developed, and new zoning is incorporated in the district plan,
- Consent applications are received by WDC seeking industrial development (i.e., resource consents or building consents).

Table 5 - Anticipated Industrial Growth and Demand

Industrial Node	Existing Sectors	Anticipated Growth & Demand
Horotiu	<p>AFFCO Freezing Works (currently have own treatment, may change in the future)</p> <p>Northgate Industrial Park</p> <ul style="list-style-type: none"> • RX Plastics • Waikato Valley Chocolate • Ports of Auckland 	<ul style="list-style-type: none"> • Primary Sector Support Services and Manufacturing • Warehousing and Logistics • Inland Port, freight movement and logistics
Pokeno	<ul style="list-style-type: none"> • Yashili Dairy Factory • Hynds • Mining and Aggregates (current have their own water supply) • water bottling plants • Synlait Dairy Factory 	<ul style="list-style-type: none"> • Warehousing and Logistics • Primary Sector Support Services • Construction Sector Services • Manufacturing • Light industrial
Tuakau	<ul style="list-style-type: none"> • Tuakau Timber Treatment Products • Van Den Brinks • Tuakau Grains 	<ul style="list-style-type: none"> • Brinks/Lowe development • Warehousing and Logistics • Primary Sector Support Services
Ohinewai	<ul style="list-style-type: none"> • None in Ohinewai 	<ul style="list-style-type: none"> • Manufacturing Sleepy Head • Commercial • Construction Services • Wet Service Industry
Huntly	<ul style="list-style-type: none"> • Genesis Energy Power Station • Small timber construction materials • Fletchers • Built Smart 	<ul style="list-style-type: none"> • Manufacturing • Commercial • Construction Services • Expanded services

This D Kemp's (2019) 'Recent Growth' Scenario projects a future demand of 239 ha is needed in the Waikato District for Industrial Land from 2017 to 2045. The equivalent of 241 ha projected by the 'Business Development Capacity Assessment 2017' for the Waikato District. This includes a 15% margin above the actual projected demand as set out in Table .

Table 6 - Business Development Capacity Assessment Demand for Waikato 'Industrial Land' 2017-2047

**'Business Development Capacity Assessment
Demand for Waikato 'Industrial Land' 2017-2047**

Ward	Demand 2017-2047	Available Supply 2017	Centres in ward
	Ha	Ha	
Awaroa ki Tuakau	75.2	119.5	Ohinewai, Tuakau
Onewhero	4.0	0	
Whangamarino	14.6	47.1	Meremere, Te Kawkata
Hukanui-Waereng	11.0	21.6	
Whaingaroa	12.9	0.8	
Huntley	19.1	7.2	Huntley
Ngaaruawahia	11.6	4.1	Ngaaruawahia
Newcastle	68.7	89.7	Whatawhata
Raglan	7.1	7.4	Raglan
Eureka	14.1	0	
Tamahere	2.6	1.9	
Total	240.8	299.2	

(Market Economics July, 2018 NB includes a 15% margin above the model's projected demand)

8.2 Commercial Growth

Waikato 2070 identifies Town Centre areas in the following localities Tuakau, Pokeno, Te Kauwhata, Huntly, Taupiri, Ngaruawahia and Raglan. The purpose of the town centre area is to encourage a mix of activity such as retail development on the ground level and office space or apartments on subsequent levels to revitalise town centres and encourage a higher density of development where public transport and access such as walking, and cycling is more readily available.

Growth is anticipated from commercial developments, predominantly in the North and Central part of the district. Tuakau and Pokeno will grow and become the commercial centres of the northern part of the district. Pokeno, with the redevelopment of the town centre and the availability of residential and industrial land close to the expressway, will attract more commercial activity than what is currently present.

Te Kauwhata, Ohinewai and Huntly communities along the expressway will also attract more commercial interest. With the significant residential development occurring in Te Kauwhata, there will be accompanying business demand within the immediate future and longer-term.

The Commercial Growth areas of Ohinewai will make use of large land parcels and the connection to roading (expressway) and rail (Main trunk line) to develop a manufacturing hub with good freight and logistics (Kemp, 2019). This will require appropriate feeder roads to be constructed and maintained (Great South Road into Huntly).

Ngaruawahia's key new commercial areas will be the Town centre and Hopuhopu business park (a mixture of industrial and commercial).

Inclusive of the large business parks to be progressed in the district, additional land will be set aside for service trades and cottage industries. Other land categories include clean production that minimises impacts on adjacent land and showroom spaces requiring high visibility.

9. How will Climate Change impact growth?

The New Zealand Climate Change Office indicates with the increasing variability of weather patterns and increasing frequency of high-impact adverse weather events (e.g., droughts, flooding, and coastal erosion) will become a growing challenge, with impacts on our communities and our infrastructure.

For further information on climate change, refer to Part 6: Sustainability section of the AMP.

10. References

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A. Solid Waste Demand Management

1. What are our Demand Management Strategies?

Demand management has different drivers in the solid waste activity than other activities. With contractors responsible for some asset and infrastructure issues relating to increases in demand, Council’s primary drivers for reducing demand are the environmental, economic and social benefits that result from reducing the amount of waste going to landfill.

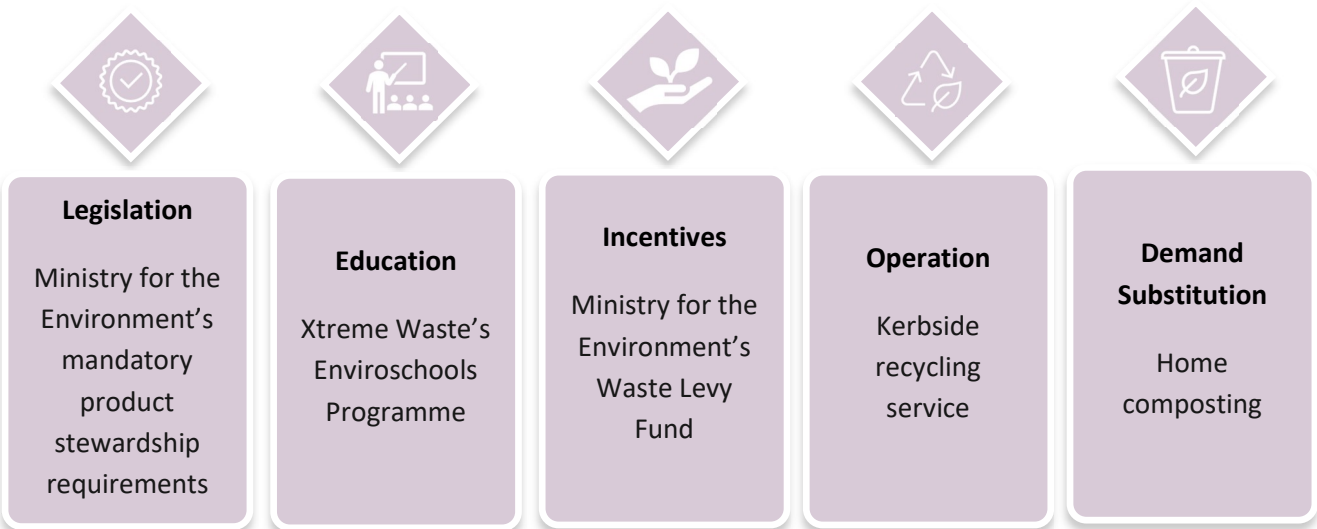
National, Regional and local strategies which impact on demand include:

- New Zealand Waste Strategy 2010
- Waikato Waste and Resource Efficiency Strategy 2015-18
- Council’s Waste Management and Minimisation Plan 2018-2024

2. What are our Demand Management Actions?

Demand management actions fall into five broad categories and when promoted as a package, rather than in isolation, they can dramatically reduce the amount of waste going to landfill. The key categories with examples are provided below:

Table 25: Demand Management Actions



This section outlines actions that are planned or in place to reduce the waste to landfill per capita, which is the primary measure of demand that Council wants to manage.

2.1 National and Regional Legislation/Regulation

The Waste Minimisation Act 2008 has two parts that each enact specific demand management actions:

- Part Two sets a framework for product stewardship programmes to encourage the people and organisations involved in the life of a product to share responsibility for ensuring there is effective reduction, reuse, recycling, or recovery of the product, and managing any environmental harm arising from the product when it becomes waste.

- Part Three creates a waste levy to raise revenue for promoting and achieving waste minimisation and increase the cost of waste disposal to recognise that disposal imposes costs on the environment, society, and the economy.

The Waikato Regional Council runs the Waste Exchange website (www.nothrow.co.nz), a free business-to-business waste brokering service which connects people who have waste material with others who can reuse the material.

3. The Future Demand in our District

3.1 What are the factors impacting future demand?

There are several factors that will affect future demand for waste minimisation and management, which include:

- Overall population growth
- Economic activity
- Changes in lifestyle and consumption
- Changes in waste management approaches

Demand for waste and resource recovery services are primarily influenced by:

- Population and household growth
- Construction and demolition activity
- Economic growth
- Changes in collection service or recovery materials

As shown above, the population in the Waikato District is projected to increase by approximately 15,500-19,000 additional people over the next 10 years. The population change, along with expected economic growth, are likely to drive moderate increases in the amount of waste generated, but no dramatic shifts are expected. The biggest changes in relation to waste demand are likely to come through changes within the waste industry, with economic and policy drivers leading to increased waste diversion and minimisation.

3.2 What are potential issues?

The following potential issues for the Waikato District were identified (as outlined in the WMMP):

- Insufficient systems in place for obtaining waste data from private operators in the District.
- Increasing population affecting waste streams and waste reduction messaging.
- Infrastructure to manage increased quantities and some waste streams may be insufficient to meet future demand.
- Potential for improved services targeting the rural sector and construction demolition waste.
- Opportunities for improved sub-regional, regional and national collaboration to achieve reduction and minimisation of waste.
- Insufficient leadership from central government to address national waste issues

4. WMMP Actions

The following tables are action points listed in the [WMMP](#):

Action Points – Services

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Review funding model for council services to align with waste minimisation activities (including but not limited to contracting of solid waste services, kerbside refuse, inorganic collection, food waste and drop off collections).	Plan	Plan	Implement					New	Levy, Rates
Access the viability of other areas for kerbside services.	Plan	Implement						New	Rates
Consider increasing the use of a social procurement approach to the procurement of waste services to achieve the objectives and targets of the WMMP.	Ongoing							New	Rates
Evaluate Raglan food waste services and assess suitability for expansion. Expand if suitable.	Assess		Plan		Implement			New	Levy, Rates (TBC)
Continue litter and illegal dumping services, while improving data collection in alignment with the Waste Data Framework.	Ongoing							Existing	Rates
Monitor, evaluate and manage council provided services and contractors to ensure they meet contractual obligations.	Ongoing							Existing	Rates
Procure council services and waste related contracts as required, ensuring new contracts in alignment with this WMMP and utilising a social procurement approach.			Plan	Implement				Existing	Rates

Action Points – Facilities

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
To progress Resource Recovery facilities in Huntly and to consider the development of resource recovery facilities for the Northern part of the district. This will be encouraged through collaboration and partnerships before 2024.	Plan			Implement				New	Levy, Rates (TBC)

Action Points – Data and Licensing

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Introduce a Solid Waste Bylaw & licensing system for operators and facilities, aligning with the regional template developed by Waikato Regional Council.	Plan	Implement						New	Levy, Rates (TBC)
To support the introduction of a Waste Bylaw and licensing system: develop internal waste data collection and monitoring systems to enable waste data management in alignment with the Waste Data Framework.	Plan	Implement						New	Levy, Rates (TBC)
Undertake Waste Compositional Audit every 3-6 years.			Plan & Implement					New	Levy

Action Points – Event Waste Management

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		

Develop Event Waste Management Guidelines and promote to events in the district, including mandatory utilisation for events at Council facilities. This may be undertaken in partnership with other councils.	Plan	Implement			Planning	Implement	Existing	Levy, Rates (TBC)
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Action Points – Behaviour Change

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Council will provide quality behaviour change programs focused on waste minimisation, and that support the goals and objectives of this WMMP,	Ongoing							Existing	Levy

Action Points – Partnerships

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Engage in regional cooperation including appointing a Regional Coordinator to assist with joint projects.	Ongoing							Existing	Levy
Work closely with Tangata Whenua, community groups and private sector to enhance economic development through resource recovery.	Ongoing							Existing	Levy
Work with business, farms and industry organisations assisting to reduce waste increase diversion and recycling (potentially as a sub-regional project).			Plan		Implement			New	Levy
Identify and support community and business champions in waste reduction and avoidance; including but not limited to initiatives focusing on e-waste and/or construction and demolition waste.	Ongoing							New	Levy

Action Points – Grants

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Investigate introducing a Grants scheme (funded through the Waste Levy) for waste minimisation projects – this may be in the form of low interest loans and/or targeted grants.					Plan	Implement		New	Levy

Action Points – Advocacy

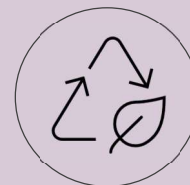
Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Advocate for effective product stewardship and regulation and support independent organisations advocating for similar outcomes.					Ongoing			New	Levy

Action Points – Partnerships

Activities	Timeframe							New or Existing	Potential Funding Mechanism
	2018	2019	2020	2021	2022	2023	2024		
Ensure that services provided by Council are in line with and promote current health and safety guidelines; meet legislative obligations.					Ongoing			Existing	Levy
Undertake Waste Assessment and develop and adopt 2024 -2030 WMMP (by June 2024).						Plan & Implement		New	Levy, Rates (TBC)
Investigate alternate treatments to Council wastewater sludge and other Council's waste generating activities.	Investigate	Plan	Plan		Implement				

Part 6: Sustainability

This section looks at the processes set up at council for assessing and managing sustainability and Climate Change for the Solid Waste Activity and its integration with Council's other activities.



1. Regulatory Framework

1.1 What does sustainability mean?

Sustainability is about ensuring that all resources are used and managed for a balance of environmental, social, cultural, and economic well-being. Asset management practices include actions that recognise the need for these four well-beings, namely:

1. **The natural environment** needs to be preserved for future generations and not degraded because of Council's asset management operations and development projects.
2. **Financially**, there is a limit to what ratepayers, developers, and therefore Council, can afford. Expenditure needs to remain within this limit and the costs need to fall equitably on the generations which derive the benefits.
3. **Social relationships** between individuals, interest groups and local government are valuable, and Council needs to facilitate and encourage this by providing infrastructure.
4. **Our history, customs and creativity are valuable to us.** Their preservation and enhancement over time is facilitated by providing venues where they can be practiced, preserved, and displayed.

1.2 Statutory and Regulatory

In taking a sustainable approach to service delivery Council must ensure that they and their contractors comply with:

- Local Government Act (2002) Amendment Act 2014
- Resource Management Act 1991
- Reserves Act 1977
- Building Act 2004
- Council's own District Plan
- Climate Response and Resilience Policy

2. What are the main impacts of our activity?

Section 14 of the Local Government Act 2002 requires local authorities to take a sustainable development approach, by considering:

- the social, economic, and cultural interests of people and communities

- the need to maintain
- enhance the quality of the environment
- the reasonably foreseeable needs of future generations

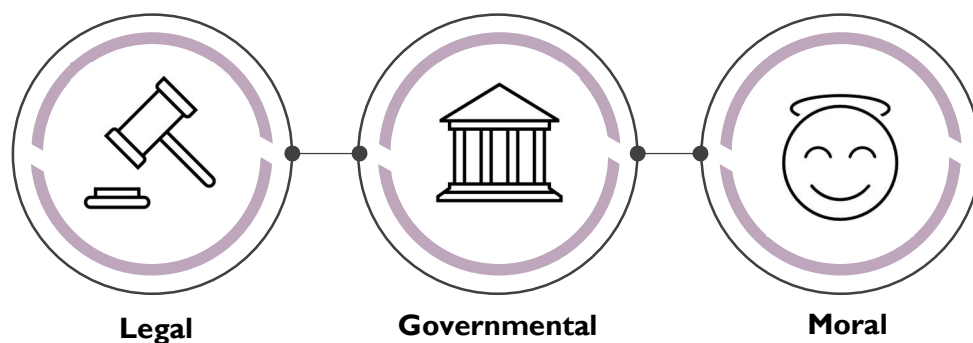
Sustainable development is about maintaining the delicate balance between improving people's standard of living and well-being over time. While at the same time preserving the resources and ecosystems on which we and future generations depend.


3. How are we dealing with Climate Change and Adaption?

It is recognised that we need to progress from discussion to action about climate resilience. It is likely that climate hazards will significantly disrupt our vision for:

"liveable, thriving and connected communities" within the next 30 years.

It is accepted that without drastic action the world will face a significant climate crisis. We have a Legal, governmental and moral obligation to balance our communities' current needs, economic growth and our future.



For this reason, we want to progress our climate resilience from discussion to action and in an effort to address this on Monday 31 August council formally adopted an internal Climate Response and Resilience Policy .

The policy is important because it:

- Acts to protect people from risk
- Provides a foundation to establish a consistent, standardised, all-of-organisation approach to climate resilience
- Demonstrates and operationalises Council's commitment to take climate action
- Acts as an enabler helping people to make decisions; requests have been received for a climate policy to assist with planning
- Aligns the organisation with climate related legislation
- Sets a framework within which a Climate Resilience Action Plan will be developed, in collaboration with our communities and regional partners
- The Climate Action Project is underway to develop Councils action plan and we have made a commitment to finalise the plan prior to the end of December 2020. There is also plans to develop and implement a Climate Action Strategy that includes goals, objectives, actions, and indicators for Council

The Waikato District is likely to see extremes of weather becoming more frequent. This includes warmer and wetter weather not necessarily at the same time as a result of climate change with average temperatures increasing as much as 3°C over the next 70-100 years. This could result in longer, drier summers and flooding which will put extra demand on the council's infrastructure including:

- Water activity for wet industries, garden water and irrigation (businesses that rely on water)
- Roading maintenance with extremes of weather likely to cause more damage
 - Drying out of roads, cracking, and ground level subsidence
 - High rainfall events causing floods that washing away roads, bridge or undermining them through damage to the substrate
- Passive and active recreational assets will need additional maintenance. In some cases, further protection from these climate changes e.g. additional shade structures to provide protection from sun / rain, increased frequency of painting of assets due to peeling/fading in heat.

Rising sea levels will limit growth along the coastal regions (Port Waikato / Raglan) due to potential inundation, erosion and flooding placing development pressure on inland areas and existing infrastructure.

The council has developed Proposed District Plan Natural Hazard Provisions for land use and subdivision land development currently at risk and on land that is potentially at risk in the future. This is in line with the official Government predictions and guidance³ to be used in planning the development and location of key infrastructure. The assumption of a 1m sea-level rise over at least 100 years.

Hazard modelling and assessments have incorporated climate change projections where relevant, i.e. rainfall patterns and sea-level rise based on projected climate change scenarios

The main effects of climate change on assets will be increased damage to assets over their lifecycle, leading to increased maintenance costs and possible construction costs if the asset must be built more resiliently.

³ "Climate Change Projections for New Zealand," Ministry for the Environment, Sept. 2018; and "Climate Change Effects and Impacts Assessment: A Guide for Local Government in New Zealand," Ministry for the Environment, May 2008.

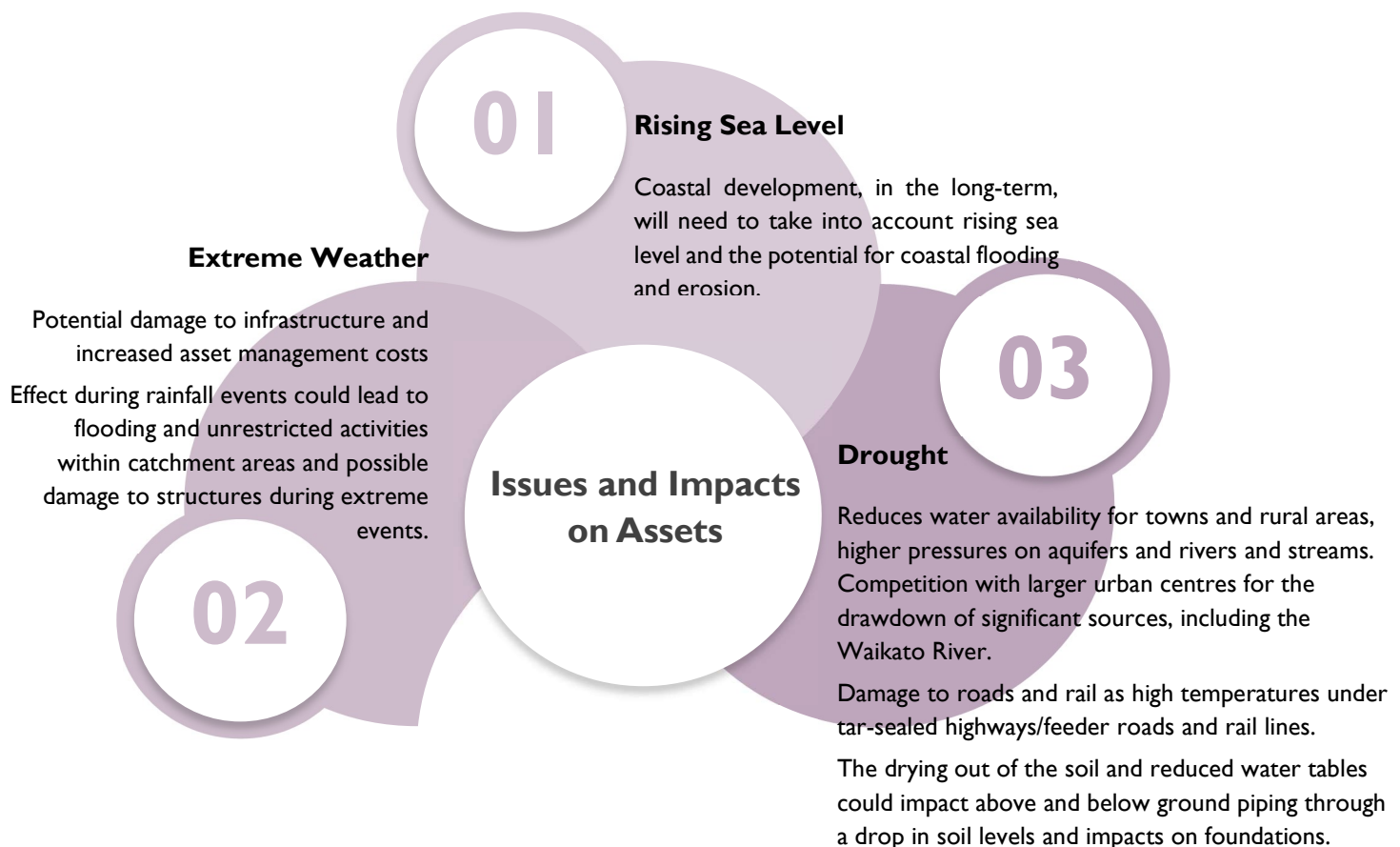


Figure 35: Issues and Impacts on Assets

4. What is the Paris Agreement?

The Paris Agreement's central aim is to work with nations to strengthen the global response and threat of climate change by keeping a global temperature rise well below 2 degrees Celsius this century, above pre-industry levels pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

For there to be any progression around the globe on climate change, the Paris Agreement requires all parties to put forward their best efforts through NDCs (Nationally Determined Contributions). These NDCs are specific to each country, helping them to achieve their own goals, yet help the globe combat against climate change.

New Zealand's NDC is to reach a goal of reducing greenhouse gas emissions by 30 per cent below 2005 greenhouse gas levels which takes into effect in 2021. New Zealand's goal is to achieve this by the year 2030, giving New Zealand 9 years to reach this goal to help fight against climate change.

Alongside the NDC goal, New Zealand has made their own domestic goals which are as follows:

- Net zero emissions of all greenhouse gases other than biogenic methane by 2050
- 24 to 47 per cent below 2017 biogenic methane emissions by 2050, including 10 per cent
- Below 2017 biogenic methane emissions by 2030

4.1 Carbon Emission Stocktake and Roadmap

During 2020 council engaged Martin Lynch from the Waikato Local Authority Shared Services (WLASS) to perform a Carbon Emission Stocktake for the 19/20 financial year, results are outlined in Figure 2.

As a result of this stocktake, it has identified that we have to discover new approaches on how to undertake the Solid Waste activity that reduce carbon emissions, the Carbon Zero roadmap outlined in Figure 11 is the Council’s guide on how reductions are going to be achieved and ensures Council is compliant with the Climate Change Response (Zero Carbon) Act 2019 which came into force November 2019.

Waikato District Council GHG Emissions FY19
(2,433 TCO2e)

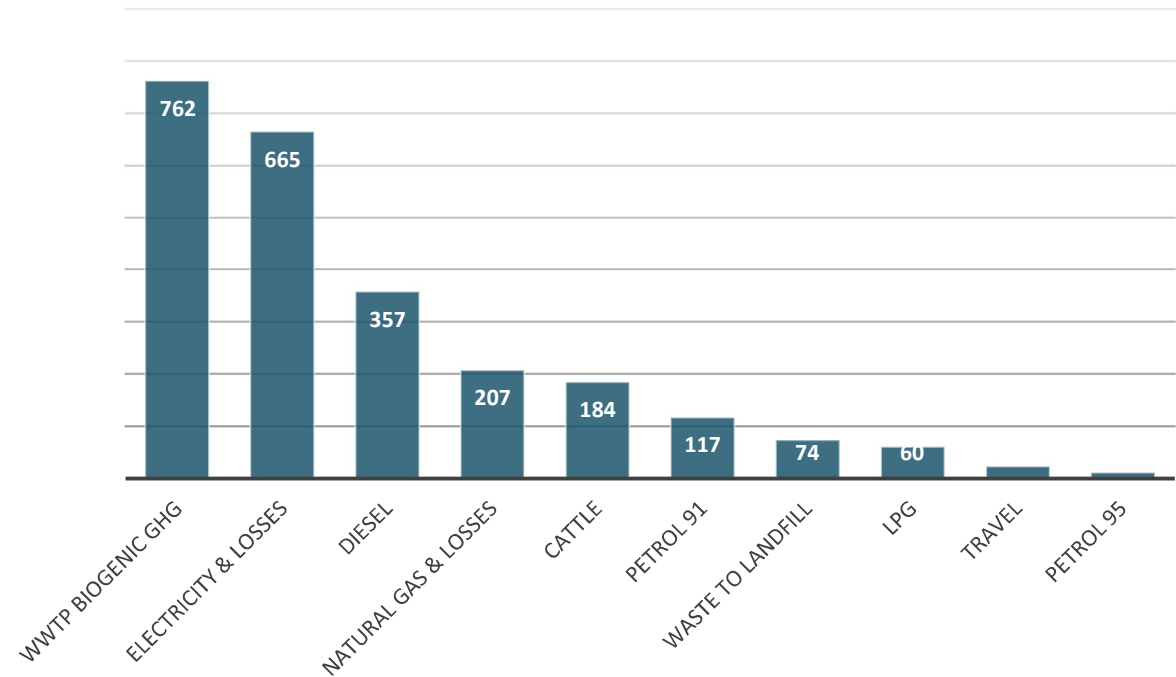


Figure 36: Carbon Emissions 2018-19 (Source - Martin Lynch - Waikato LASS)



We contribute directly to approximately 3.0% of the total Carbon Emissions produced by Council through the Waste to Landfill. Usage of electricity at the Refuse Transfer Stations, Landfill and Pump stations throughout the district also contribute to the Carbon Emissions produced by the Solid Waste activity.

Waikato District Council Carbon Zero Road Map To 2030



Figure 37: Carbon Zero Road Map to 2030



Create resources to facilitate zero waste event management

5. Sustainability Challenges

Sustainable Environment – Council’s strategic focus is to have an integrated approach to providing sustainable, attractive, affordable, accessible, and safe options for living, in a way that is in tune with what ratepayers want. This needs to result in more streamlined processes that cost less while still providing required results for both community and the council.

Sustainable Communities – Council’s strategic focus is to support economic growth, rather than spatial growth, to enrich our communities through employment, improved quality of life, rather than simply encouraging population growth.

5.1 Negative Effects of the Activity

The provision of the solid waste activity does not create any significant negative effects, described in the table below.

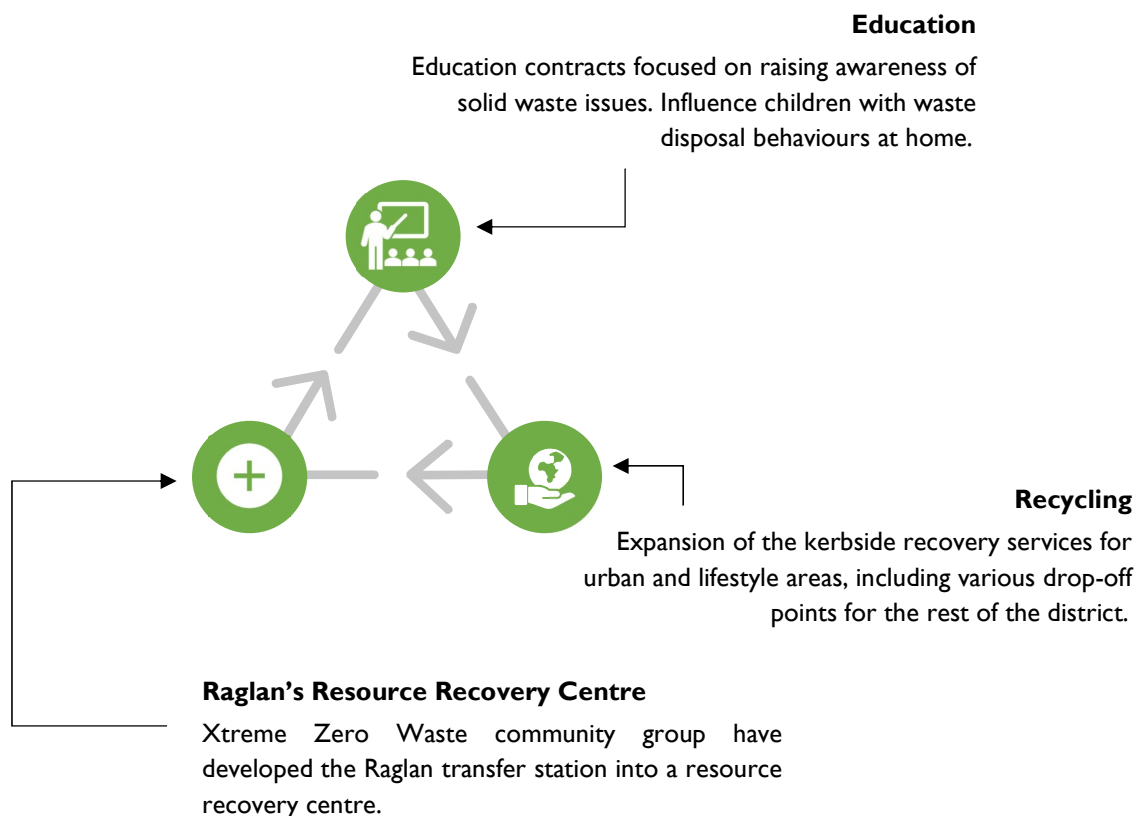
Table 26 - Significant Effects of the Activity

Significant Negative Effect	Council’s Response
Increase in the amount of waste that is landfilled and or not recovered as population increases over time	The council is legislated to reduce waste through the adoption of the Waste Management and Minimisation Plan. Ensure Council services and facilities enable waste reduction and recovery The council also supports education initiatives and provides education material for its customers
Environmental impacts caused by the discharge of contaminants to land and water from closed landfills	Compliance with resource consent conditions that stipulate the frequency and parameters to be monitored
Ease of disposal, through convenient waste management services, encourages increased quantities of material to be sent to waste by customers. Continue to offer disposal services over other diversion alternatives	Education and programmes to build awareness and foster waste minimisation within the community.
Potential impacts on customer satisfaction due to service failure /delays /responsiveness	Monitor and report on Levels of Service and in-service provider contracts. Seek to resolve customer complaints “close the loop”
Health and safety risks associated with the operation, maintenance, or construction of solid waste infrastructure	Ensure compliance with legislation and health & safety management plans. Maintain an incidents register.
Under-provision of recycling and diversion facilities fails to promote a positive shift in the community’s attitude to waste	Our communities in our District has access to appropriate services and facilities
Waste entering the water bodies affect the mauri of the environment	

Source: Waikato Long Term Plan 2018/28

5.2 Sustainability Initiatives

The following sustainability initiatives are being implemented in relation to our activity:



5.3 Sustainability Initiatives for the Future

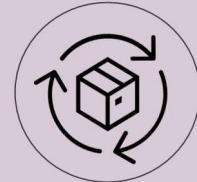
The following sustainability initiatives are being implemented in relation the solid waste activity:

- The planning and development of community recycling centres and or resource recovery centres at Council's other transfer station sites to increase the diversion of waste form landfill and increase community engagement with solid waste issues.

Part 7: Lifecycle Management

Lifecycle cost is the total cost to Council of an asset throughout its life including: creation, operations and maintenance, renewal and disposal.

Council aims to manage its assets in a way that optimises the balance of these costs. This section summarises how Council plans to manage each part of the lifecycle for the Solid Waste activity.



1. What is lifecycle management?

Lifecycle Asset Management focuses on management options and strategies to minimise risks to assets, and any potential risk of assets.

It considers all relevant consequences from initial planning through to:

- renewal
- replacement
- disposal
- rationalisation of assets.

It acknowledges that assets are always in a state of decay and their useful life is primarily influenced by:



Lifecycle Asset Management also enables us to:

- identify issues
- determine appropriate response options
- identify strategies and programmes for response to identified issues/opportunities to deliver Levels of Service
- achieve both asset and organisational goals and objectives

This section contains the prioritisation of works:

- That meets the short- and long-term needs of our community
- That offers value for money
- In a sustainable manner to the least whole-of-life cost.

The prioritisation of planned maintenance, renewal/replacement and capital projects is based on:

- Level of Service requirements

- Criticality and risk assessment associated with investment levels that potentially change the level of service
- Age and condition of the infrastructure
- Budgetary constraints
- Growth – required by and supporting population and economic growth

These key outcomes have been considered for each activity at an asset group level.

2. How Management of Infrastructure is Undertaken?

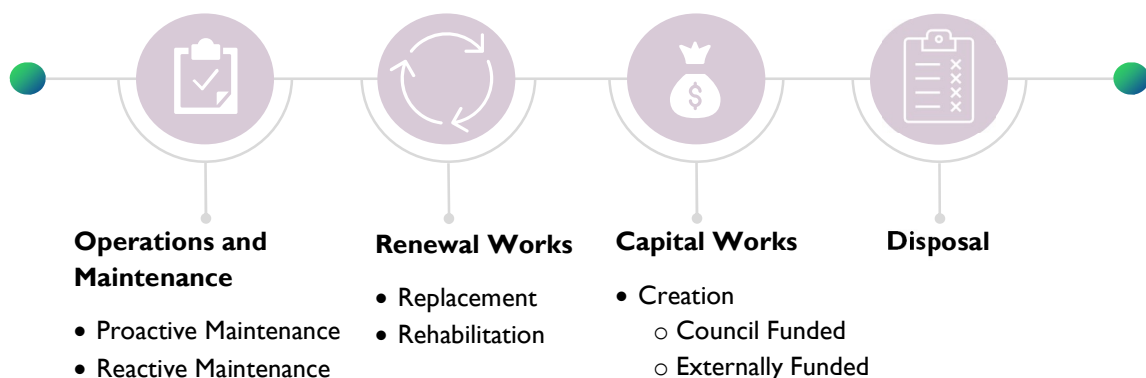
The overall management of infrastructure will be driven through strategies aimed at:

- Complying with the legislative and strategic requirements
- Meeting customer expectations and agreed levels of service
- Delivering value for money for ratepayers, funding partners and the Council

Our strategies are outlined in Part 1: Introduction.

3. What are the categories of Lifecycle Management?

Lifecycle management is split into three main categories for our activity.



4. What is Operations and Maintenance, and how is it undertaken?

Operations and Maintenance work is required for the day-to-day operation of the network to consistently achieve optimum use. A key facet of asset management planning is determining the most cost-effective blend of planned and unplanned maintenance.

The operation and maintenance of assets is undertaken through:

- **Operations** - Activities designed to ensure efficient utilisation of assets and that they achieve their service potential. Operational strategies cover activities such as:
 - Kerbside collection
- **Maintenance** – Maintenance strategies are designed to enable existing assets to operate to their service potential over their useful life. This is necessary to meet service standards, achieve target standards and prevent premature asset failure or deterioration. There are two types of maintenance:

- **Preventative Maintenance** – A base level of maintenance carried out to a predetermined schedule. Its objective to maintain the service potential of the asset system.
- **Reactive Maintenance** – Maintenance carried out in response to reported problems or system defects, or emergency response such as storm damage. Its objective is to maintain day to day Levels of Service.

4.1 Operating and Maintenance Practices

District Wide Operating and Maintenance Practices

Our activity operates through contracts, this means council is not directly responsible for the condition; of the assets used in the delivery of our service this has been mentioned through Part 2: Activity Overview.

This allows council do not directly use maintenance plans. We do however have monitoring plans that monitor the condition of closed landfills.



Create an initiative to co-design road setbacks for kerbside collection in new developments

4.2 Deferred Maintenance

If work is to be deferred, the impact on the assets and their ability to provide the required levels of service will be considered in the decision-making process. All deferred works will be reconsidered and re-prioritised in the following years annual plan programme or, if urgent, undertaken immediately.

The deferral of some items of work will not have a detrimental effect on the levels of service provided by the assets. Repeated deferral however may incur a liability in future years. There is evidence of deferred maintenance with our assets, although it is difficult to gather the data behind this.

5. Asset Renewal and Replacement Plan

Renewal forecasts are intended to provide for the progressive replacement of individual assets that have reached the end of their useful life.

The rate of asset renewal is intended to maintain the overall condition of the asset system at a standard which reflects its age profile and ensures that the community's investment and levels of service is maintained.

Renewal works fall in two categories:

- **Rehabilitation:** Involves the major repair or refurbishment of an existing asset. Rehabilitation creates an extension in the life of an asset. It does not provide for a planned increase in the operating capacity or design loading.
- **Renewal:** Does not provide for a planned increase to the operating capacity or design loading. Some minor increase in capacity may result from the process of renewal, but a substantial improvement is needed before system development is considered to have occurred. Expenditure around renewal is outlined below.

The level of expenditure on cyclic asset replacement varies from year to year, reflecting:

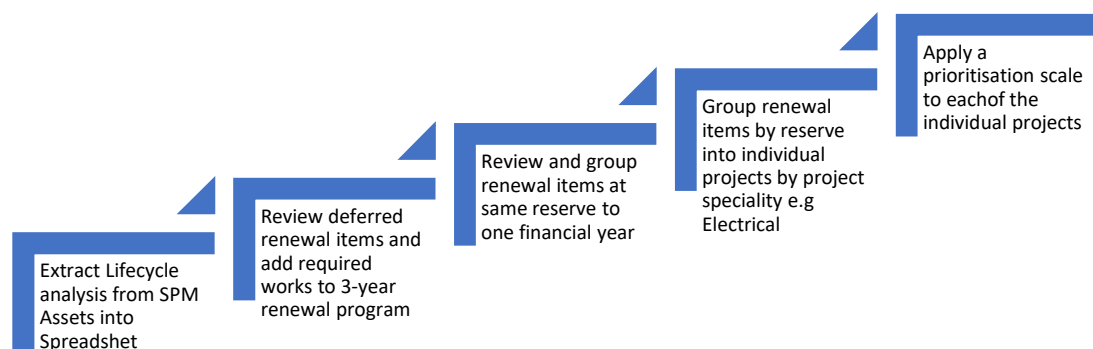
- The assets age profile of the asset class
- The condition profile of the asset class; (condition ratings are used to review the remaining life of assets prior to programming renewals)
- The on-going maintenance demands
- Customer service issues
- The differing economic lives of individual assets comprising the overall asset system

The key assumptions underlying the renewal forecasts are:

- Default lifecycles and costs for components in the Assets database were initially based on the NAMS Building Component Guidelines⁴.
- An additional review process also identified sites where default lives required modification (either an increase or a decrease). This is dependent on expected usage patterns and operating conditions.
- Site Importance levels are reviewed regularly by the Community Assets Team and are based on individual sites.
- Component Criticality levels are also reviewed regularly, both at a default level and for specific sites.
- Components are generally replaced at Condition Grade 4 (where they have between 11-24% of their useful life remaining).

Both the Importance Levels and Component Criticality Levels may shorten (or lengthen) component lifecycles at certain reserves. High Profile reserves are considered those with a site Importance Level of 5 (High).

When compiling the capex renewal programme the following process was undertaken:



The prioritisation scale for our Activity is as follows:

- 1 – Deferred Projects
- 2 – Building Structure
- 3 – Health and Safety / Compliance
- 4 – Finishings
- 5 – Administrative

⁴ NAMS Property Manual – Version 1.0, 2006

Prior to producing the lifecycle analysis extract from SPM Assets, a ground-truthing exercise of the data was undertaken to establish validity of the renewal program it was suggesting. Suggested changes were then applied by the Community Assets team.

Key principles of the programme include:

- Condition Grade 5 components are compulsory renewals
- Bundling work where more cost effective or to minimise disruption
- Managing peaks to ensure they can be resourced, both operationally and financially
- Seeking input from Activity Managers where priorities differ
- Linking with capital upgrade programme
- For structural renewals – deferring maintenance / replacement leading up to it

5.1 Renewal / Replacement Strategies

Identification of Renewal Needs

Renewal / replacement needs are identified by:

- analysing condition reports
- maintenance records (asset failure and expenditure history)
- request for service records
- observations of staff and contractors

The short and long-term asset renewal programmes are prepared from specific renewal needs identified from the above information.

In the longer-term renewal forecasts will be based on an assessment of remaining asset lives and condition (integrated with valuation process) once the Asset identification, condition grading improvements have begun.

Prioritisation of Renewal Projects

Renewal projects are justified and prioritised using a risk-based process. As outlined previously there is a prioritisation scale on a 1-5 basis. When reviewing each of the renewal projects the risk rating associated with the affected componentry is considered.

The risk rating is based on the same matrix as outlined in Part 4: Risk Management Planning, so hence higher the risk scores the higher risk the asset poses for Council and should be given priority for renewal.

Decisions on renewal works consider the short and long-term effects on the operating and structural integrity of the system. Renewal works are designed and undertaken in accordance with industry standards (or known future standards) and system design loadings.

Short-term renewal priorities are reassessed annually considering any additional information that becomes available.

Deferred Renewals

The quantity and impact of deferred renewals (if any) is tracked within SPM Assets so that these can be prioritised for inclusion in future programmes.

General

Condition grading based on the PRAMS guidelines for all assets are used to determine the position in the lifecycle and end of life for assets. Several factors influence the useful lives of assets, these include factors:

- such as the level of use
- location
- environmental factors such as weather, amount of vandalism in the locality.

Funding

Renewals are funded from mostly depreciation with some exceptions regarding Direct Contribution spending.

5.2 What is included in the capital programmes?

There are variety of assets included in the capital renewal programmes. These are:

- North Resource Recovery Centre or Community Recycling Centre
- South Resource Recovery Centre or Community Recycling Centre



Investigate the implementation of a RRC/CRC in the Tuakau area



Investigate the implementation of a RRC/CRC in the Huntly / Te Kauwhata area

5.3 What are New Asset Requirements?

There is a need to provide extra solid waste services to meet the District's needs. There is also a necessity:

- develop the infrastructure to support existing operations
- provide a suitable level of amenity for visitors

New capital assets for solid waste may be required to:

- Address performance gaps in the current levels of service
- Provide for the development of additional areas to meet demand
- Meet increases in levels of service
- Provide new technologies or innovations to improve efficiency/sustainability

It is anticipated that, overall, a similar level of service will continue to be provided into the future for our activity and this will be reflected in designs and infrastructure provision.

Prioritisation and Timing

Prioritisation of new capital items has involved consideration of the following criteria:

- Level of usage of assets
- Demand information
- Technical assessments
- Issues identified in planning documents (e.g. Sanitary Services Assessment for Cemeteries)
- Risk factors

Selection and Design

The following requirements are assessed when consideration is given to creating or acquiring new assets:

- service
- functionality
- price
- availability
- reliability
- aesthetics
- safety
- sustainability
- maintenance

6. Asset Development Plan

Asset development provides for a planned increase in service capability for our activity to:

- Close any gaps between the current targets and target service standards
- Accommodate growth
- Ensure appropriate funding mechanisms are in place such as Development Contributions

Asset development and asset renewal can occur simultaneously. The purpose of asset renewal is to prevent a decline in the service potential of the assets. Asset development is concerned with the service improvements, measured by asset performance.

7. Management, Renewal and Operations Standards

Our activity management, renewal and operations and maintenance are managed in accordance with the following standards:

- Generally accepted accounting practice
- The International Infrastructure Management Manual
- Lifecycle renewals and finance
- Relevant Resource Consents and the Resource Management Act 1991
- Zero Harm Policy
- The general policies from the Reserve Management Plans

8. What is the Disposal Plan?

As part of the whole life cycle management of assets, it is vital to consider the costs of asset disposal in the long-term financial forecasts for an asset. The cost of asset disposal is expected to be incorporated within the capital cost of new works, or asset renewals.

Disposal is the retirement or sale of assets whether surplus or superseded by new or improved systems. Assets may become surplus to requirements for any of the following reasons:

- Underutilisation
- Obsolescence
- Provision exceeds required level of service
- Assets replaced before its predicted economic life
- Uneconomic to upgrade or operate
- Policy changes
- Service provided by other means (e.g. private sector involvement)
- Potential risk of ownership (financial, environmental, legal, social)

8.1 What are we going to dispose?

The disposal plan recognises that there can be activities and costs associated with the decommissioning and disposal of assets which are no longer required as part our activity. In some situations, there can be revenue resulting from asset disposal.

No Solid Waste facilities or other assets have yet been identified for disposal. An acquisition/disposal strategy for land purchases still needs to be developed.

Table 27: Disposal Strategies

Strategy	Objective / Description
Asset Disposal	Assess each proposal to dispose of surplus or redundant assets on in individual basis, subject to the requirements of the relevant legislation.
Residual Value	The residual value (if any) of assets, which are planned to be disposed of, will be identified, and provided for in financial projections

Part 8: Financial Summary

Council has planned a prudent financial approach to managing its assets and services. This section sets out financial statements, funding strategy, depreciation forecast and charges for the Solid Waste in the Waikato District.



1. Overview

The Local Government Act 2002 (Part 6(3)) requires local authorities to manage their finances “prudently and in a manner that promotes the current and future interests of the community.” This implies compliance with applicable Financial Reporting Standards, which include New Zealand equivalents to International Financial Reporting Standards (NZ IFRS).

In determining how activities will be funded local authorities are required to take the following into consideration:

- The contribution to the achievement of Community outcomes (strategic alignment)
- Beneficiaries of each activity (beneficiary / user pays principles)
- The period over which benefits from the activity will occur (intergenerational equity issues)
- The extent to which identifiable individuals contribute to the need to incur expenditure (exacerbator and user pays principles)
- The costs and benefits of funding the activity compared to other activities (cost / benefit, prioritisation principles)
- The impact of funding the activity on the wellbeing of the community (ability to pay principles)

This Activity Management Plan provides the basis for meeting these requirements.

2. How much does our Activity cost and how is it funded?

The operational costs for our activity is funded by targeted rates and user charges. Waste Minimisation initiatives and programmes are for the most part funded by the waste minimisation levy. Waste minimisation can attract central Government funding.

Minimisation Fund provides funding for projects that promote or achieve waste minimisation. This helps to increase resource efficiency, reuse, recovery, and recycling, and decrease waste to landfill.

Capital costs are funded through loans and reserves.

The following table summarises the ways in which the Solid Waste Service is funded.

Table 28: Activity Funding Sources

Solid waste Activity Category	Funding Source	Proposed Level	Average Last 3 Years	Changes from the Last Plan (If any)
Kerbside Collection	Targeted Rates + part user pays	%	%	No Change
Transfer Stations	Raglan Recycling Rate does go to support the running cost? Te Hutewai road			
Drop-off Centres	Targeted Rates +			No Change
Closed Landfills	General Rates			No Change

3. Capital

As a result of the SPM database, the information that is available to staff with regards to renewal forecasting can now be completed with a higher degree of accuracy over the LTP term.

With this new level of precision available to staff we can forecast component renewals across the entire portfolio.

Capital and Renewals expenditure will be funded from the following sources:

- Depreciation
- Loans (either internal or external)
- Development / Financial contributions
- Private or Community contributions
- Government Subsidies (where applicable)

The following table summarises the ways in which the capital aspects of the Facilities activity are funded:

Table 29: Capital Funding Sources

Solid Waste Activity Category	Funding Source	Proposed Level	Average Last 3 Years
Kerbside Collection	Depreciation	100%	No Change
Transfer Stations	Depreciation	100%	No Change

Drop-off Centres	Depreciation	100%	No Change
Closed Landfill	Depreciation	100%	No Change

Depreciation is provided on a straight-line basis on buildings. The depreciation is calculated at rates that will write off the cost (or valuation) of the assets to their estimated residual values over their useful lives.

3.1 Development Contributions

Development contributions provide a source of funding for future capacity upgrading work. These works offset the cumulative depletion of any spare capacity within each network caused by new users. Development contribution charges are calculated as per Council's development contribution policy and reflected in Council Fees and Charges documents.

4. Financial Statements and Projections

4.1 Cash Flow Forecasts

The financial summaries in this Activity Management Plan cover a minimum 10-year planning period and are based on financial projections covering the lifecycles of the assets. Financial forecasts are based on the BERL index.

BERL is the leading provider of a broad range of economic research, analysis, advice and consultancy for business enterprises, organisations, iwi, institutions, community groups, industry associations and public sector clients in New Zealand.

The following tables summarise the 10-year financial forecast for our Activity under the following headings:

- Maintenance & Operations
- Capital expenditure next 10 years
- Financial summary

Growth budget (capital works) identified is funded from Development Contributions for which Council has a policy for implementing charges to recover these costs.

Increased Level of Service (Capital Works) is new work requested by the public and generally results from the customer satisfaction surveys or consultation with communities who would like additional surveys. The Waikato District Blueprints which were publicly consulted in 2018 and then again in 2020 have assisted in defining priorities have also contributed to this as well.

Vested Assets are assets gifted to Council as part of a subdivision and which Council has accepted the ongoing liability for its maintenance and ultimately its replacement.

The 10-year renewal and operational requirements detailed in the 2021-31 LTP.

5. Procurement Policy

A procurement strategy enables decision makers to understand longer term goals such as realising value for money and encouraging supplier improvement and to consider these goals when making procurement decisions. Councils Procurement Strategy was developed in 2018 and outlines various engagement processes and how to select the appropriate method.



Generate benefits beyond the goods and services required. E.g. Encourage local enterprise



Create roles to fill the shortfalls of the solid waste activity

6. Key Financial Forecasts

The financial estimates presented below are preliminary work that has been completed by staff. The operating expenditure and revenue has been based from the 2017-2018 Annual Plan that is considered the baseline for the development of the 2021-2031 estimates. Once Waikato District Council has been through the budgeting process Council approved budgets will replace what is currently displayed.

6.1 Financial Forecast Assumptions

The cost figures arrived at in Section 7 are the best possible estimates at the time of preparation. More accurate figures will be prepared during each year's annual plan preparation. Some of the works in the plan need more investigation and therefore the works may vary depending on the options available.

The following solid waste activity management assumptions have been made in preparing the financial forecasts:

- **Growth** – Demand forecasts are made on population forecast predictions made by the University of Waikato.
- **New developments** - Most of the infrastructure required to service new developments will be funded by developers.
- **Renewal** - timing assumes that components of the facility will be replaced at the end of useful life.
- **Level of Service** – There has been significant changes in the Levels of Service (see AMP Part 3: Levels of Service).
- **Useful life of assets** - is based on a mixture of manufacturers' recommendations and staff experience and judgements, although providing required maintenance work has been undertaken in a timely and effective manner a building can be maintained indefinitely.
- **Natural Disasters** – No provision has been made for the cost of repairing damage or other additional costs consequent upon a natural disaster such as major flooding or substantial earthquake, apart from the costs of insurance.
- **Climate change** – No provision has been made for the effects of climate change of current assets, going forward alignment with the Climate Response and Resilience Policy will be considered in the development of any new / replacement infrastructure.
- **Ownership** – assets will remain in Council ownership throughout the planning period.

- **Expenditure** - All expenditure is stated in dollar values as of July 2021. No allowance has been made for inflation.
- **Operational costs** are based on historical expenditure.
- **Regulations** - It is assumed that regulations relating to this activity will remain essentially the same over the planning period (i.e., 30 years to June 2048).
- **Maintenance and operations allocations** are largely based on maintaining current service levels.
- **Delivery** - The present management system will remain the same.
- **Asset Values** - The determination of asset replacement value, depreciated value, and renewal projections are based on the valuation data as of 30 June 2020.
- **Depreciation** - The depreciation has been calculated on a simple straight-line basis.

Risk to Significant Forecasting Assumptions

- *Underdeveloped Waste Management Planning for Disaster or major disruption*
- *Lack of appropriate funding sought while available*

The table below outlines the risks to significant forecasting assumptions. Should these assumptions prove to be incorrect there could be a significant effect on the level of rates to be collected from the community. If this were to occur, Council would re-evaluate the works programmes to determine if the expenditure is appropriate or whether the scope of the proposed works could be scaled down. Rates may then be altered accordingly.

Table 30: Risks to Significant Forecasting Assumptions

Assumption	Risk	Likely Financial Effect	Consequence/ Mitigation Strategy
Level of Service – Changes in customer expectations regarding levels of service will not alter significantly	There is significant change in customer expectations	Impact on operating and capital budgets	Review levels of service and budgets at the next LTP round
Growth Strategy – Council has based its budgets on a sustainable growth strategy	Another growth scenario or a combination of growth scenarios is selected, which may impact on settlement patterns and intensification of development	Impact on demand projections of asset management plans and consequent impact on work programmes	Review demand management sections of AMP and also work programmes and budgets.
Depreciation expense – Council is assuming that present estimates of depreciation are adequate.	Depreciation expense calculations prove to be inaccurate after revaluation	Impact on long-term financial forecasts	Review budgets during the annual plan process

Planning Information – Asset renewal is based on assumed useful economic life	Asset data results in overestimation or underestimation of the need for renewal or replacement	Depreciation costs and renewal programmes may be over or underestimated	Undertake performance and conditions monitoring programme for estimation of useful life of assets.
Population Growth – Over the next ten years the projected population growth for the district is estimated to be 1.5% per annum.	Should the population growth be higher than projected, then there would be extra pressure on Council to provide and maintain additional infrastructure. Should the population growth be lower than projected there would be extra pressure to maintain new infrastructure	Extra costs to attend to customer complaints and maintain levels of service. Operations and maintenance costs higher than required	Review population forecasts regularly and adjust work programmes accordingly

6.2 Capital Works Forecast

Several new capital works are planned over the 10-year planning period. These capital projects will allow Council to continue to provide solid waste services to the desired service level standards and to meet the needs of additional capacity requirements that are forecast to occur.

Included are a number of initiatives that were established and prioritised during the development of the Community Blueprints, these are outlined in Part 3: Levels of Service.

Table 31: Solid Waste Community Blueprint Initiatives

Initiative Number	Description	Location	Priority
-	Support the creation and implementation of a resource recovery centre	Huntly	Top
RA2.2	Support community in Zero Waste initiatives, spread learning across the district.	Raglan	Very High
RA6.3	Consider a bed tax to compensate for increased waste and to support housing affordability initiatives	Raglan	Medium
TM4.1	Support Zero Waste initiatives at the Hub as a start of possible wider local initiative.	Tamahere	Medium
DW2.2	Review district wide solid waste services.	District Wide	High

The following figure shows the capital programme (including capital renewals) planned for the next 10-year period.

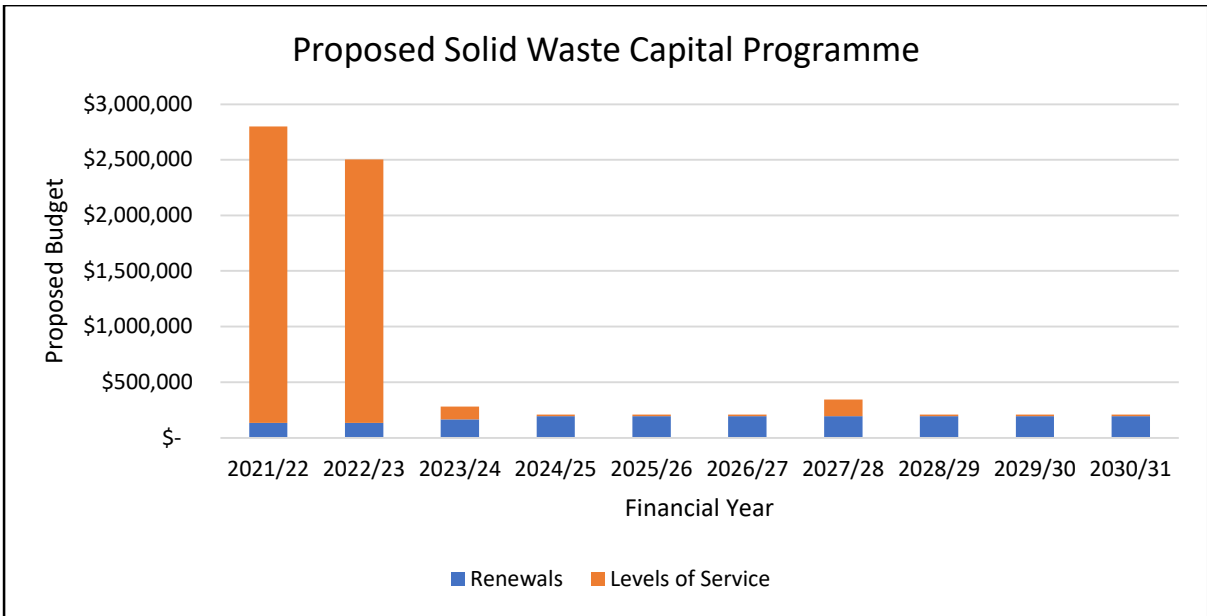


Figure 38 - Solid Waste Capital Programme

Detailed cost estimates are prepared for each solid waste site taking into consideration specific asset and operational requirements. The forecast costs also reflect the predicted increase in usage and growth over the planning period and the associated maintenance and servicing costs. A scheduled maintenance programme is indicated that provides for works necessary to extend the life and serviceability of assets and manage them in a sustainable manner.

6.3 Operational Forecast

The following figure shows the operational programme planned for the next 10-year period:



Figure 39: Solid Waste Operational Programme

6.4 Capital Projects

The following table shows the capital projects split into renewals and levels of service categories planned for the 2021-31 period:

Group	Project	Location	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Renewal	Refuse and recycling capital renewals	Raglan	\$15,000	\$15,450	\$15,852	\$16,264	\$16,703	\$17,137	\$17,617	\$18,110	\$18,636	\$19,139
	Transfer Stations Capital Works	District Wide	\$100,000	\$103,000	\$105,678	\$108,426	\$111,353	\$114,248	\$117,447	\$120,736	\$124,237	\$127,592
	Resource Recovery Centre Upgrade	Huntly			\$31,703	\$32,528	\$33,406	\$34,274	\$35,234	\$36,221	\$37,271	\$38,277
	North Waikato Resource Recovery Centre	North Waikato				\$32,528	\$33,406	\$34,274	\$35,234	\$36,221	\$37,271	\$38,277
	District Wide Closed Landfill Renewals	District Wide	\$20,000	\$20,600	\$21,136	\$21,685	\$22,271	\$22,850	\$199,660	\$24,147	\$24,847	\$25,518
	Total		\$135,000	\$139,050	\$174,369	\$211,431	\$217,139	\$222,783	\$405,192	\$235,435	\$242,262	\$248,803
Level of Service	Refuse and Recycling Capital Upgrades	Raglan	\$15,000	\$15,450	\$15,852	\$16,264	\$16,703	\$17,137	\$17,617	\$18,110	\$18,636	\$19,139
	Raglan food waste collection	Raglan	\$120,000									
	Transfer Station Capital Renewals	Huntly	\$250,000									
	Transfer Station Capital renewals	Raglan	\$250,000	\$257,500								
	Resource Recovery Centre Upgrade	Huntly	\$1,500,000	\$103,000								
	Resource Recovery Centre	North Waikato		\$2,472,000	\$105,678							
	Total		\$2,135,000	\$2,847,950	\$121,852	\$16,264	\$16,703	\$17,137	\$17,617	\$18,110	\$18,636	\$19,139

7. Confidence Levels

Confidence ratings are made using the criteria outlined below:

Table 32: Confidence Rate Grading Criteria

Grade	General Meaning
A	Highly Reliable - Data based on sound records, procedure, investigations, and analysis which is properly documented and recognised as the best method of assessment.
B	Reliable - Data based on sound records, procedure, investigations, and analysis which is properly documented but has minor shortcomings.
C	Uncertain - Data based on sound records, procedures, investigation, and analysis which are incomplete or unsupported, or extrapolations from limited sample for which grade A or B data is available.
D	Very Uncertain - Data base on unconfirmed verbal report and/or cursory inspection and analysis.

Accuracy ratings are made using the criteria outlined below:

Table 33: Accuracy Rating Criteria

Grade	Description	Accuracy
1	Accurate	100%
2	Minor inaccuracies	+ / - 5%
3	50% estimated	+ / - 20%
4	Significant data estimated	+ / - 30%
5	All data estimated	+ / - 40%

The confidence in the asset data used as a basis for the financial forecasts is detailed below which provides an assessment of the confidence in, and the accuracy of the 10-year financial forecast and supporting asset data:

Table 34: Confidence Levels for each expenditure type

Activity	Reason	Confidence Grade			Accuracy		
		Years 1-3	Years 4-10	Years 10+	Years 1-3	Years 4-10	Years 10+
Operations - Fixed	Historic information supports this expenditure	B	C	C	2	3	3
Operations - Variable	Only 1 year of data is available since pre-paid service introduced- What does this mean?	C	C	C	3	3	3
Revenue	Waste minimisation results in less revenue. Also have the risk of residents moving to private services	D	D	D	4	4	4

Activity	Reason	Confidence Grade			Accuracy		
		Years 1-3	Years 4-10	Years 10+	Years 1-3	Years 4-10	Years 10+
Renewal	Expenditure has been derived from a combination of actual and extrapolated data which is based on assumptions. Condition assessment data is not current.	C	C	C	2	3	3
Capital	Expenditure has been derived from staff estimates	C	C	C	3	3	3

The overall confidence level is B indicating that the confidence of the financial forecasts is Reliable for years 1-3 and C (Unreliable) for years (4-10).

8. Funding Strategies

8.1 Policies for Funding the Solid Waste Activity

Funding sources available for the solid waste activity includes:

- Targeted Rates
- General Rates
- Fees from pre-paid stickers/tags Waste minimisation levy income

Targeted rates are set by Council triennially through the Long-Term Plan, any changes are put forward through the Annual Plan, which is developed annually.

8.2 Funding of Operating Expenditure

Operating expenditure is funded from targeted rates and user charges from the part-user pays collection service. Revenue from the Kerbside collection - part user pays service is about x% of the total income from fees and targeted rates.

Expenditure on the solid waste activity represents a significant Council investment. The table below explains how the activity is funded.

8.3 Proposed Changes to LTP 2021/2031

No changes to the funding policies are proposed.

9. Assessment between AMP and Adopted LTP 2021/2031

To be completed upon adoption of the LTP.

Table 35: Council Funding Explanations

Council Funding	Operating Expenditure	Renewal Expenditure	Levels of Service Expenditure	Growth Capital Expenditure	Development Contributions
General Rate	The general rate is based on the capital value of rateable properties. It is levied on all properties and funds things that all rate payers benefit from. Examples include roads, libraries, and transfer stations.				Development contributions provide a source of funding for future capacity upgrading work. These works offset the cumulative depletion of any spare capacity within each network caused by new users. Development contribution charges are calculated as per Council's development contribution policy and reflected in Council Fees and Charges documents
Replacement Reserves	The total yearly depreciation expense (less non funded depreciation) is put into replacement fund reserves. Only capital works and loan repayments can be funded from this source.	Renewal works are funded from replacement fund reserves. The replacement fund reserve is funded from revenue at a rate equal to depreciation. Assets are depreciated on a straight-line basis over their remaining life with depreciation recognised as an operating expense.			
Targeted Rate – Capital	Contributions under the LGA are levied in circumstances where the effects of growth require council to incur capital expenditure to provide new or additional infrastructure. Reserves exist for Structure Plans, Development Contributions, Financial Contributions and Capital Targeted rates.		Capital works that will improve levels of service is funded from targeted rates and loans.		
Targeted Rate – Operational	Legislation states that if we rate for a specific reason, the income received can only be used for that specific purpose. The reserves monitor operational costs in relation to special rates and user pays.				
Loans Raised	Loans are raised for level of service improvements. The expectation is that future rate payers will benefit from the improvements and hence should share in paying for the improvement.			Capital works that are required to service growth are funded from development funds and loans. Developers themselves fund most infrastructure works.	
Income applied to Capital	User charges like water connection charges are used to fund user pays infrastructure. Subsidies like the NZTA subsidy are also used to fund infrastructure.				

Part 9: Continuous Improvement

This section identifies the maturity of Council asset management practices, improvements made since the last Activity Management Plan review and a plan for future asset management improvement areas for improvements identified in earlier sections of the plan



1. Overview

Council is committed to fostering an environment of continuous improvement and our activity adheres to this approach.

The following continuous improvement functions fall into the fall into the four parts of the Plan, Do, check, Act process:

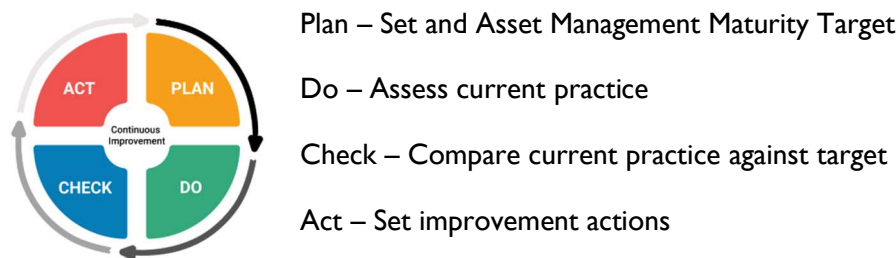


Figure 40: Generic Approach to Continuous Improvement

2. What Asset Information System do we use?

We now use SPM Assets, with the migration of the portfolio asset information from Finance I. The product is web-based and provides comprehensive life cycle analysis that is based on unit rates / base and remaining lives. This now provides robust reporting for the assets that have been recently condition graded.

The system can also provide asset condition grading in the field via GPRS connection to the database and as such allows staff with almost real time asset upgrades and information to the system. This provides a significant step forward for the Community Assets department, especially with regards to the renewal and valuation / depreciation information that is now available.

Processes for the processing of new or upgraded assets are being developed for each asset class as they are being entered into the SPM Assets database. The application is web based that provides seamless extraction of data and reporting but has no linkages to Councils present IT systems.

2.1 Data Accuracy and Confidence

Table below provides the confidence framework (NAMS IIMM) used to determine the confidence in the asset data used in this AMP.

Table 36: Data Confidence Grading System (IIMM)

Confidence Grade	Description Grade
A Very High	Highly Reliable <2% uncertainty Data based on sound records, procedure, investigations and analysis, documented properly and recognised as the best method of assessment.
B High	Reliable ± 2-10% uncertainty Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example the data is old, some documentation is missing, and reliance is placed on unconfirmed reports or some extrapolation.
C Medium	Reasonably Reliable ± 10-25% uncertainty Data based on sound records, procedures, investigations, and analysis which is properly documented but has minor shortcomings' for example the data is old, some documentation is missing and reliance is placed on unconfirmed reports or significant extrapolation.
C Low	Uncertain ± 25-50% uncertainty Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B is available.
D Very Low	Very Uncertain > 50% uncertainty Data based on unconfirmed verbal reports and/or cursory inspection and analysis.

3. What is the status of asset management practices?

3.1 Activity Management Policy

Council developed and adopted its inaugural Activity Management Policy in 2017. The policy establishes the first level of Council's asset management framework for managing infrastructure assets in a structured, coordinated, and financially sustainable manner. The objectives of this Policy:

- Outline the target level of activity management practice appropriate for each activity.
- To provide a consistent approach to asset management planning within Council and to ensure plans reflect the strategic direction of Council.
- Demonstrate to the community that Council recognises the critical importance of managing the District's assets and activities in an efficient and cost-effective manner to deliver levels of service appropriate to current and future generations.

3.2 Current and Target Maturity Scores

The appropriate current and target maturity scores have been set **internally** and reviewed by Robert Ashley (DIAM) for the solid waste activity. In order to achieve the targets we must improve on a number of asset management practices.

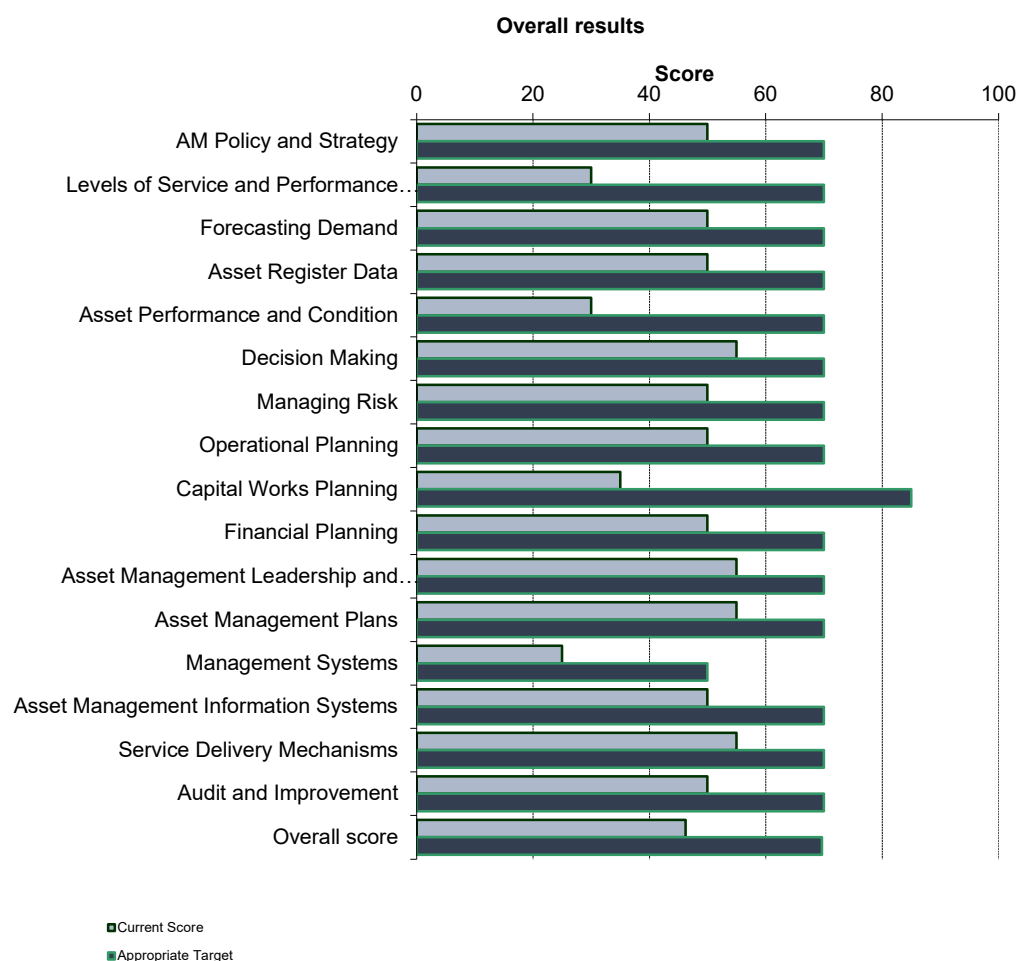
The tables below show the actual vs target asset maturity levels as per the Activity Management Policy for the solid waste activity.

Summary Results – Solid Waste

Table 37: Current and Target Maturity Scores

Reference	Summary Results	Current Score	Appropriate Target	Difference
IIMM 2.1	AM Policy and Strategy	50	70	20
IIMM 2.2	Levels of Service and Performance Management	30	70	40
IIMM 2.3	Forecasting Demand	50	70	20
IIMM 2.4	Asset Register Data	50	70	20
IIMM 2.5	Asset Performance and Condition	30	70	40
IIMM 3.1	Decision Making	55	70	15
IIMM 3.2	Managing Risk	50	70	20
IIMM 3.3	Operational Planning	50	70	20
IIMM 3.4	Capital Works Planning	35	85	50
IIMM 3.5	Financial Planning	50	70	20
IIMM 4.1	Asset Management Teams	55	70	15
IIMM 4.2	Asset Management Plans	55	70	15
IIMM 4.3	Management Systems	25	50	25
IIMM 4.4	Asset Management Information Systems	50	70	20
IIMM 4.5	Service Delivery Mechanisms	55	70	15
IIMM 4.6	Audit and Improvement	50	70	20
	Overall Score	46	70	23

IIMM 2	Understanding and Defining Requirements	42	70	28
IIMM 3	Developing Asset Management Lifecycle Strategies	48	73	25
IIMM 4	Asset Management Enablers	48	67	18
	Overall Score	46	70	23



Percentage variance from the target: 34%

ICR score (out of 15): 10

The strategic assessment for each activity shows an overall score of 46 out of 70, or a percentage of 66 of the target.

4. How are we going to improve?

4.1 Historical Improvement Plan

The improvement programme for the previous Long Term Plan period (2018-2028) has been updated to reflect what improvements have been achieved and where work still needs to be done. Many of the items have been identified as on-going works. These cannot be considered complete and have been included in the programme for 2021-2031 to ensure the continual improvement in these areas.

4.2 Proposed Actions and Timetable

We are committed to on-going improvement in the quality of our Solid Waste management practices. The improvement tasks are shown in Current Improvement Plan

Table 39.

The current improvement plan will be undertaken as identified in the timeframes shown. They highlight the fact that, generally, we are light in Policy, Strategy and some procedures for our assets once completed.

The proposed improvements are identified to improve current management practices for:

- Activity Management Plan processes and information systems
- Bring data in line with desired management practices
- Optimise the way that the activity is carried out

The purpose of the Improvement Plan is to:

- Identify, develop, and implement AM planning processes
- Identify and prioritise ways to cost-effectively improve the quality of the AM plan
- Identify indicative timeframes, priorities, and human and financial resources required to achieve AM planning improvements

The 2021-2031 Improvement Plan is subject to constant reappraisal and change. While reappraisal is an on-going-process, the Improvement Plan will form the basis of our annual business planning.

The criteria in Table 38Table 38 is used to prioritise actions identified to meet the desired business practice for asset management processes, data and information, information systems, and implementation tactics.

Table 38: Priority Ranking

Priority Ranking	Description
1	Needs to be implemented urgently to support current LTP processes and / or poses a significant risk.
2	Needs to be implemented as soon as practicable to meet “core” asset management practice.
3	Needs to be addressed in developing the next version of the plan for the next LTP cycle.
4	No immediate need for implementation but should be addressed over time.
5	Desirable to implement at some time but will not adversely affect the quality of the plan or asset management practice.

4.3 Current Improvement Plan

Table 39: Improvement Plan 2021-2031

Improvement No.	Activity Area	AMP Ref.	Improvement Action	Maturity Assessment Category	Priority	Status	% Complete	2021/22	2022/23	2023/24	Council Person Responsible	Cost Estimate / Budget*
1	Contract Rollover	1.2	Renew kerbside contracts	Operational Planning	5	In Progress	90%				Jackie Bishop /Jo Hall	
2	Solid Waste Review	2.1	Investigate the viability of food waste services in urban areas under phase 2 of the SW review	Operational Planning	3	Not Started	0%				Ian Cathcart/ Phil Ellis	
3	Solid Waste Review	2.1	Align a standardised recycling services to cover the district as per WMINZ recommendations Phase 2 under SW Review	Operational Planning	3	Initiated	0%				Phil Ellis	
4	Solid Waste Review	2.1	Investigate the viability of additional rural services including service area coverage under phase 2 of the SW review	Operational Planning	4	Not Started	0%				Phil Ellis	
5	Waste Education	3.1	Introduce community behaviour change program part of the phase 2	Operational Planning	5	In Progress	5%				Pat Cronin	
6	Kerbside Collection	4.1	Create an initiative to co-design road setbacks for kerbside collection in new developments	Operational Planning	2	Not Started	0%				Pat Cronin/ Phil Ellis	
7	Policies / Bylaws to Develop	3.3	Develop a wheelie bin policy	AM Policy and Strategy	4	Not Started	0%				Phil Ellis	
8	Policies to Develop	3.3	Investigate (and potentially develop) the usefulness of a kerbside collection private roads policy/SOP	AM Policy and Strategy	4	Not Started	0%				Phil Ellis/ Pat Cronin	
9	Policies to Develop	3.3	Develop public litter bin policy, create map identifying the location and ownership of litter bins.	AM Policy and Strategy	2	Not Started	0%				Phil Ellis	
10	Policies / Bylaws to Develop	3.3	Develop Solid Waste bylaw, to enforce initiatives	AM Policy and Strategy	3	Not Started	10%				Pat Cronin	
11	RRC / CRC	5.2	Investigate the implementation of a RRC/CRC in the Tuakau area	Capital Works Planning	5	Into Started	0%				Phil Ellis	\$ 2,990,000
12	RRC / CRC	5.2	Investigate the implementation of a RRC/CRC in the Huntly and Te Kauwhata area	Capital Works Planning	5	Not Started	20%				Phil Ellis	\$ 2,140,000
13	Government Initiatives	1.5	Support national waste min initiatives and stewardship schemes locally and nationally within the industry peer group	Decision Making	3	On-going	N/A				Pat Cronin	
14	Community Engagement	1	Upgrade solid waste website, create online look up for residents to identify the available services within their area	Decision Making	4	On-going	N/A				Pat Cronin	
15	Resilience	6.3	Build emergency resilience into facilities and services	Managing Risk	4	On-going	N/A				Phil Ellis	
16	Zero Waste Event Management	4.1	Create resources to facilitate zero waste event management	Managing Risk	3	In Progress	5%				Pat Cronin	

Improvement No.	Activity Area	AMP Ref.	Improvement Action	Maturity Assessment Category	Priority	Status	% Complete	2021/22	2022/23	2023/24	Council Person Responsible	Cost Estimate / Budget*
17	Waste Data	1.5	In put towards the national waste data framework system through MFE	Asset Management Information Systems	4	In Progress	0%				Phil Ellis	
18	WMMP Action Plan	3.1	Create a mechanism that allows community groups to access community solid waste grants	Financial Planning	4	Not Started	5%				Pat Cronin	
19	Technology	3.5	Incorporate current and emerging technologies into services to bring improved operational practice	Asset Performance and Condition	3	Not Started	0%				Phil Ellis	
20	Procurement	5	Generate benefits beyond the goods and services required. E.g. Encourage local enterprise	Service Delivery Mechanisms	4	Not Started	0%				Waste Team	
21	Procurement	5	Create roles to fill the shortfalls of the solid waste activity	Service Delivery Mechanisms	4	Not Started	0%				Phil Ellis	

*Tasks without an assigned budget are due to relatively small costs using internal budget.