

Strategic

Asset Management Plan 2024-2034

FINAL



Executive Summary

Welcome to the Bay of Plenty Regional Council’s (Council) Strategic Asset Management Plan (SAMP). This is the second iteration of this document, having first been approved in 2021.

The purpose of this SAMP is to formally set out Council’s long-term approach to managing its infrastructure assets that provide services to our communities. We are committed to the proactive and sustainable management of our diverse range of assets. Our Asset Management (AM) Framework forms the backbone of our approach. This encompasses a well-defined AM Policy and clear AM Objectives, which align with our Strategic Direction and community outcomes, informing the development of individual Asset Management Plans (AMPs) for each activity area.



All organisations operate within specific environments and are influenced by various drivers and variables. Assets and services need to be managed within the context of multiple changing environments such as: social, environmental, economic, cultural, technological, political and legal. This organisational environment will both and provide direction for the management of infrastructure assets. Providing effective and efficient management of assets is a key obligation for Council. As custodian of community infrastructure assets, Council is committed to managing its assets in the most cost-effective manner and to provide efficient, safe and reliable services for current and future generations.

Council owns, manages, operates, and maintains assets valued at approximately \$527.52 million (Optimised Depreciated Replacement Cost (ODRC) or Book value). Rivers and drainage assets make up a significant portion of our total asset value. However, the value distribution should not detract from the importance of other key asset areas, which all play a critical role in serving our communities and supporting Council's service delivery and strategic goals. These assets are managed through five activity AMPs.

Asset Area	Optimised Depreciated Replacement Cost (ODRC) or Book value \$m	Replacement Value (ORC) \$m
Rivers and Drainage	\$438.02*	\$519.90
Regional Parks and Coastal Catchments	\$25.91	\$27.10
Rotorua Te Arawa Lakes	\$16.10	\$24.90
Maritime Operations	\$1.51	\$2.12
Property	\$45.98	\$49.20
Total	\$527.52	\$623.22

*Excludes an impairment of \$2.15m relating to the Whakatane-Tauranga River scheme. The ODRC including impairment is \$436m.

Assessing the current condition and performance of our assets is vital for providing a comprehensive understanding of each asset's status and future needs, such as the maintenance and renewal investment they require. The latest condition information available for select activity portfolios is summarised below. The Rotorua Lakes and Property portfolios did not have asset condition information in a suitable format for reporting below, but qualitative information is available within the SAMP.

Condition	Rivers and Drainage		Maritime Operations		Regional Parks and Coastal Catchments		Total	
	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio
Very Good	1035	18%	196	22%	61	62%	1292	19%
Good	2479	42%	399	45%	28	29%	2906	42%
Average	1551	26%	296	33%	4	4%	1851	27%
Poor	587	10%	0	0%	4	4%	591	9%
Very Poor	211	4%	0	0%	1	1%	212	3%
Total	5863	100%	891	100%	98	100%	6852	100%

The majority of assets inspected (61%) are in 'Very Good' or 'Good' condition. Around 12% of assets fall into the 'Poor' or 'Very Poor' categories. We also track the performance of our assets to ensure they are meeting the service levels expected by our community. This encompasses both the technical performance of the assets and how well they are meeting user needs.

Activity	Level of Service	Measure	2022/23 Target	2022/23 result
Rivers & Drainage	Provide flood protection and drainage	Percentage of maintenance and repairs completed in accordance with the Rivers and Drainage Asset Management Plan.	85%	121%
		Percentage of capital works completed in accordance with the Rivers and Drainage Asset Management Plan.	75%	32%
Regional Parks & Coastal Catchment	Manage our Regional Parks sustainably	The number of visitors to Regional Parks.	124,068	99,288
		Visitor satisfaction for visitors to Regional Parks.	75%	(21/22) 98%
Rotorua Lakes	Improve indigenous biodiversity and waterbodies in the Bay of Plenty catchments	Number of Rotorua Lakes that have reached their Trophic Level Index (TLI), based on the three year rolling TLI.	3	5
Maritime	Minimising risks and effects of maritime oil spills and navigation hazards	The percentage of navigation aids of "good" quality or higher.	95%	99%
Property	Reduce carbon emissions through utilising sustainable and energy efficient solutions	Change in total council emissions compared to prior year	5% reduction from prior year	52% increase

Understanding condition and performance is also integral to our risk management processes. Assets that are in poor condition or not performing as intended can introduce significant operational and financial risks that need to be managed. Risk management is an integral component of our asset management framework and is embedded in all our processes and decision-making. Council has developed corporate risk management standards, which provide risk criteria and scoring matrices that are aligned to the ISO 31000:2009 risk management standard, enabling a consistent approach to assessing and managing risks.

In addition to the identifying risks, we also identify key drivers that will place a demand on our assets and activities. Planning for future demand is imperative to provide an economically sustained pathway to meet the needs of the region. Our biggest challenge in assessing future demand across our asset portfolios, is analysing the potential impacts on capital and operational expenditure requirements. The SAMP has identified five common demand drivers across our activity portfolios. Two demand drivers posing significant challenges are climate change and the economic situation. The SAMP presents existing and proposed strategies to manage demand at a Council-wide level.

Asset Activity area	Demand Driver				
	Demographic Changes	Climate Change	Legislation/Regulatory	Economic Situation	Stakeholder Expectations
Rivers and Drainage	✓	✓	✓	✓	✓
Maritime Operations	✓		✓	✓	✓
Rotorua Te Arawa Lakes		✓	✓	✓	✓
Regional Parks	✓	✓		✓	✓
Property		✓	✓		✓

Our approach to managing assets and addressing challenges is underpinned by key guiding principles that inform our decision-making: service level objectives, whole-of-life approach, stakeholder engagement, risk management, and sustainability and resilience. We prioritise the needs of our communities, ensuring our assets provide desired service levels, and embrace a whole-of-life approach to derive maximum value from our assets over their lifespan. We also strive to embed sustainability and resilience in our AM practices, aiming to manage our assets in an environmentally responsible, economically viable, and socially equitable manner, while ensuring they are robust and adaptive.

Our financial planning approach is guided by our commitment to ensuring value for money, economic sustainability, and the long-term affordability of our services. Over the next decade, we estimate (uninflated) operational expenditure at \$440.8 million and capital expenditure at \$100.0 million to continue meeting service levels and managing risks. Supporting assumptions are appended to these forecasts within the SAMP.

A central theme of the SAMP is continuous improvement, as we strive to advance AM maturity across the organisation. Fourteen improvement items have been identified which have been collated into an AM improvement plan to be implemented over the next three years.

These improvements will not only enhance the effectiveness and efficiency of our AM practices, but also contribute towards our strategic objectives, such as improving sustainability and resilience, enhancing stakeholder engagement, and delivering value for money. Priorities include developing an AM sustainability framework, integrating nature-based solutions, and implementing an investment decision-making framework for all asset activity areas to support informed trade-off decisions between cost, service levels and risk.

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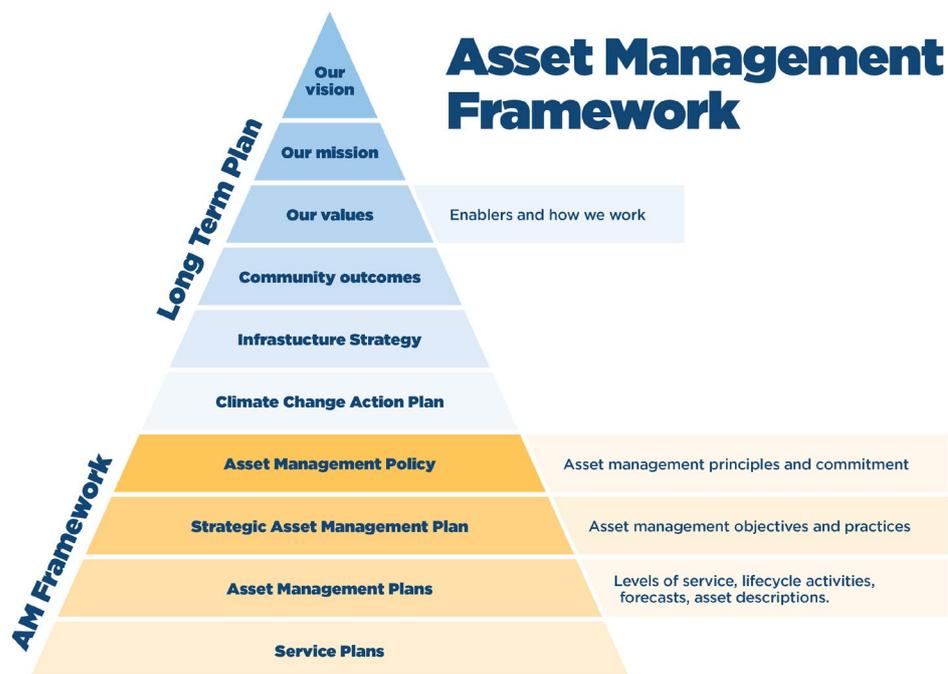
Part 1: Introduction

WHAT IS ASSET MANAGEMENT?

Infrastructure is essential for the health, safety, and transport of people, freight and all other things. It supports community well-being and enables businesses and communities to develop and grow. Failure to invest in and maintain infrastructure poses a risk to the economic prosperity and sustainable future of people and regions.

Asset management is considered internationally as the preferred choice for driving improvement in most organisations that derive value by managing and operating infrastructure assets. It is now widely recognised that asset management can provide a framework and systematic approach to enable organisations to achieve improved performance and deliver community outcomes.

Asset management can be defined as the systematic and coordinated activities and practices of an organisation to deliver on its objectives through the cost-effective lifecycle management of infrastructure assets. Asset management planning aims to translate community outcomes and organisational objectives into the operational delivery of asset-based services, through defined levels of service.



1.1 Purpose of the SAMP

WHAT THE PURPOSE OF THIS PLAN?

The purpose of this SAMP is to formally set out the long-term approach the Bay of Plenty Regional Council will follow to manage those assets that contribute towards achieving its strategic direction, in particular our community outcomes. Every asset-based service we deliver to our community should contribute to achieving the Vision, Goals and Strategies that form the strategic direction our Council have set for the region.

The key purpose of this SAMP is to:

- Convey the role of assets and asset management in supporting the achievement of Council's organisational objectives (strategic direction including vision and community outcomes).
- Outline how the strategic direction has been linked to the asset management objectives.
- Set out how asset portfolios are managed to ensure Council continues to deliver services, in a sustainable and affordable way, to meet community expectations and legislative requirements.
- Outline the processes that enables informed and robust asset management decision making and planning.

1.2 Document relationship

HOW DOES THE SAMP FIT IN COUNCIL?		
<p>The Strategic Asset Management Plan sets out the long-term approach Council will take to manage its assets and link Council's organisational objectives with the asset management objectives. The Council has a number of other key strategic documents, all working towards achieving the community outcomes. The relationship between these documents is represented in figure below, and some examples are discussed below.</p>		
Document	Description	Relationship to SAMP
Long Term Plan (LTP)	<p>The LTP sets Council's strategic plan including the community outcomes that Council is seeking to achieve. The LTP assesses and adjusts the organisation's direction in response to a changing operational environment, while articulating organisational and customer expectations and outcomes to be delivered through the organisation. The LTP establishes the work we will deliver to our community over the next 10 years, as well as setting out how that work will be funded, including through rates and various fees and charges.</p>	<p>The SAMP converts the objectives of the organisational strategic plan into a high-level, long-term action plan for the assets, asset portfolio and/or the AM System.</p> <p>Provides direction for Council decision-making and sets the budgets for the activities and work programme priorities, which enable Council to deliver its objectives.</p>
Asset Management Policy	<p>The Asset Management Policy outlines the objectives, requirements and responsibilities for undertaking asset management and guides decision making across the organisation.</p>	<p>The SAMP converts the principles and actions of the AM Policy into AM Objectives in order to deliver the objectives from Council's Strategic Plan.</p>
Infrastructure Strategy	<p>The Infrastructure Strategy sets out the issues and implications that Council faces over the next 30 years and the approach for managing those issues with regard to flood protection and control works, as required by section 101B of the Local Government Act (2002) (LGA).</p>	<p>Sets out the issues, implications and actions for the management of the infrastructure assets over the next 30 years. There is crossover with the SAMP.</p>
Tactical Asset Management Plans	<p>The Operational Asset Management Plans document the life cycle strategies and activities (create, maintain, renew and dispose) to be undertaken so that the assets are able to provide the defined levels of service in the most cost effective way.</p>	<p>SAMP provides the framework and direction for developing the AMPs and operational activities, which Council will carry out in order to work towards achieving the objectives set in the Strategic Plan.</p>

1.3 SAMP Structure

This document is structured into the following ten sections.

WHAT DOES THE SAMP DESCRIBE?	
Regional Overview	This section provides an overview of the Bay of Plenty region and presents summary information on the location, natural environment, and climate. The demographic and economic context is provided.
Strategic Environment	This section provides an overview of the organisation and presents summary information on the internal and external context and environment that the Council operates within, including our stakeholders, key legislation, and climate change.
Strategic Direction	This section outlines Council's Strategic Direction and ties together the vision, community outcomes, strategic priorities and the way we work. The AM Framework, AM Policy and AM Objectives are outlined.
Asset Management System	This section explains what an Asset Management System is, and what assets are and are not covered by the AM System. A framework diagram illustrates the scope of the AM System, including the state of individual system components.
Activity and Asset Overview	This section provides an overview of Council's activities and presents a summary of the asset portfolios covered by the SAMP. Asset information includes asset types, condition, performance, criticality, and data confidence.
Future Demand	This section sets out the key demand drivers, impact analysis and management strategies that Council has, is or will undertake in order to plan ahead to manage the projected future demand for the assets and activities.
Levels of Service	Levels of service are key business drivers and influence strategic, tactical, and operational decisions. Levels of service provide the link between the higher-level organisational objectives and technical operational activities.
Asset Management Approach	Outlines our strategic approach to managing our infrastructure, from the principles of the AM Framework and Policy, to the details of creating the AMPs. It covers our approach to lifecycle management, risk management and decision-making.
Financial Planning	Financial requirements for the operation, maintenance, renewal and new capital works for the activity asset portfolios, are outlined alongside financial policies, strategies, assumptions and valuations.
Audit and Improvement	The improvement plan is a fundamental part of this SAMP. It outlines what Council plans to do over the following three years to continually improve its SAMP and its components. This includes resources, timeframes, monitoring and reporting.

Part 2: Regional Overview

Bay of Plenty is located on the east coast of the North Island, and incorporates the full extent of the coastline from Cape Runaway in the east, to Waihi Beach in the west. The region extends inland, generally to the ridge of the catchments that drain into the Bay of Plenty, including the Rotorua Lakes. The furthest point from the coast is the top of the Rangitāiki River Catchment which is 139 kms from the sea; and the boundary extends out to the 12-nautical-mile boundary. The area of the region is 21,740 square kilometres, comprising 12,231 square kilometres of land and 9,509 square kilometres of coastal marine area (Figure 1).

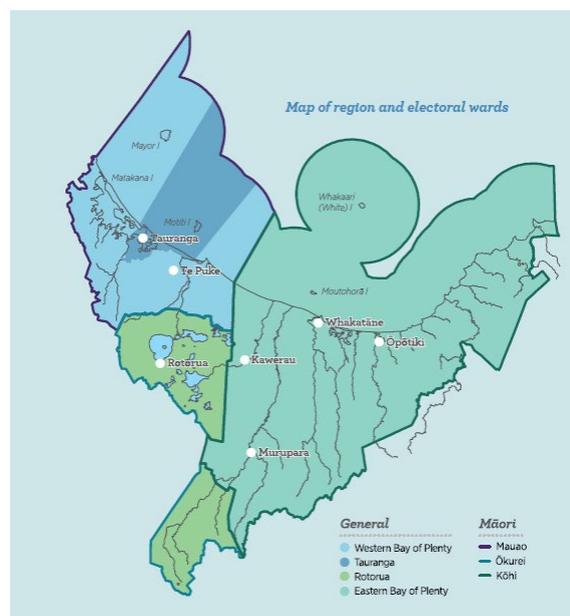


Figure 1: Locational map of the Bay of Plenty region.

2.1 Natural environment

The region has a number of prominent features, including eighteen offshore islands such as Matakana, Tuhua (Mayor) and the active volcano Whakaari (White Island). Other distinctive landmarks include the Rotorua lakes, the distinctive peaks of Mount Tarawera and Putauaki, the Tauranga and Ōhiwa Harbours, and Mauao (Mount Maunganui).

The region is volcanically active with the Taupo Volcanic Zone crossing the area between Whakaari (White Island) and Lake Taupo. The two major features of this zone include a number of extensive geothermal areas and a number of earthquake fault lines that run parallel to each other within this zone. Eight major rivers flow into the Bay: Raukōkore, Mōtū, Waioeka, Whakatāne, Rangitāiki, Tarawera, Kaituna, and Wairoa rivers. There are seven large estuaries: Maketu, Little Waihi, Whakatāne, Waiotaha, Waioeka/Ōtara, Tauranga, and Ōhiwa.

2.2 Climate

The Bay of Plenty region enjoys a maritime climate, characterised by relatively mild winters and warm, humid summers. It is one of the sunniest regions in New Zealand, receiving an average of over 2,200 sunshine hours per year.

As the Bay of Plenty is sheltered by high country to the west, south, and east, variations of the weather are largely determined by the direction of the wind. Airstreams from the north and northeast frequently have long trajectories over the warm ocean and as a result the air flowing onto the Bay of Plenty under these conditions is very humid. As the whole region is exposed to the north, these airstreams often produce widespread and heavy rain, when the moist air is forced to ascend over the rising ground.

Occasional extreme weather events, such as cyclones and heavy rainfall, can result in flooding and other climate-related risks. The effects of the changing climate is discussed further in 3.3.

2.3 Demographics

The Bay of Plenty region has a diverse population with a mix of urban and rural communities. The region is characterised by a mix of ages, ethnicities, and socio-economic backgrounds. In 2022, the population of the Bay of Plenty region was around 347,700¹, approximately 6.8% of New Zealand's total population. The Bay of Plenty is one of the fastest growing regions, ranking third for average annual population increases over 2018-2022. There has been significant net migration into the region over the past decade. Growth is projected to continue with the population projected to grow approximately 20% to 417,700² by 2048 (based on the medium projections).

Around 84% of the region's population live in the areas of Tauranga City, Rotorua District, and Western Bay of Plenty. Population projections to 2043 for the territorial authorities in the Bay of Plenty region indicate there will continue to be strong population growth in Tauranga City. Growth in Western Bay of Plenty and Rotorua districts will also continue, while population will be relatively stable in Whakatāne, but decline in the Ōpōtiki and Kawerau districts.

Year at 30 June	2023	2028	2033	2038	2043	2048
Total New Zealand by region	5,149,500	5,354,100	5,564,400	5,752,800	5,924,000	6,077,100
Bay of Plenty region	352,500	370,200	384,500	396,600	407,500	417,100
Kawerau District Council	7,900	7,970	7,970	7,900	7,780	7,620
Ōpōtiki District Council	10,650	10,850	11,050	11,150	11,100	11,050
Rotorua District Council	77,000	78,700	80,100	81,100	81,800	82,200
Tauranga City Council	161,300	172,700	182,200	190,900	199,200	207,400
Western Bay of Plenty District Council	61,000	64,700	67,700	70,200	72,200	73,900
Whakatāne District Council	38,500	39,100	39,400	39,500	39,400	39,100

Data extracted on 13 February 2024 from NZ Stat. Released July 2022.

Source: <http://nzdotstat.stats.govt.nz/WBOS/Index.aspx?DataSetCode=TABLECODE7994#>

The proportion of people with Māori ethnicity is projected to increase across every territorial area. Māori will account for over a third (34.3%) of the region's population by 2043, but will be significantly higher in some territorial areas such as Rotorua (50.3%), Whakatāne (59.3%), Kawerau (67.4%) and Ōpōtiki (77.2%).

The Bay of Plenty region also has an ageing population. In 2022, there were around 67,300 people aged 65 and over, which accounted for around 19% of the region's population. The national average was 16%. By 2043, this number is projected to increase to 105,800, or 26% of the region's population; compared to the national average of 23% for people aged 65 and over.

¹ <https://www.stats.govt.nz/information-releases/subnational-population-estimates-at-30-june-2022-provisional/>

What does this mean for this SAMP?

The SAMP needs to consider the population and demographic characteristics of the region, to better address the community's needs and ensure that infrastructure planning is responsive, inclusive, and sustainable. This may be through planning for and managing changing demand, or ensuring that infrastructure assets are designed to be inclusive and accessible, particularly for older people, while incorporating cultural values in planning and decision making. The SAMP must also balance the requirements of both urban and rural communities and ensure infrastructure investments are equitably distributed.

2.4 Economic

The Bay of Plenty region comprises the 5th largest regional economy in New Zealand, with latest official estimates³ showing a gross domestic product (GDP) of around \$21.7 billion for the year ended March 2022. This comprises 6% of the national GDP. Notably, the region ranks 1st for percentage change in GDP (43.6%) for 2017-2022.

The region's GDP per capita, however, is approximately \$62,673, ranking tenth among the regions. The national average is around \$70,617. When a region has a lower GDP per capita despite a high regional GDP, this can indicate that the region has a larger population and/or a greater income disparity. The latter can have implications for a community's ability to afford levels of service provided by the Council.

The Bay of Plenty region is often known for its agricultural, horticultural, forestry, and tourism industries. However, as of 2021, the six biggest industries based on GDP were markedly different.

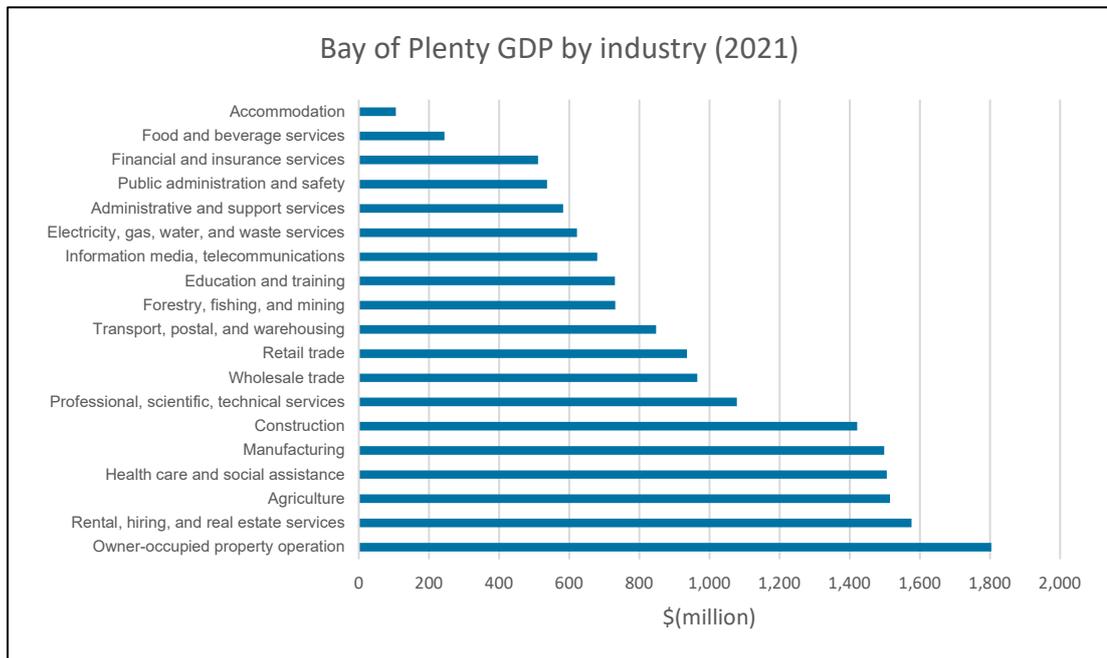


Figure 2: GDP by industry for the Bay of Plenty region (2021).

The region's economic environment is influenced by various factors, such as local and global economic conditions, population growth, infrastructure development, and environmental and social considerations.

³ <https://www.stats.govt.nz/information-releases/regional-gross-domestic-product-year-ended-march-2022/>

What does this mean for this SAMP?

The region's economy is driven by key industries, such as agriculture, horticulture, construction, and manufacturing. The SAMP will need to consider the potential for economic growth and ensure that the region's assets can support and adapt to these changes. Investments in infrastructure are crucial for the region's economic development and resilience. The SAMP should prioritise and allocate resources to maintain and improve assets that support and protect these key industries.

Part 3: Strategic Environment

3.1 Organisational Context

All organisations operate within specific environments and are influenced by various drivers and variables. Assets and services need to be managed within the context of multiple changing environments such as: social, environmental, economic, cultural, technological, political and legal. The organisational environment will impact, but also provide direction, for the management of infrastructure assets.

Regional Councils have slightly different functions to those performed by city and district councils. They are charged with the integrated management of land, air, and water resources, supporting biodiversity and biosecurity, providing for regional transport services, and building more resilient communities in the face of climate change and natural hazards. A major focus of our work involves looking after the environment and delivering a range of services to achieve our community outcomes.

Improvement – Conduct a SWOT analysis against PESTLE* components. Develop strategies for SAMP to leverage strengths and opportunities, address weaknesses and mitigate threats.

* *PESTLE (political, economic, social, technological, Legal and environmental) is an analysis tool to support environment scanning when developing strategies/plans.*

Another key role of Council is to lead and represent communities, encouraging participation in decision-making, and promoting their social, economic, environmental, and cultural well-being, both now and into the future.

3.1.1 Governance and stakeholders

Council is governed by fourteen Councillors elected from four general constituencies: Tauranga, Rotorua, western Bay of Plenty and eastern Bay of Plenty. Voters on the Māori roll elect one councillor from three Māori constituency areas: Kōhī, Mauao and Ōkurei. They in turn elect a chairperson who facilitates decisions about the committee structure that Council uses for decision-making. Work is overseen by a Chief Executive and a team of general managers. There are just over 500 staff who are based around the region.

Māori Partners

The Bay of Plenty has a long and proud Māori heritage with more than one quarter (25%) of the population of the region identifying themselves as Māori at the 2013 Census. This is in comparison with only 14.9% of New Zealand's total population identifying themselves as Māori.

Council acknowledges the unique status of the relationship between the Crown and Māori under the Treaty of Waitangi. Council also acknowledges that the relationships it has with Māori are central to the fulfilment of its statutory responsibilities and will continue to utilise a range of different mechanisms to engage with the wider Māori community and ensure their views are appropriately represented in the decision-making process. One of Council's strategic priorities in its 2021-2031 Long Term Plan relates to 'Partnerships with Māori'.

Council recognises the importance of mātauranga Māori and the value of it to inform council decision making processes. Through He Korowai Mātauranga, Te Hononga, and the pending Māori Responsiveness Framework, incremental changes to the way Council works with Māori will yield more productive and meaningful relationships that will inevitably benefit the wider regional community.

Community and external stakeholders

Members of the community in our region are our primary stakeholders, our community contributes to the funding of our assets and asset maintenance through rates, fees and charges and are involved in the decisions for the management of assets and our community is also the main beneficiaries of the services. There are a range of other individuals, groups and organisations with external stakeholder interests, some of these are listed below.

Table 1: Council's various external stakeholders and communities.

Community and external stakeholders		
Our community – citizens and ratepayers	Local Iwi and Hapū	Emergency service providers (Police, Ambulance, Fire, Civil Defence, etc)
The region's territorial authorities (TA's) and neighbouring TA's	Central Government Ministers and Agencies	Regional and sub-regional economic development agencies.
Co Governance Forums including; Te Maru o Kaituna River Authority, Rangitāiki River Forum, Rotorua Te Arawa Lakes Strategy Group	Te Arawa Lakes Trust	Environmental Care and Education Groups
Financial Institutions, Insurers, Regulatory Authorities.	Te Uepu (shared decision-making entity for the Pāpāmoa Hills Cultural Heritage Regional Park)	Rivers Scheme Advisory Groups.

Internal stakeholders

Key internal stakeholders for developing and implementing the Strategic Asset Management Plan and their respective roles and responsibilities are outlined below.

Table 2: Council's internal stakeholders relating to this SAMP.

Who	Role
Councillors	Sets strategic direction of the Council including vision, community outcomes and strategic priorities, and approval of the Asset Management framework.
Leadership Team	Responsible for management of Bay of Plenty Regional Council and ensuring asset management plans are consistent with the strategic direction.
Asset Management Steering Group	Responsible for the development of the asset management plans to deliver on the Strategic Direction
Asset Activity Managers	Responsible for the implementation of the Asset Management plans

Improvement – Undertake a stakeholder analysis explicitly for the SAMP.

3.2 **Legislation, policies and strategies**

Community expectations, on-going monitoring of environmental effects, together with more awareness and attention towards the potential effects Council activities have on the environment are changing the way that these activities need to be delivered. Current trends are placing greater importance on the social, cultural, and environmental values of water resources. This is evidenced by a number of recent initiatives, notably the National Policy Statement for Freshwater Management 2020, the Local Government Amendment Act (May 2019) regarding four aspects of community well-being, and various co-management arrangements around the country with Tangata Whenua. There is also significant upcoming change with the Resource Management Act (RMA), Three Waters and other ongoing legislative reform and resulting in uncertainty.

There is a range of legislation impacting delivery of Council services. Key legislation regulating and informing asset management requirements are outlined in (Table 23) above. This means that there are some non-negotiable commitments and absolute obligations that this SAMP must adhere to.

Council has also developed various policies and strategies, and works in partnership to fulfil its role and align its activities to other agencies and organisations throughout the region and nationally. This means that in establishing its programmes, Council must be aware of these policies, strategies and guidelines. Our Asset Management Policy is presented and discussed in 9.1.1. A list of some of the key policies, plans and strategies is included in Appendix 1.

Table 3: Key legislation influencing Council's activity delivery.

Legislation	Summary
Local Government Act 2002	The Local Government Act 2002 provides councils with a framework of powers to carry out democratic decision-making and action for and on behalf of its community. It also imposes accountability for prudent management and stewardship of community assets in the present and into the future.
Resource Management Act (RMA), Spatial Planning Act (SPA) and Natural Build Environment Act (NBA)	The RMA 1991 has been New Zealand's primary legislation dealing with the management of natural and physical resources. The Regional Water and Land Plan is a vehicle used to meet the requirements of the RMA and this can directly impact AMP Levels of Service e.g. trophic level index in Rotorua Te Arawa Lakes AMP. The NBA and SPA replace the RMA and Council are working through transition requirements for the new Acts.
Local Government (Rating) Act 2002	This Act provides a framework for setting, assessing, and collecting rates in New Zealand. Rates are a primary source of funding for regional councils.
Emergency Management Bill 2023	Provides for the comprehensive management of emergencies and hazards. Regional councils have responsibilities under this Bill, particularly around hazard identification and emergency planning.
National Policy Statements and Natural Resources Plan	The Natural Resource Plan (NRP) has driven land use change, and facilitated agreements to reduce land use impacts, that support the improvement of water quality in the Rotorua Lakes. The upcoming National Policy Statement – Freshwater Management will require additional action in relation to water quality in the Rotorua Lakes.
Carbon Response Act 2002 and Amendments	Establishes the legal framework for the country's response to climate change, amended in 2019 to set the foundation for a National Adaptation Plan and Emissions Reduction Plan. This set a legally binding target of net-zero carbon emissions by 2050.

<https://atlas.boprc.govt.nz/api/v1/edms/document/A3896371/content>

<https://www.participate.boprc.govt.nz/ltp/our-climate-change-statement>

3.3 Climate change

The effects of climate change will impact the environment regionally, nationally, and globally. There will be changes in sea level rise, wind and weather patterns, and the frequency of extreme weather events are anticipated to increase. Indications of climate change by the Intergovernmental Panel on Climate Change (IPCC) from a report completed by NIWA in 2019 are illustrated below.

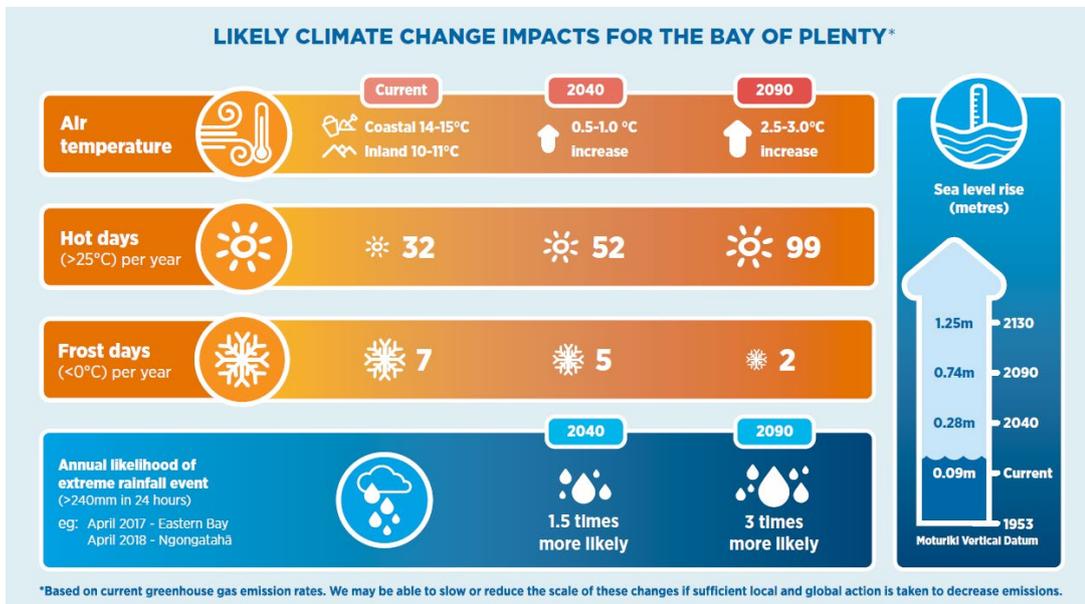


Figure 3: Likely climate change impacts for the Bay of Plenty region.

Climate change is the most significant challenge we are facing that is a major risk to our infrastructure and the services they provide. The most at-risk infrastructure is our flood protection and control assets as part of our Rivers and Drainage activity.

Council recognises the significant implications that climate change will have for the Bay of Plenty and the need for mitigation and adaptation actions locally and region wide. In June 2019, Council declared a climate change emergency alongside the adoption of our first Climate Change Action Plan⁴, which was updated in 2021 and again in 2023.

Council is committed to working with our sectors and communities on transitioning to a low carbon future and preparing ourselves for the changing climate. Council’s new Climate Change Statement⁵ included in the CCAP outlines our view of what needs to occur in our region and how we will work towards the changes needed to respond to climate change.

What does this mean for this SAMP?

Implementing nature-based solutions has and will become more important to deliver greater asset resilience, long-term cost savings, and contribute to valuable environmental outcomes. Sustainability and resilience will need to be integrated into activity AMPs and circular economy principles will need to be embedded within asset management strategies and practices.

⁴ <https://atlas.boprc.govt.nz/api/v1/edms/document/A3896371/content>

⁵ <https://www.participate.boprc.govt.nz/ltp/our-climate-change-statement>

Part 4: Strategic direction

As described throughout the previous two sections, all organisations operate within specific environments and are influenced by various drivers and variables. Council must work together to understand the implications of the strategic environment and how they may impact on the management of infrastructure assets.

This includes understanding the internal and external environment, as well as our customer and stakeholder requirements. This understanding, alongside our AM Policy, will inform the development of our asset management plans and practices.

The current local government landscape is particularly changeable. COVID-19 has had substantial economic and social effects, and over the past three years has been Central Government's most immediate focus for the majority of that period.

There is also significant regulatory reform underway at the Central Government level, with freshwater, resource management, urban development, and 'three waters' reforms all experiencing changes. These changes make our relationships with tangata whenua even more important.

The Bay of Plenty is also growing rapidly, and population growth is creating challenges, notably in terms of housing, transport, and urban development, but also in creating additional environmental pressures. Furthermore, the region is exposed to various environmental challenges, such as flooding and sea level rise, which will be exacerbated by the effects of the changing climate. This complex environment means that adaptation is vital.

4.1 Council's strategic direction

This SAMP aligns with and takes direction from the Council's Strategic Direction outlined in the 2024-2034 Long Term Plan. The Strategic Direction has been developed to support the well-being of our community and ties together our vision, five community outcomes, eighteen goals and three key enablers as outlined below.

Tō mātou aronga rautaki

Our strategic direction



Te pae tawhiti

Ka eke panuku, ka eke ngātahi Te Moana a Toi – mō te taiao, mō ngā tāngata

Our vision

Bay of Plenty Thriving Together - mō te taiao, mō ngā tāngata

Te whāinga

E tū ai, e wana ai te rohe o Te Moana a Toi, he manawaroa, he ora, he mauri tū roa

Our mission

To create and enhance a resilient, healthy and sustainable Bay of Plenty region

Our community outcomes

HUANGA HAPORI 1 He taiao ora COMMUNITY OUTCOME 1 A healthy environment	HUANGA HAPORI 2 He hapori mata-hī awatea COMMUNITY OUTCOME 2 Future ready communities	HUANGA HAPORI 3 Ngā hapori e honoa ana, e whakamanatia ana hoki COMMUNITY OUTCOME 3 Connected and enabled communities	HUANGA HAPORI 4 He whanaketanga mauri tū roa COMMUNITY OUTCOME 4 Sustainable development	HUANGA HAPORI 5 Te Ara Poutama COMMUNITY OUTCOME 5 The Pursuit of Excellence*
<p>Ka whakaū, ka whakawana mātou i te taiao kikokikome ngā pūnaha rauropi māori mō ō mātou hapori mēngā whakaturanga o āpōpō. Ka tautokohoki mātou i ētahi atu ki te mahi i ēnei mahi.</p> <p>We maintain and enhance our physical environment and natural ecosystems for our communities and future generations. We support others to do the same.</p>	<p>Ka arataki, ka tautoko ā mātou mahi ki Te Moana a Toi te whakapakaritanga o te tū ki ngā mōreareatanga māori, ā, kia pai ai te tauritanga mauri ora ki te āpōpō puhanga-warō iti.</p> <p>Our work in the Bay of Plenty guides and supports improved resilience to natural hazards and an equitable and sustainable transition to a low emissions future.</p>	<p>Ka awhina mātou ki te hanga hapori tōhonohono, hapori mauri tū roa.</p> <p>We help provide connected and sustainable communities.</p>	<p>Ka tautoko, ka manaaki hoki mātou i te whanaketanga mauri tū roa.</p> <p>We support and advocate for sustainable development.</p>	<p>Te mahi tahi ki te tangata whenua me te hapori ki te anamata taurikura me te anamata tautika.</p> <p>Partnering with tangata whenua and community towards a prosperous and equitable regional future.</p> <p><small>*While not a direct translation, 'Pursuit of Excellence' is a close approximation to 'Te Ara Poutama. Te Ara Poutama has its origins in Te Ao Māori and references the pathway accorded by time to retrieve the three baskets of knowledge that represent humanity's consciousness. From a contemporary perspective, Te Ara Poutama serves to inspire a commitment to innovation, excellence, and continuous improvement.</small></p>

Ngā kalwhakakaha Whakatūnangatanga Haumitanga Whakahoanga me te whai wāhitanga	Enablers Delivery Investment Partnership and engagement	Ā mātou mahi <ul style="list-style-type: none"> • Whai ai mātou ki te whakapakari i te rohe • Ka kimi mātou i ngā kaupapa pāhekoheko, ā, ka mahi tahi hoki ki ētahi • Tā mātou e mahi ai, mahi paitia ai • He pai rawa ā mātou ratonga kiritaki 	How we work <ul style="list-style-type: none"> • We look to add value regionally • We seek integrated solutions and we collaborate • What we do, we do well • We provide great customer service
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Ō mātou mātāpono

- Whakapono
- Ngākau Pono
- Hautoa
- Manaakitanga
- Kotahitanga
- Whanaungatanga

Our values

- Trust
- Integrity
- Courage
- Showing care and respect
- Working together as one
- Forming and maintaining relationships and strengthening ties with communities

Our wellbeing

<p>He korowai Taiāo Environmental Wellbeing</p>	<p>He korowai aroha Social Wellbeing</p>	<p>He korowai whakamana tangata Economic Wellbeing</p>	<p>He korowai mātauranga Cultural Wellbeing</p>
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Figure 4: Council's Strategic Direction 2024-2034.

4.1.1 Activity contribution to strategic direction

Table 4 below illustrates at a high level the links between the asset activity areas and Council's Strategic Direction. An activity and asset overview is provided in Part 6:

Table 4: How each activity contributes to Council's Strategic Direction.

Asset Activity areas		Rivers and Drainage	Regional Parks and Coastal Catchments	Rotorua Te Arawa Lakes	Maritime Operations	Property
Community Outcomes	A Healthy Environment <i>He taiao ora</i>	✓	✓	✓	✓	✓
	Future Ready Communities <i>He hapori mata-hi awatea</i>	✓	✓			✓
	Connected and enabled communities <i>Ngā hapori e honoa ana, e whakamanatia ana hoki</i>	✓	✓		✓	✓
	Sustainable Development <i>He whanaketanga mauri tū roa</i>	✓	✓			✓
	The Pursuit of Excellence* <i>Te Ara Poutama</i>	✓	✓		✓	✓
Community wellbeing	Social	✓	✓	✓	✓	
	Cultural	✓	✓	✓	✓	
	Economic	✓		✓	✓	
	Environmental	✓	✓	✓	✓	

Part 5: Asset Management System

A 'management system' is a disciplined approach designed to achieve specific outcomes in a controlled and sustainable manner. It comprises interacting elements within an organisation that work together to establish asset management policies and objectives, and then devise and implement processes to realise those objectives.

A well-designed Asset Management System (AM System) is pivotal to the consistent and successful delivery of Council's organisational objectives and Strategic Direction. It not only improves effectiveness and efficiency but also strengthens community satisfaction and helps better manage risks associated with our assets.

Table 5: How the Asset Management System contributes to asset management objectives.

AM Objective	Actions to delivery
4. Maintain the Asset Management System to a high quality	4.1 Asset Management processes are documented and opportunities for improvement and efficiencies are identified. 4.2 Ensure improvement plan items are actioned and reported back to the Steering Group. 4.3 Practices represent global best practice.

Council recognises that our current AM System needs further enhancement, and we are committed to taking crucial steps towards its robust establishment. These steps, outlined throughout this section, are further detailed in the SAMP Improvement Plan (11.3) - our roadmap towards a more robust and effective AM System.

Improvement – Undertake maturity assessment and/or SWOT analysis on the current AM System.

5.1 Scope of the Asset Management System

An important part of establishing an AM System is clearly defining its scope, in terms of the asset portfolios covered, the policies, strategies and plans included, and the people, processes and information systems within the boundaries of the AM System. Documenting the scope of the AM System creates clarity and consistency, particularly for the key documents that form the core of the AM System. The documents included within the scope of the AM System are illustrated in Figure 5 below. The assets included within the scope of the AM System are covered in Part 6: .

Not all activities or aspects that influence the achievement of asset management will be included within the scope of the AM System, however they may still be critical for the organisation's performance. Typically, some functions which could be described as 'enablers' for asset management (5.2) may sit outside the boundaries of the AM System, but still be managed by the organisation. Examples include leadership, culture, behaviour, and human resources.

Establishing boundary conditions necessitates examining multiple aspects, such as:

- Responsibilities and the organisation's structure;
- Outsourcing arrangements;
- Decision-making power or governance;
- Interaction with other management systems;
- Influence of factors outside the scope of the AM System.

These boundaries and the applicability of the AM System require further exploration and a more thorough representation within this SAMP to ensure the integrity and sustainability of the AM System.

5.1.1 Asset Management System framework

A framework diagram is an effective tool for describing the AM System and its components, providing a visual representation of the scope of what is included.



Figure 5: Asset Management System framework.

A key challenge is making sure all components of the AM System work cohesively and demonstrate links between the organisation's Strategic Direction and the asset management and operational plans needed to deliver them. Strategy and planning aligns an organisation's asset management activities with its overall objectives.

A document hierarchy is useful for mapping and creating a line of sight between organisational objectives, strategic asset management objectives, tactical asset management plans, and operational plans and procedures. This alignment – or line of sight – enables the individuals carrying out their day-to-day asset management activities to trace the rationale for what they are doing through the asset management plan back to the organisational objectives.

Improvement – Develop an AM System Handbook to outline, describe and illustrate the scope of the Asset Management System.

5.2 AM system enablers

Effective infrastructure planning and decision-making are facilitated by a range of AM enablers. These are essential components that foster a robust and dynamic AM System. They encompass dedicated individuals (both internal and external), accurate and insightful data, advanced information systems and tools, well-defined processes, strategic outsourcing, and an ongoing commitment to continuous improvement.

The subsequent sections will cover each of the six enablers, providing an overview of each one, including their current state and any areas identified for improvement.

5.2.1 People

Overview

Leadership - An organisation's culture, leadership and engagement with people create the environment for asset management to succeed. This environment establishes a way of working and a set of behaviours that shape the processes to support effective asset management, including change management.

Effective leadership, alongside communication, is crucial for building an organisation with the appropriate culture, which supports the delivery of good asset management. This will include commitment to cross-functional working, ensuring adequate resources, and reviewing the AM System.

Council staff - While leadership provides direction and motivation, it is vital to remember that people do asset management and therefore people, and their knowledge, competence, motivation and teamwork have a huge influence on the asset management outcomes. Engagement of the workforce, clarity of leadership, and collaboration between different departments and functions are the real differentiators of a leading asset management organisation. Each person and team should understand where they fit within the AM System and how their role contributes to AM objectives.

Current state
<p>The following groups demonstrate leadership and commitment by taking an active role in directing, supporting, communicating, monitoring and improving the AM System.</p> <p>Executive Leadership Team (ELT) demonstrates commitment to asset management and creates a work culture that is successful and motivated. The ELT sets the organisational structure and oversight of asset management, and mandates and supports the Asset Management Steering Group (AMSG).</p> <p>The GM Integrated Catchments and GM Corporate are the Leadership Team Sponsors to the AMSG. They provide a connection between the ELT and the function of the AMSG.</p> <p>Asset Management Steering Group (AMSG) - The primary function of the AMSG is to oversee the implementation and 3-yearly review of Council's AM Policy, SAMP, Infrastructure Strategy and activity AMPs. The AMSG also oversees and guides improvements to the AM System.</p>
Improvement(s)
<p>An important part of the AM System is the capability and capacity of the organisation's people. Workforce capability is an organisation's ability to achieve its objectives through the knowledge, skills, abilities and competencies of its people. The process used by an organisation to systematically develop and maintain an adequate supply of competent and motivated people to fulfil its asset management functions is significant.</p> <p>Improvement – Develop a business case to understand costs and benefits of having a centralised team to manage and improve the AM System. As part of this complete a RASCI assessment to identify AM capability and capacity needs.</p>

5.2.2 Data and information

Overview
<p>All asset management activities are reliant on a foundation of accurate and reliable asset data and information. Knowing exactly what assets exist, where they are, and in what physical condition they are in is fundamental to achieving asset management objectives.</p> <p>Information within the AM System ranges from asset data, condition and performance data, AMPs, operating procedures, and all other documented information used to manage assets and deliver services. High-quality data is essential for informed decision-making within the AM System.</p>
Current state
<p>Information requirements for each asset activity vary depending on the asset components and the level of management required. Each activity will assess the confidence in the data they have used within their activity AMPs, identifying improvements to close gaps and improve confidence.</p> <p>Some activities are more advanced in their data collection and management, and we acknowledge that there are improvements to be made in some areas around asset hierarchy, data structure and componentisation. These improvements have been identified within individual activity AMPs.</p>
Improvement(s)
N/A

5.2.3 Systems and tools

Overview
<p>Information systems are critical to effective asset management and an organisation achieving its AM objectives. Information systems provide asset managers with tools that enable them to conduct the degree of analysis required for the size and complexity of the asset portfolio, and to advance the maturity of AM practices.</p> <p>Software solutions are an important part of the AM System. Tools may range from simple spreadsheets to organisation-wide asset information systems. Systems and tools provide analytical capabilities for better decision-making.</p> <p>Having fit-for-purpose asset management information systems and using them appropriately is an important foundational step in supporting informed prioritisation of our investment in infrastructure.</p>
Current state
<p>Council implemented the TechOne enterprise asset information system in 2020 and is testing its use in the Rivers and Drainage and Regional Parks-Coastal Catchments activities. It is intended that asset management functions of TechOne will be adopted across other activities at Council as capability, systems and processes develop.</p>
Improvement(s)
<p>Consolidate the use of Techone asset management functions in the Rivers and Drainage and Regional Parks-Coastal Catchment activities and gradually adopt its use across Council.</p>

5.2.4 Processes

Overview
<p>Asset management processes describe the set of procedures and interactions within an organisation that are needed to achieve its objectives. As noted earlier in this section, formalised processes can improve effectiveness and efficiency, increase community satisfaction and better manage risks associated with our assets.</p> <p>A well defined, documented and managed set of processes provides the organisation with a “road map” to follow to deliver quality, consistent services and achieve objectives.</p>
Current state
<p>Council currently documents some of the critical asset management processes used across the organisation, particularly around our new asset information system, but acknowledge that we must do better to document and formally record more of our key asset management processes. We aspire to make our systems more robust and resilient, especially in the event of an emergency or staff absence/turnover.</p>
Improvement(s)
<p>Identify and record key asset management processes.</p>

5.2.5 Outsourcing

Overview
Outsourcing can be an effective strategy to access specialized skills, technologies, and capabilities that may not be available in-house. Properly managed outsourcing relationships can enhance the organization's capacity to deliver asset management services efficiently and cost-effectively.
Current state
Council has a range of options available to deliver services associated with assets and asset management. Service delivery options range from full in-house delivery of all asset activities by the Council staff, to outsourcing part, or all asset services and functions. Determining which service delivery model is appropriate requires activity managers to consider the cost, benefit and risk associated with various service delivery options.
Improvement(s)
Outsourcing will be reviewed as part of the AM System SWOT/maturity assessment.

5.2.6 Continuous Improvement

Overview
Continual improvement is essential for maintaining and enhancing the performance of the AM System over time. By regularly reviewing and updating the AM System, organisations can adapt to changing conditions, address emerging risks, and optimise asset performance and service delivery.
Current state
The 'appropriate' AM maturity level for each of the asset activity areas that fall within the scope of this SAMP is specified in (Table 30) in Section 11.2.2. This represents a baseline from which we will strive to improve. Aiming for higher AM maturity levels aligns with our commitment to continually improve our asset management practices.
Improvement(s)
Continual improvement is covered in more detail in Part 11: .

Part 6: Activity and asset overview

6.1 Activity overview

Council's infrastructure assets covered within the scope of this SAMP are grouped below into the activity areas. The rationale for Regional Authorities being responsible for the provision and control of significant Council assets stems from provisions in the Local Government Act (LGA) 2002. Understanding the reasons for asset ownership and the benefits derived from them is crucial for making strategic asset management decisions. This understanding guides our investment strategies, maintenance plans, and lifecycle management approaches. It also allows us to balance the demands for new assets with the need to adequately maintain and replace existing ones.

Table 6: Overview of activity areas, services and rationale.

Activity	Services provided	Rationale for ownership
Rivers and Drainage	Flood protection, land drainage and river management.	Assets contribute to a mix of public and private benefits. Private benefits accrue to individual landowners and occupiers through the protection of lives, livelihoods and property. Local benefits occur because a range of public facilities, infrastructure and services receive security from flooding. Regional and national benefits arise because productive land, in flood prone areas provides an economic benefit through the multiplier effect to the wider region and nation. Council's Significance and Engagement Policy lists the rivers and drainage assets as strategic assets. This means that any transfer of ownership of the assets would be a significant decision and would require a full analysis of options and consideration of community views and preferences in Council's decision-making process.
Regional Parks and Coastal Catchments	Recreational and open space areas for the benefit of the community.	Assets provide benefits across the region. Visitors to the region also benefit from being able to enjoy and use the regional parks.
Rotorua Te Arawa Lakes	Rotorua lakes water quality improvements.	National and regional benefits include the protection of nationally significant bodies of water, and local benefits arise for those who live close to protected waterbodies. The wider community and future generations will get enhanced economic, environmental, social and cultural value from these improvements.

Maritime	Provides a 24/7 navigational safety and maritime oil spill response across the region.	Assets contribute to a mix of national, regional, local and individual benefits. National and regional benefits arise from minimising the likelihood of maritime accidents that have an impact on people and the natural environment, including oil pollution response. Local and individual benefits arise because navigation aids help commercial and recreational vessels to avoid accidents and the associated financial and personal costs.
Property	Workspaces for staff and customers. Equipment and plant storage for wider activity services.	Rationale of asset ownership as a result of the Local Government Act provisions whereby Regional Authorities are responsible for the provision and control of significant Council assets. Property provides a supportive function for all of Councils activities in the LTP as a corporate overhead.

6.1.1 Significant negative effects

In accordance with the LGA, it is essential to acknowledge and assess any significant negative effects our activities may have on the social, economic, environmental, and cultural well-being of our local community. While our assets and services provide considerable benefits, we recognise that they may also contribute to undesirable impacts. Identifying these effects and implementing mitigating strategies is an important responsibility of a Regional Council.

Outlined in the table below are the significant negative effects linked to each activity area, along with the mitigation measures we have planned or are currently implementing. It's important to note that these reflect only the significant negative effects. Other less critical negative effects and corresponding mitigations are documented within individual Activity Asset Management Plans (AMPs).

Table 7: Potential significant negative effects from Council infrastructure activities.

Activity Area	Significant negative effects	Mitigation
Rivers and Drainage	Potential negative effects on the environment as a result of Council's delivery of flood control and land drainage functions. Restrictions on land use through the Floodway and Drainage Bylaw.	<ul style="list-style-type: none"> • Civil construction works must comply with all relevant RMA Plans, and resource consent processes to ensure that effects of concern to the community are understood and adverse environmental effects are avoided, remedied or mitigated. • All activities undertaken by the Rivers and Drainage team of council comply with our environmental code of practice and relevant industry design standards. • Where a significant change to an activity is proposed, clear opportunities are provided to the community to express their views via the engagement processes set out through Councils Significance and Engagement Policy.
Rotorua Te Arawa Lakes	Making the change to more sustainable land uses and land use practice may have	<ul style="list-style-type: none"> • As part of our planning processes, we ordinarily carry out cost benefit analysis that is proportionate to the type of proposal or plan being considered.

	economic, cultural and social costs for individual landowners, and possibly the regional economy.	<ul style="list-style-type: none"> Where a significant change to an activity is proposed, clear opportunities are provided to the community to express their views the engagement processes set out through Councils Significance and Engagement Policy.
Regional Parks and Coastal Catchments	There are no significant negative effects of providing this service.	<ul style="list-style-type: none"> N/A
Maritime Operations		
Property		

6.2 Asset overview

Council owns, operates, and maintains assets valued at \$527.52 million ODRC value (Table 8) below. Rivers and drainage assets, which account for 83% of the total value, make up a significant portion of our asset portfolio. However, the value distribution should not detract from the importance of other key asset areas. Each asset area, regardless of its proportion of the total value, plays a critical role in serving our community and supporting the council's service delivery and strategic goals.

Table 8: Asset types and values by activity.

Asset Area	Asset Group/Type	Optimised Depreciated Replacement Cost (ODRC) or Book value \$m	Replacement Value (ORC) \$m
Rivers and Drainage	<ul style="list-style-type: none"> Erosion protection Pump stations Stopbanks Structures Waterways 	\$438.02*	\$519.90
Regional Parks and Coastal Catchments	<ul style="list-style-type: none"> Fencing and styles Pathways/walkways car parks Dams Farm buildings, dwellings, and toilets Water supply-tanks and pumps Park furniture Timber plantations Signage Land 	\$25.91	\$27.10
Rotorua Te Arawa Lakes	<ul style="list-style-type: none"> Phosphorous Locking plants Ohau Diversion wall: Rotoiti. Koaro fish passage Wetlands: Okaro and Rotoehu (floating) Outlet Structures: Okareka, Rerewhakaaitu, Rotomahana 	\$16.10	\$24.90
Maritime Operations	<ul style="list-style-type: none"> Beacons Buoys Markers Signs 	\$1.51	\$2.12

Property	<ul style="list-style-type: none"> • Offices • Depots • Carparks 	\$45.98	\$49.20
		\$527.52	\$623.22

**Excludes an impairment of \$2.15m relating to the Whakatane-Tauranga River scheme. The ODRC including impairment is \$436m.*

6.3 Asset age

Understanding the age of our assets is a critical component of effective asset management. Age is a key factor that influences an asset's performance, maintenance needs, and ultimately, its life cycle cost. The 'useful life' of an asset is an estimated timeframe that the asset is expected to perform its intended function, assuming it's properly maintained. From a financial perspective, these concepts are significant. They contribute to our financial planning and budgeting, particularly in terms of allocating funds for asset replacement.

However, while understanding the age of our assets provides important insights into their lifecycle stages and helps anticipate future expenditure, it is not the only factor that determines an asset's health or performance. Assets, depending on their specific context, usage, and maintenance history, may outlast their estimated design lives or, conversely, may deteriorate more quickly than anticipated. Asset condition and performance is covered in 0.

The subsequent sections below will provide a high level overview of asset age by asset activity portfolio. It is important to note that the data provided here is a snapshot of our current understanding, and as our asset management practices mature, so too will the depth and accuracy of this data. The reader is encouraged to find more detailed information within each Activity AMP.

6.3.1 Activity summary

Rivers and Drainage

Asset age is tracked, and decisions for replacement made, by individual asset. Stopbanks, waterways and erosion protection asset groups are not managed by age due to the fact that they have an expected life of perpetuity, as planned maintenance continually renews these assets.

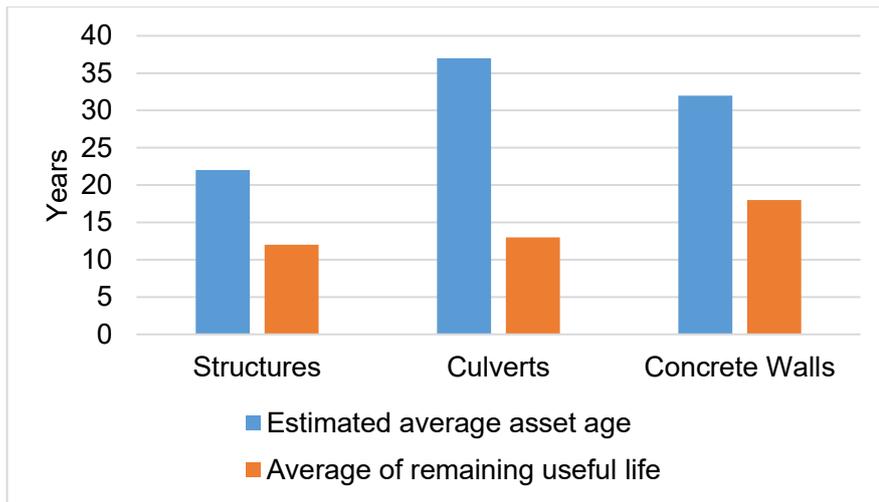


Figure 6: Average asset age and remaining useful life for structure, culverts and concrete walls.

Figure 6 above depicts the average estimated age and remaining useful life of structures (e.g. tide gates, major flood gate concrete structures, flap gates, drop structures and headwalls), culverts and concrete walls. These asset types require replacement when they reach end of life and condition assessments confirm the need for replacement. Capital budgets are allocated in the Long Term Plan to replace these assets and the timing of budgets is set using the expected end of an asset's life. For example, culverts and concrete walls have an expected life of 50 years.

Maritime

Figure 7 shows the total number of assets grouped into remaining useful life year ranges. A significant portion (42.3%) of assets have between 11-20 years of useful life remaining. Over the next ten year period, 123 assets will reach the end of their useful life. Around 44% of AtoN assets have over 20 years of remaining useful life.

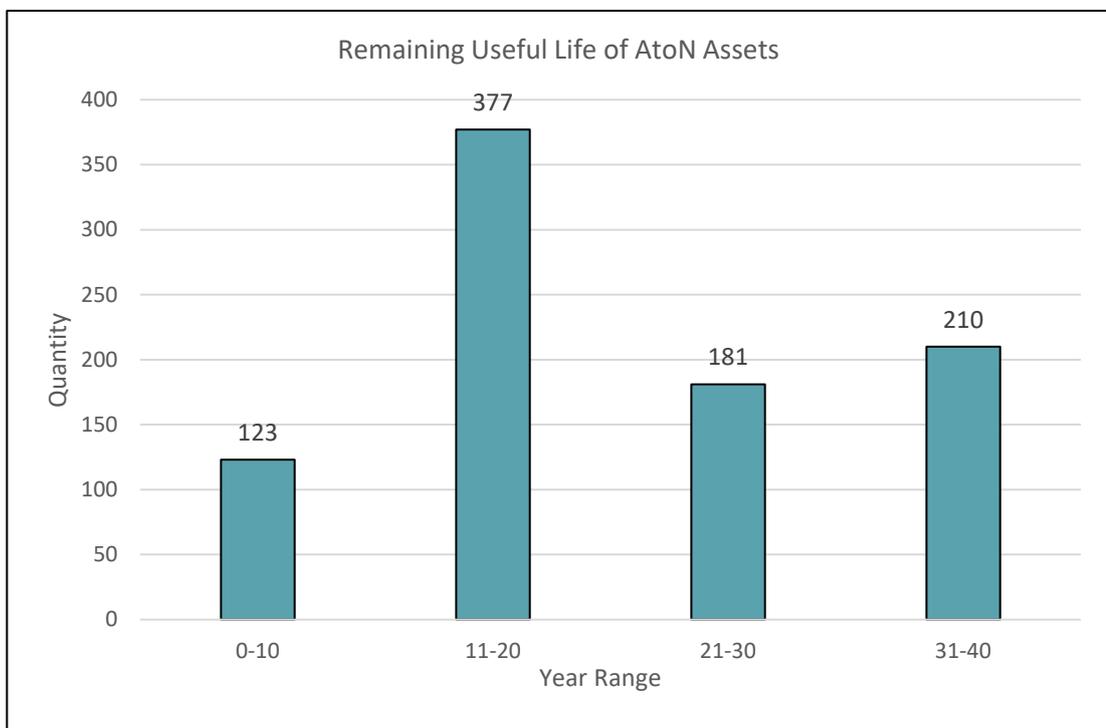


Figure 7: Number of AtoN assets grouped into remaining useful life ranges.

Property

Figure 8 shows the approximate age and estimated remaining useful lives of Council's owned properties. Providing age data at the property/building level does not offer very useful information. The office and depot asset classes have many asset types and components with varying ages and remaining useful lives. However, in lieu of more detailed information at this asset type and component level, the below information has been included to provide the reader with some perspective on the age and scale of property assets.

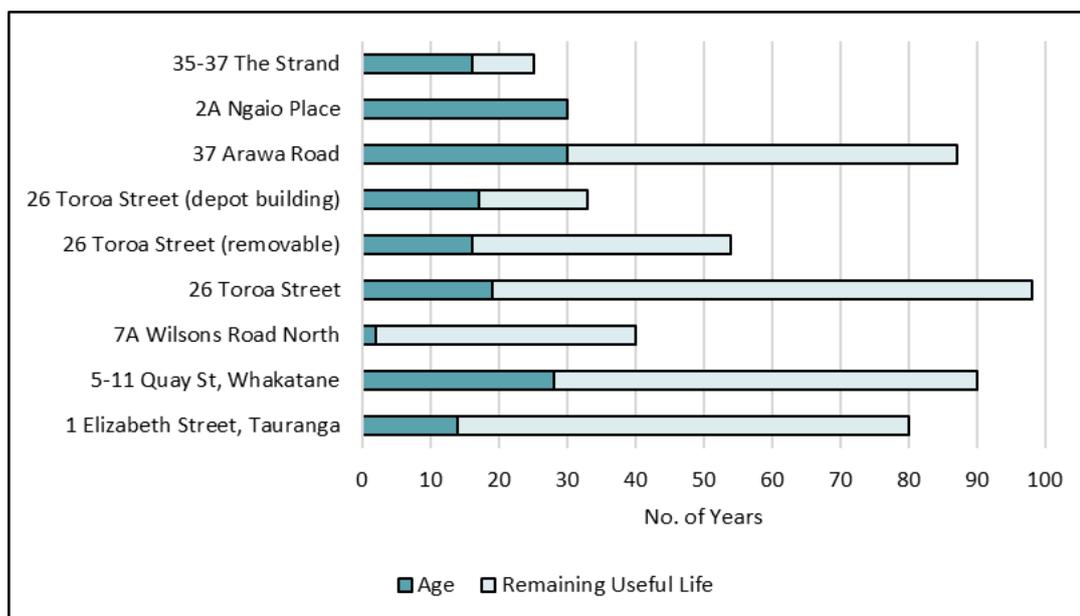


Figure 8: Number of AtoN assets grouped into remaining useful life ranges.

Depots and carparks generally have lower effective lives (10-40 years) compared to the office buildings (40-100 years), with some exceptions. The majority of Council's property assets are less than halfway through their expected lives; the carpark (35-37 The Strand) is 64% through its expected life; and the Edgecumbe Depot (2A Ngaio Place) has surpassed its expected life but continues to be in good condition.

A number of property assets have received refurbishments and replacements of asset types and components, thereby extending the remaining useful lives of these assets. In some instances this has improved the structure of parts of the property asset. This has not yet been reflected in the age information presented below.

Rotorua Te Arawa Lakes

Providing age data at the asset type/facility level for assets that have many components, such as the phosphorus (P-) locking plants, offers minimal useful information. For assets with either a small number or similar type of components, using the average age and average remaining life of an asset is useful. These examples include the Kaoro Fish Pass, Ōkaro Wetland, and Lakes Rotomahana and Rerewhakaaitu Outlets. For other assets, such as the Ōhau Diversion Wall, Lake Ōkāreka Outlet, the average age based on its components is misleading due to the variety of component types, material, function, useful lives, etc.

Nonetheless, Figure 9 summarises average age information across the Rotorua Lakes portfolio (excluding the P-Locking Plants). Please refer to the Rotorua Lakes AMP for age information and analysis at the component level for these assets.

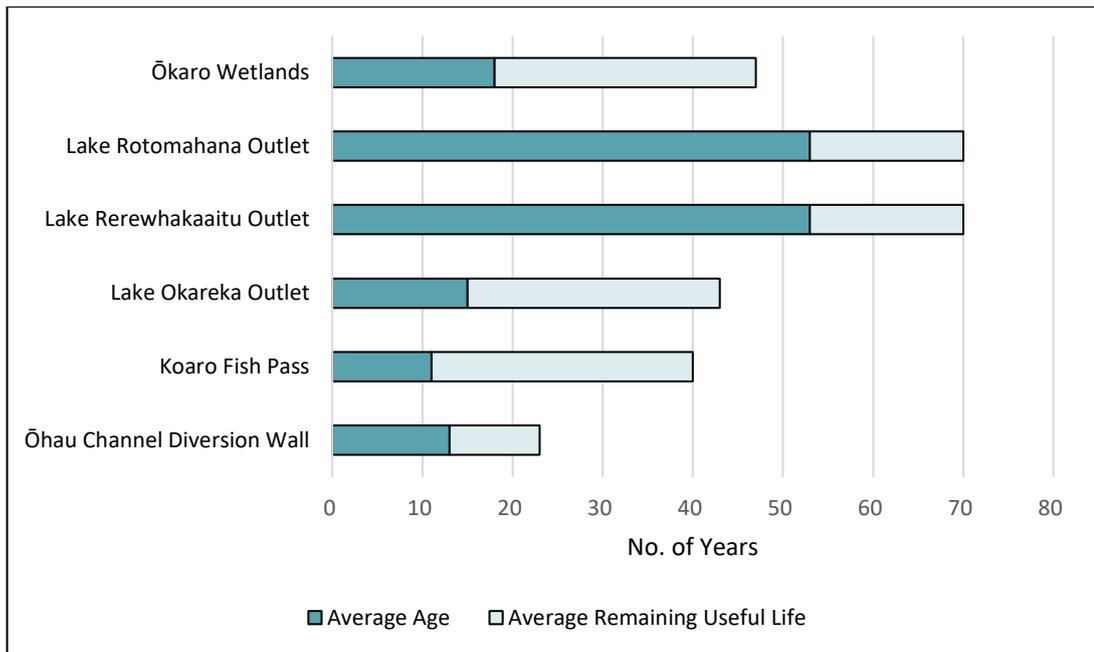


Figure 9: Age information for Rotorua lakes other asset types.

The Koaro Fish Pass and Ōkaro Wetlands exhibit the longest average remaining useful lives of 29 years. The oldest infrastructure in this portfolio are the lakes Rerewhakaaitu Rotomahana Outlet structures, both at an average age of 53 years, and still show a substantial remaining useful life of 17 years.

The age information has been adjusted based on the 2021 asset valuation, and does not account for any works that have taken place since this valuation. This information will be updated following the upcoming asset valuation before 30 June 2024.

Regional Parks and Coastal Catchments

The Regional Parks and Coastal Catchments portfolio boasts a unique collection of assets, some of which transcend the conventional meaning of 'infrastructure'. The portfolio is enriched with an array of appreciating and 'intangible' assets. These include significant trees, vast expanses of regenerating native bush, and important archaeological and cultural sites, all of which contribute to the unique value of the parks and coastal areas. Many of these assets are attached to the land and do not follow the typical cycle of depreciation. Their age is not easily quantified, nor does it necessarily correlate with a decrease in value.

The age-related approach to asset management becomes less applicable in the context of these intangible assets. Instead, their management is focused on conservation, preservation, and enhancement of their inherent values.

There are, however, a portion of assets in this portfolio, such as buildings and structures, that do have a tangible, physical form, but detailed information about their age is currently limited. These assets were primarily derived from previous farming activities conducted on the land before their transition into parkland.

6.4 Asset condition and performance

Assessing the current condition and performance of our assets is vital for providing a more comprehensive understanding of each asset's status and future needs. The interplay between age, condition, performance and criticality forms the basis of our ongoing asset management strategy.

Asset condition is a measure of the physical state of an asset which is visually assessed by staff and contractors on a regular basis. Whereas the performance of an asset relates to its ability to support the delivery of agreed levels of service. Asset condition is one component of asset performance.

Condition information provides information on where an asset is in its lifecycle. Understanding where an asset is in its lifecycle supports asset managers to identify actions required to maximise the value from the asset, which enables the delivery of agreed levels of service for the lowest whole-of-life costs.

Monitoring asset condition and performance enables us to:

- Predict and plan maintenance.
- Forecast renewal requirements.
- Determine actual delivery of service against agreed service levels.
- Identifies areas for improvement.
- Provide data and information to inform evidence-based decisions.
- Develop effective and proactive work programmes.

Consistency between assessors in condition assessments is achieved through the application of guidance documents and standardised frameworks. All activity areas included within this SAMP have or are adopting a 1-5 scoring system for asset condition (Table 9) below. Note: Maritime use the same interpretation below but different descriptors. We will look to align all grading systems.

Table 9: Asset condition grading system.

Grade	Description	Interpretation
0	Non-existent	Asset no longer exists
1	Very Good	Only normal maintenance required (e.g. cleaning)
2	Good	Minor defects and minor maintenance required
3	Average	Minor maintenance required to return to accepted service level
4	Poor	Major maintenance required to return to accepted service level
5	Very Poor	Asset unserviceable and needs to be replaced

Understanding condition and performance is integral to risk management processes. Assets that are in poor condition or not performing as intended can introduce significant operational and financial risks. By closely monitoring condition and performance, we are better equipped to identify and manage any risks in a timely manner. The frequency of asset condition assessments varies across activities, but all areas assess higher risk assets more frequently. Our decision-making framework, including risk management, is discussed in 9.4

While performance in general is monitored through the delivery of levels of service, we acknowledge there is room for improvement with respect to asset performance monitoring across our activity portfolios. Rivers and drainage have adopted a national standard for assessing the performance of flood protection assets, whereas other activity areas need to first improve asset data and/or risk management practices.

6.4.1 Activity summary

Rivers and Drainage

The results of the latest asset condition assessments are shown in (Table 10) below. Critical assets are inspected 1-3 yearly and the latest information is from 2022/23. The total count comprises 326.9 stopbank segments, with each 0.1 of a count being equal to a 100 m stopbank segment. This is equivalent to 32,690 m of stopbank assessed for condition. The vast majority of stopbanks are in very good, good or average condition, with a relatively small proportion being in poor or very poor condition.

Overall, these results show that the vast majority of critical flood protection assets are in an acceptable state (very good – moderate). A work programme has been developed to undertake maintenance, repairs and additional investigations to improve overall asset condition and to address specific sites of concern.

Table 10: Summary of asset condition for all assets and critical assets.

Assets inspected	Critical stopbanks		All stopbanks	
Year				
Asset condition	Ratio	Count	Ratio	Count
1 Very Good	96%	1.8	95.35%	8
2 Good		41.6		235
3 Moderate		6.8		68.7
4 Poor	4%	2.2	4.65%	15.2
5 Very Poor		0		0
Totals	100%	52.4	100%	326.9

While condition assessment looks at the physical state of an asset, assessing asset performance is more of a 'whole picture' analysis, incorporating required service levels, asset condition, intrinsic strength, capacity, and potential risks to communities.

Asset performance is a measure of confidence that an asset or group of assets will provide the required level of service. When assessing the performance of Council's flood protection schemes, a national Asset Performance Assessment Code of Practice is used. This national standard provides an overall asset performance score expressed as a risk grading between 1 (very low) and 5 (very high).

Performance assessments were completed on Council's flood protection assets in 2019/20 and 2022/23. A summary of these results is provided below.

Table 11: Asset performance assessment for critical assets.

Year	Critical stopbanks		All stopbanks	
Asset Performance Risk Scores	Ratio	Count	Ratio	Length (km)
1 Very Low	0%	0	0.40%	1.3
2 Low	0.38%	0.2	61.82%	202.1
3 Medium	45.99%	24.1	29.09%	95.1
4 High	51.53%	27.0	8.35%	27.3
5 Very High	2.10%	1.1	0.34%	1.1
Totals	100%	52.4	100%	326.3

Critical stopbanks can generally at best score “3 Medium” in performance assessments due to the fact that the performance assessment method uses high consequence of asset failure as a key determinant for scoring. For this reason, the majority of critical stopbanks have a medium to **high-risk** performance rating (97.52%).

The scheduled work programme in the Rivers and Drainage Asset Management Plan will achieve appropriate improvement in areas where critical stopbanks are rated as either high or very high risk.

The performance scoring changes when the critical stopbank data is added to all other stopbanks, as presented in the “All stopbanks” columns in (Table 11). This is indicative of the lower consequence associated with non-critical stopbanks (enabling scores of very low and low risk) and the fact that critical stopbanks constitute approximately 16% of the total count.

Performance results for critical stopbanks in (Table 11) below show that 45.99% are in the medium risk category. The majority of the remaining critical stopbanks have a performance rating of high risk, with only a very small proportion (2.10%) being rated as very high risk.

Maritime

Keeping aids to navigation operating is an important task, and Maritime Operations adopt best practice by following the Maritime New Zealand Aids to Navigation Guidelines, assigning condition ratings using a 1-5 scoring system. As of 2021, there are zero assets in Poor or Very Poor condition; all navigation assets were assessed as being in Excellent to Good condition.

One level of service for the Maritime activity relates to the number of assets in ‘Good’ condition or higher. The current target set in the LTP is 95%; (Figure 10) illustrates that 100% of navigation assets assessed in 2021 are in Good condition or higher.

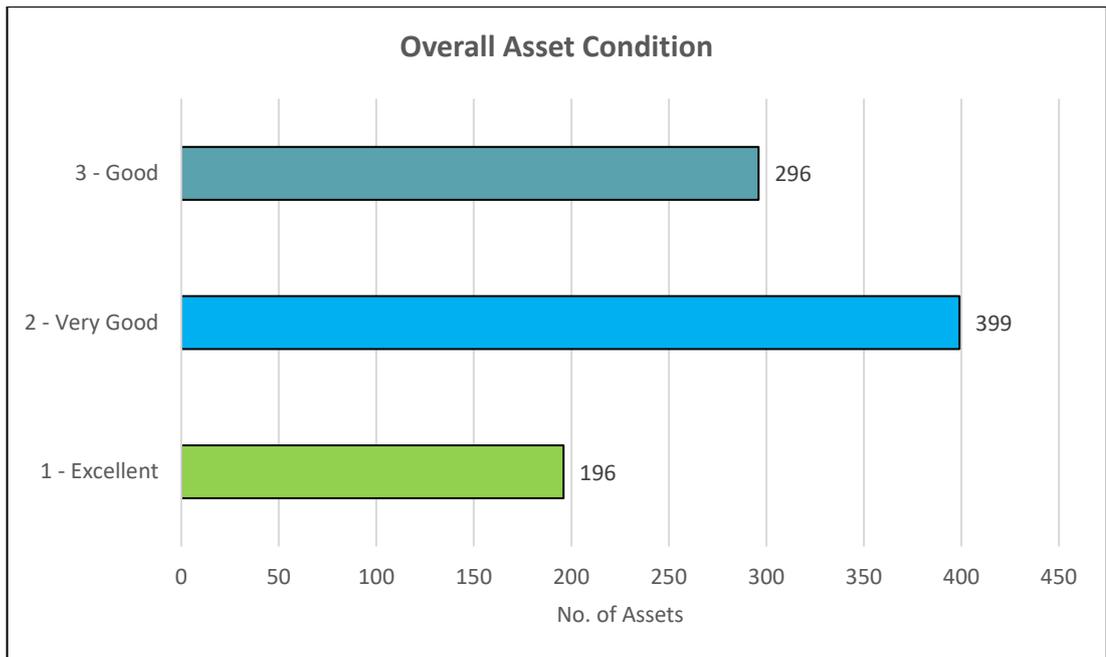


Figure 10: Asset condition summary for Maritime assets.

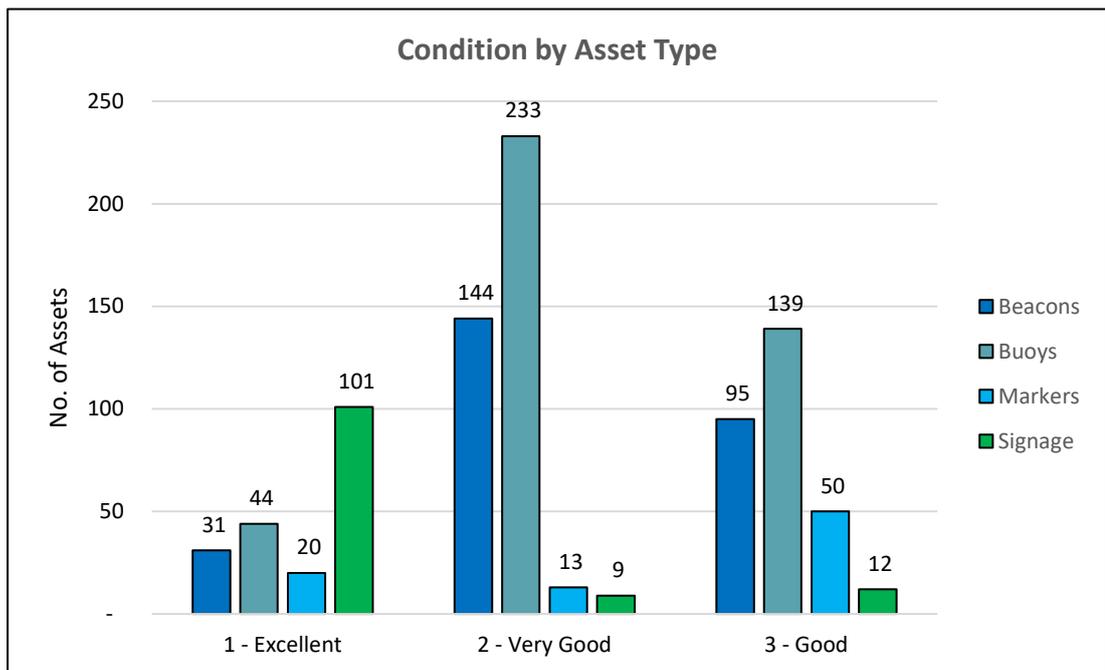


Figure 11: Maritime asset condition summary by asset type.

Property

Inspections and condition assessments are undertaken on a routine and regular basis for the Property assets, some of which are inspected by external contractors. Some of these inspection reports do not align well with the 1-5 scoring system. General property condition is summarised below.

Table 12: Summary of condition by property.

Property	Asset Class	Condition Summary
Regional House	Office	A newly upgraded property in generally good condition with sustainable design features. Wallingford House is in an average condition and currently only serves storage and parking needs.
Quay Street	Office	Recent upgrades have been undertaken, including remediation work for historical leaks and landscaping. Some parts of the HVAC system are nearing their end of life and will need replacement.
Pukaki Street	Office (leased)	A new build in excellent condition, with some initial issues such as glare, and pest control in the car park, that have since been resolved. HVAC inconsistencies are currently being addressed.
Toroa Street	Depot	The sheds are average-good condition but have been well maintained and are fit for purpose. There is potential need for upgrading due to storage capacity limitations. The asphaltting is average.
Arawa Road	Depot	This property has areas in average condition and below but has had recent security and facility upgrades in 2023, including kitchen, office and bathroom upgrades. The exterior was painted in 2018.
Edgcumbe	Depot	A well-maintained 40-year-old building in good condition. The roof and exterior were painted in 2023 with a new shed scheduled for late 2023. The kitchen was replaced in 2016, and bathroom hardware in 2019.
Paengaroa	Depot	This portable building is 17 years old, in good condition and the interior and exterior was refurbished when moved to its current location.
The Strand	Car Park	Despite improvements made over time, some areas like fencing and carpark surfacing need attention. The parking area's plastic structure is deteriorating. Overall, the car part is in average condition.

Work is required to improve the asset hierarchy and data structure of the property portfolio. This will enable asset condition data to be collected and recorded at a more appropriate and granular level than currently. This has been identified as an improvement within this AMP.

Rotorua Te Arawa Lakes

Condition assessments are undertaken on a routine and regular basis for the Rotorua Lakes assets. Work is required to better document inspections and recording of the results to transform information into an easier to understand manner. This has been identified as an improvement within the AMP.

Currently asset condition and performance information is not in a suitable format and instead is summarised by Council's Lakes Operations Manager.

Table 13: Summary of Rotorua Lakes asset condition by major asset type.

Asset type	Condition summary
Ohau Diversion Wall	Some recent inspections indicate significant additional maintenance is now necessary to maintain wall performance despite past efforts.
Phosphorus Locking Plants	The plants are generally all in Very Good condition. Their operation adapts to changes in regulations and operational requirements, with plans to add a dosing location in the centre of Lake Rotoehu for improved efficiency.
Kaoro Fish Pass	This asset is in very good condition and requires little maintenance but may need a redesign to improve its capability of blocking upstream trout passage.
Okaro Wetland Structures	The wetland, control structures and detention bunds are in good condition and maintained by a combination of BOPRC contractors and landowner maintenance. Recent inspections and maintenance has addressed any historic lack of maintenance.
Okareka Outlet	The outlet structure, pipeline and Waitangi Stream banks have all recently been upgraded to cater for a maximum flow of 500L/s and prevent stream bank erosion as a result of higher flows. They are all in very good condition.
Rotomahana Outlet	This is an old structure but is maintained in good order. Council has now undertaken the first recorded clearance of the channels leading to and from this structure since construction.
Rerewhakaaitu Outlet	This structure is in very good condition. The drain was cleared by long reach digger in 2019.

Regional Parks and Coastal Catchments

The majority of assets (91%) are in Very Good to Good condition (Table 14) below. Three assets are in Poor condition at Onekawa Te Mawhai: the stockyards driveway, water tanks and pump shed building. The public toilet building at Pāpāmoa Hills is in poor condition but is scheduled for disposal. One asset is in Very Poor condition, which attributed to the outbuildings on Gawns property at Onekawa Te Mawhai. This asset is of low criticality. The highest critical assets are in Very Good to Good condition.

Currently there is no regular, ongoing condition assessment programme in place to ensure this data is kept up to date. This has been identified as an improvement item. However, the most recent condition assessments were undertaken in 2022/23.

Table 14: Asset condition summary for Regional Parks & Coastal Catchments assets.

Condition	Pāpāmoa Hills		Onekawa Te Mawhai		Coastal Catchments		Total	
	Count	Ratio	Count	Ratio	Count	Ratio	Count	Ratio
Very Good	8	35%	5	21%	48	94%	61	62%
Good	13	57%	13	54%	2	4%	28	29%
Average	1	4%	2	8%	1	2%	4	4%
Poor	1	4%	3	13%	0	0%	4	4%
Very Poor	0	0%	1	4%	0	0%	1	1%
Total	23	100%	24	100%	51	100%	98	100%

6.5 Asset criticality

The definition for a critical asset used across most activity groups is: “Assets that have a high consequence of failure, but not necessarily a high probability of failure.”. Therefore, quantifying consequence of failure is the key element in determining critical assets. The consequence criteria that qualifies a Council asset as ‘critical’ is based on the failure/incident being assessed as ‘Major’ or ‘Catastrophic’ (Table 15) below.

Table 15: Consequence criteria qualifying an asset as 'critical'.

Rating Level	Consequence description	Score
Catastrophic	<ul style="list-style-type: none"> • Catastrophic loss of public or stakeholder confidence, or breakdown in standards, which requires major recovery action to restore reputation or effectiveness. • Significant negative economic, social or cultural impact on a large proportion of the Bay of Plenty community. • Clearly threatens operations or ability of organisation to achieve its objectives. • Major unexpected financial overspend or loss. • Loss of life. • Prolonged national media and political attention. 	5
Major	<ul style="list-style-type: none"> • Major unexpected financial overspend or loss. • Significant dissatisfaction expressed by stakeholders. • Moderate negative economic, social or cultural impact on a large proportion of the Bay of Plenty community. • Serious harm. • National media attention. • Unexpected failure to meet a standard. 	4

By identifying Council’s critical assets and services, as well as any critical failure modes, Council can better target and refine investigative activities, and maintenance and capital expenditure plans, towards the critical areas. While the organisation provides the definition and criteria for a critical asset, the process for identifying and managing the critical assets remains within each activity.

See (Table 16) below for a summary of critical assets across the activity portfolios. Council has identified the need to improve risk management processes for several activity areas, this includes the process of identifying critical assets, which is discussed in more detail further below.

Table 16: Critical assets across activity portfolios.

Activity area	Critical assets
Rivers and Drainage	<ul style="list-style-type: none"> • See • Table 17.
Maritime operations	<ul style="list-style-type: none"> • Mayor Island light beacons. • Motiti Island light beacons.
Property	<ul style="list-style-type: none"> • All Council buildings.
Rotorua Te Arawa Lakes	<ul style="list-style-type: none"> • There are currently zero assets associated with these activities considered to be critical.
Regional Parks and Coastal Catchments	

Currently, our Regional Parks and Rotorua Lakes portfolios have no assets considered to be critical. In our Maritime Operations portfolio, through workshops, we have identified key assets such as Mayor Island and Motiti Island light beacons as most critical. However, we acknowledge the need for a more comprehensive analysis across our portfolios, and have identified the assignment of criticality ratings to each individual asset as an area of improvement within each AMP. The Parks team recently undertook an exercise assigning criticality scores to each individual asset.

Regarding our Property assets, preliminary workshops have helped us identify key critical assets. However, this has only been undertaken informally. We realise that our approach to identifying asset criticality needs refining. As part of their improvement plan, the Property group aim to improve the asset hierarchy and data structure, with a focus on assigning criticality ratings at the component level. This will allow us to recognise critical components of buildings and facilities, enabling a more targeted approach to maintenance, risk assessment, and condition assessments. Until such a time, the Property team has deemed all of Council's properties to be significant as each facility enables Council services to be delivered.

For Rivers and Drainage, critical assets were first identified in 2014. At that time, the criteria that qualified a flood protection asset as 'critical' were assets that:

- Provide direct flood protection to urban environments where large groups of people live in a concentrated manner, i.e. towns, not rural type subdivisions.
- Provide direct flood protection to regionally significant infrastructure.

This criteria identified the most critical assets based on risk to people and important infrastructure (Table 17) below. Stopbank lengths identified as critical include the associated assets that form part of the stopbank e.g. floodgate, floodwalls, culverts, and rockwork protecting a stopbank.

Table 17: Critical assets from Rivers and Drainage portfolio.

Asset	Location	Protects
Whakatāne River, right bank	Te Tahī Street to rivermouth	Whakatāne township
Whakatāne River, left bank	Te Rahu Canal outlet to rivermouth (incl. Te Rahu and Kopeopeo Canal floodgates)	The Hub, Gateway Drive, Keepa Road, Whakatāne Board Mill
Rangitāiki River stopbank left and right bank	From substation to downstream of town	Edgecumbe Township, Fonterra factory and Transpower substation
Waioeka, right bank	Around urban area	Ōpōtiki township
Ōtara left bank and Mill Stream bank	Around urban area	Ōpōtiki township
Ōkere control gates	Regulates the flow of water from Lake Rotoiti into Kaituna River	Rotorua and surrounding areas and enables downstream flooding management
Ohau Weir	Controls water level fluctuations in Lake Rotorua	Rotorua and surrounding areas
Rotorua stopbanks, floodwalls and Waingaehe Diversion Structure	Around urban area	Urban Rotorua

6.6 Data confidence

Clear data reliability is critical to robust asset management. It provides decision-makers with the confidence they need to allocate resources effectively and plan strategically. Good quality data is fundamental to all aspects of our asset management activities, including risk assessments, life cycle cost analyses, maintenance planning, and strategic decision-making.

Understanding the strengths and weaknesses of our data allows us to use it more effectively, make more informed decisions, and identify where we need to improve our data collection and analysis methods. As we continue to develop our asset management practices, improving our data confidence remains a key focus. Our goal is to ensure that our data is reliable, comprehensive, and accurate, thereby enabling us to manage our assets more efficiently and effectively.

The table that follows presents a snapshot of our current data confidence levels across different activity areas. It outlines the reliability of our data in various domains such as asset inventory, asset condition, performance, and risk.

Table 18: Data confidence scores across activity portfolios.

Data	Unknown	Very uncertain	Uncertain	Reliable	Highly reliable
Asset age:					
Rivers and Drainage					
Rotorua Lakes					
Regional Parks and Coastal Catchments					
Maritime Operations					
Property					
Asset Value:					
Rivers and Drainage					
Rotorua Lakes					
Regional Parks and Coastal Catchments					
Maritime Operations					
Property					
Asset Condition:					
Rivers and Drainage					
Rotorua Lakes					
Regional Parks and Coastal Catchments					
Maritime Operations					
Property					
Asset Performance:					
Rivers and Drainage					
Rotorua Lakes					
Regional Parks and Coastal Catchments					
Maritime Operations					
Property					
Asset Criticality:					
Rivers and Drainage					
Rotorua Lakes					
Regional Parks and Coastal Catchments					
Maritime Operations					
Property					

Part 7: Future Demand

Planning for future demand is imperative to provide an economically sustained pathway to meet the needs of the region. The provision of Council's infrastructure and its management is considered an important element to enable Council to service its communities effectively and achieve its Strategic Direction.

Schedule 10 of the LGA requires that demand be considered as part of asset management planning to ensure that future requirements are identified and planned for. The Schedule 10 requirement will reduce the chances of unforeseen surprises or 'financial shocks', and ultimately provides a sustainable, economic pathway to meet the needs of our future communities.

The Bay of Plenty area contains a number of communities with different population densities, demographics, varying topography and geomorphology, and even varying climate. Demand analyses allow for the identification and quantification of areas within the region that are likely to experience significant pressures, or other situations that will impact upon the demand for services.

7.1 Approach

This SAMP addresses future demands at a regional scale across Council's activity portfolios. The Strategy group of Council is responsible for preparing demand forecast information, ensuring a consistent approach across Council. Individual AMPs address demand at the activity and asset portfolio level.

Each activity area are to adopt the demand forecasts provided by the Strategy teams, to determine specific impacts to their asset portfolio and services. The process used to determine demand forecasts involves a number of qualitative and quantitative techniques including scenario and mathematical modelling. With an understanding on demand forecasts and associated impacts, Council can make evidence-based decisions on how to address the impacts through demand management strategies.

Our biggest challenge in assessing future demand across our asset portfolios, is analysing the potential impacts on capital and operational expenditure requirements from the various demand drivers.

Improvement – Engage external expertise for assessing the potential impact of future demand on capital and operational expenditure across each asset activity portfolio.

The aim of demand management is to alter demand for a service, rather than just meeting the forecast demand with new/upgraded assets. There are two demand management categories: supply side and customer side. Supply side seeks to improve existing asset utilisation. Customer side management aims to reduce or manage peak/average demand for assets and services.

The following sections outline the key demand drivers affecting Council's infrastructure. Demand forecasts are presented for demand drivers where data is currently available, and an assessment of potential impacts to assets or services is provided. Existing and proposed demand management strategies are discussed in 7.4, with reference to other relevant sections of the SAMP.

7.2 Overview of drivers

The future demand drivers that are discussed as part of this section are outlined below in Table 20. These demand drivers are common across most if not all of Council's asset activities covered under the scope of this SAMP (Table 19). There are some demand drivers specific to an activity; the reader is directed to the individual activity AMPs for more detail on these.

The subsequent sections will look at each of the common demand drivers in more detail, presenting demand forecasts, potential impacts to assets or services, and proposed management strategies.

Table 19: Demand drivers common across most activity areas.

Asset Activity area	Demand Driver				
	Demographic	Climate Change	Legislation/Regulatory	Economic	Stakeholder expectation
Rivers and Drainage	✓	✓	✓	✓	✓
Maritime Operations	✓		✓	✓	✓
Rotorua Te Arawa Lakes		✓	✓	✓	✓
Regional Parks and Coastal Catchments	✓	✓		✓	✓
Property		✓	✓		✓

Table 20. Demand drivers and overviews.

Demand Driver	Overview
Demographic	Relates to changes in population size, age distribution, and settlement patterns, which influence the demand for services and the required capacity of infrastructure. Population growth, ageing populations, and shifts in urban or rural settlement patterns can result in increased (or decreased) demand, changing service expectations, and the need for new or upgraded assets.
Climate Change	Climate-related demand drivers encompass the impacts of climate change and extreme weather events on asset performance, service delivery, and infrastructure resilience. Organisations must consider the implications of climate change, such as increased flooding and storms, on the maintenance, design, and lifespan of their assets.
Legislative/Regulatory	Refers to changes in laws, regulations, and policy requirements that affect how organisations manage their assets and deliver services. Compliance with new or amended legislation and regulatory frameworks may require adjustments in asset management practices, investments, and operational procedures.
Economic	Economic drivers refer to changes in the broader economic landscape, such as fluctuations in global and local markets, employment, and income levels. These factors affect the organisation's financial capacity, as well as the community's ability to afford services and infrastructure. Economic conditions may also influence the need to optimise asset performance to achieve cost efficiencies.

Stakeholder Expectations	Refers to the diverse needs and priorities of individuals and groups with an interest in the organisation's assets and services, including the community, external stakeholders, elected members and wider Council. Communities often seek more value for money, and there is a heightened expectation for environmentally sustainable services. There is a need to balance competing priorities to deliver services that meet community and Council needs while addressing financial and sustainability concerns.
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7.3 Demand forecasts and impacts

7.3.1 Demographics

Demand Driver	Demographics					
Forecast						
<p>The Bay of Plenty Region currently has a population of 347,700 (2022, Stats NZ), and is one of the fastest growing regions in New Zealand. Population is projected to grow by approximately 20% to 417,700 by 2048. 84% of the population live in the areas of Tauranga City, Rotorua District, and Western Bay of Plenty.</p> <p>Population projections to 2043 for the territorial authorities indicate that there will continue to be strong population growth in Tauranga City. Growth in Western Bay of Plenty and Rotorua districts will also continue; population will be relatively stable in Whakatāne, but declines are projected in the Opōtiki and Kawerau districts.</p>						
Population projections from Significant Forecasting Assumptions LTP 2021-2031 - Volume Rua						
	2018	2023	2028	2033	2038	2043
Total New Zealand by region	4,900,600	5,222,400	5,460,500	5,679,000	5,876,400	6,055,800
Bay of Plenty region	320,800	346,900	361,700	374,400	385,500	395,500
Kawerau District Council	7,460	7,910	8,000	8,020	7,970	7,860
Opōtiki District Council	9,670	10,250	10,350	10,400	10,300	10,150
Rotorua District Council	74,800	78,900	80,700	82,200	83,400	84,200
Tauranga City Council	142,100	156,900	166,300	175,000	183,300	191,400
Western Bay of Plenty District Council	53,300	58,100	60,900	63,300	65,200	66,700
Whakatāne District Council	37,100	38,800	39,300	39,500	39,500	39,300
<p>The proportion of people with Māori ethnicity is projected to increase across every territorial area. Māori will account for over a third (34.3%) of the region's population by 2043, but will be significantly higher in some territorial areas such as Rotorua (50.3%), Whakatāne (59.3%), Kawerau (67.4%) and Opōtiki (77.2%).</p> <p>The Bay of Plenty region also has an ageing population. In 2022, there were around 67,300 people aged 65 and over, which accounted for around 19% of the region's population. The national average was 16%. By 2043, this number is projected to increase to 105,800, or 26% of the region's population; compared to the national average of 23% for people aged 65 and over.</p>						

Impact on activity	
Rivers and Drainage	<p>Population trends are important for flood management because scheme affordability is closely related to population, with rates being the key source of funding for scheme management. Community expectations lead the delivery of flood protection services and assets. Development can threaten the integrity of scheme assets and the ability of the assets to meet levels of service.</p> <p>High growth areas require good flood risk management policy and town planning that incorporates sound flood risk management principles. In areas where population is expected to increase, there will likely be greater demand for business and residential development and therefore greater population densities. Where population is expected to decrease, there will be a reduction in ability to pay as population ages and distribution of population changes within the region.</p>
Maritime	<p>An increasing population leads to more people engaging in various water activities, which may result in conflicts between different water users and a higher demand for designated areas and navigable channels. With more Maritime users, there is a potential for an increased risk of collisions, though the current effects are considered negligible. Population changes also impact the scale and breadth of education material provided by the Maritime group, including training and education for Māori groups, which may require increased budget allocation.</p> <p>A new marina planned for Whakatāne – Te Rāhui, opening in 2024, may attract more people to the area and increase the number of Maritime users. Additional navigational assets may be required, though ownership and maintenance responsibilities are yet to be determined.</p>
Regional Parks and Coastal Catchments	<p>Significant population and dwelling growth in the Western areas of the region, such as Tauranga City and Western Bay of Plenty, are expected to increase visitor numbers to Pāpāmoa Hills Regional Park. Improved transport infrastructure, including potential new bus networks and cycle lanes, may provide better access to the park and further increase visitor numbers. This could result in the demand for larger car parks, more tracks, expanded recreational areas, and additional facilities like toilets and seating areas.</p> <p>Modest growth is currently projected for the Eastern Bay of Plenty areas; however, recent and ongoing economic initiatives may impact population growth and accessibility to Onekawa Te Mawhai Regional Park.</p> <p>An increase in the proportion of elderly visitors may lead to demands for more interpretive signs, community involvement, wheelchair-friendly tracks, and facilities. An influx of young families might result in the expectation of more diverse assets, such as play areas and family-oriented facilities. Additionally, a growing population of 15-39-year-olds could increase the demand for specific recreational activities, such as rock climbing or designated yoga areas.</p> <p>The most significant impact to consider is the potential need for a new Regional Park due to increased demand, which would require land purchase, new assets, and potentially additional staff.</p>

Property	<p>Population trends significantly influence the demand for Council services, with higher growth rates in Tauranga and Western Bay of Plenty possibly necessitating increased office and depot capacity. Conversely, areas with slowing or declining population growth, such as Whakatāne, Kawerau, and Ōpōtiki, may see reduced demand for Council services and facilities, potentially leading to downsizing, sharing buildings, or relocating offices.</p> <p>Increases in population and Council staff numbers will impact the cost of maintaining and operating additional facilities and associated assets. By 2024, Council is projected to have more staff than its current capacity allows, leading to the need for more space or flexible work arrangements. This could result in additional expenditure from purchasing or leasing more space and acquiring more assets such as desks and seats.</p>
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7.3.2 Climate Change

Demand Driver	Climate Change
Forecast	
<p>In June 2019, Council declared a climate change emergency alongside the adoption of our first Climate Change Action Plan, which was updated in 2021. Likely Climate Change impacts for the Bay of Plenty are summarised below. The number of hot days (>25 degrees) per year will increase; the intensity and frequency of high rainfall events will increase; sea levels are predicted to rise with increased magnitude of tidal storm surges.</p>	
<p>The infographic displays five key climate change impacts for the Bay of Plenty:</p> <ul style="list-style-type: none"> Air temperature: Current coastal temperatures are 14-15°C and inland 10-11°C. By 2040, there will be a 0.5-1.0°C increase, and by 2090, a 2.5-3.0°C increase. Hot days (>25°C) per year: Expected to increase from 32 in the current period to 52 in 2040 and 99 in 2090. Frost days (<0°C) per year: Expected to decrease from 7 in the current period to 5 in 2040 and 2 in 2090. Annual likelihood of extreme rainfall event (>240mm in 24 hours): Expected to increase from 1.5 times more likely in 2040 to 3 times more likely in 2090. Examples include April 2017 in Eastern Bay and April 2018 in Ngongatahā. Sea level rise (metres): Projected rises from the Moturiki Vertical Datum are 0.09m (Current), 0.28m (2040), 0.74m (2090), and 1.25m (2130). 	
Impact on activity	
Rivers and Drainage	<p>Increased frequency and intensity of extreme weather events will increase pressures on infrastructure and lead to a higher risk of flooding. These impacts demand more robust and resilient flood protection infrastructure, as well as adaptation and mitigation strategies, such as natural flood management, catchment management, and land-use planning.</p> <p>Climate change may mean the lifespan of our assets is shorter than planned, or the maintenance costs increase. It may mean that repairs are needed more frequently or that materials deteriorate more quickly.</p>

Maritime	More frequent and intense weather events may result in more erosion and deposition of maritime hazards, increasing demand for clearing hazards. Navigation assets could be damaged or lost during storms, which can shorten asset lifespans, increase maintenance costs, and require more frequent repairs or material replacements.
Rotorua Lakes	Climate change is expected to impact water quality goals, lake levels, and increase erosion of outlet structures and streams. Heavy rainfall and runoff may increase sediment erosion and nutrient losses, while higher temperatures can lead to more frequent stratification events and anoxic conditions in lakes, negatively affecting water quality. The Trophic Level Index (TLI) values may increase due to climate change, making it more challenging to achieve desired levels of service and possibly increasing operational costs.
Property	<p>Extreme weather events can directly impact Property facilities and assets, potentially shortening asset lifespans, increasing maintenance costs, and more frequent repairs or replacements. There may also be higher demand for better ventilation and air conditioning systems due to increased hot days.</p> <p>Council's focus on environmentally sustainable design is expected to extend to other owned buildings, leading to short-term spikes in expenditure costs.</p>

7.3.3 Legislative and regulatory

Demand Driver	Legislative and regulatory
Forecast	
<p>There has been changes to legislation over recent years, notably the National Policy Statement for Freshwater Management (NPS-FM) 2020 and the Local Government Amendment Act (May 2019) regarding 4 aspects of community well-being. The Government is also repealing the Resource Management Act 1991 (RMA) and enacting new laws to transform the way the environment is managed. Three new pieces of legislation are planned to be enacted over the next 5-10 years: Spatial Planning Act, the Natural and Built Environment Act, and the Climate Adaptation Act.</p> <p>It is increasingly difficult to accurately forecast changes to legislation over and above what has already been disclosed by Central Government. However, some broader trends in policy and legislation that could potentially affect Council's infrastructure assets and activities are changes to climate change policies, biodiversity strategies, and land use planning. New Zealand is actively working on climate change mitigation and adaptation strategies. This is something Council are already incorporating, but any new policy/legislation will create minimum requirements. New Zealand has been developing strategies to protect and restore the country's unique biodiversity. Future legislation changes in this area could influence the way Council approaches its activities, requiring them to prioritise ecosystem health and minimise negative impacts on habitats and species.</p>	
Impact on activity	
Rivers and Drainage	<p>Environmental factors are the key driver for flood control works. As well as climatic considerations, flood control works need to consider a range of other environmental considerations, including wetland restoration, erosion protection, and other conservation needs.</p> <p>Legislative change can significantly impact on Council's ability to meet the minimum levels of service that have been agreed with the community. This will have a direct effect on the community if increased levels of service require the community to pay more for those services.</p> <p>The NPS-FM 2020 has set more stringent water quality standards, which means Council needs to review, monitor and potentially improve/change its</p>

	<p>flood protection, land drainage, and river management activities to ensure they meet these new standards and do not negatively affect water quality.</p> <p>Whilst this increased environmental awareness can deliver improved outcomes for rivers, biodiversity and public amenity, it comes at the cost of increased expenditure to undertake the activity, and consequently higher costs for ratepayers.</p>
Maritime	The review of the Navigation Safety Bylaw 2017 and public consultation may necessitate more assets, such as markers for water ski access lanes or additional speed signs. Changes to the RMA or other legislation could affect the Maritime activity and assets, potentially requiring additional assets and increased expenditure to meet new requirements.
Rotorua Lakes	The NPS-FM 2020, incorporated into the Regional Natural Resource Plan (RNRP) in March 2021, is unlikely to impact Rotorua Lakes assets in the short term but may have long-term effects. These impacts may relate to the duration or frequency of activities, such as alum dosing, or the lifespan of assets like the Ōhau Diversion Wall, potentially leading to increased expenditure needs.
Property	Legislative changes can impact property assets if they require additional staffing levels, office accommodation, facility upgrades, or hazardous material removal. Changes in service provision may also affect space and functionality requirements, such as alterations to Civil Defence requirements. Regulatory reform is driving changes in Council operations. New teams are forming and existing teams are expanding, potentially necessitating more office space, additional depots/storage, or an increase in fleet size.

7.3.4 Economic

Demand Driver	Economic
Forecast	
<p>The Bay of Plenty region comprises the 5th largest regional economy in New Zealand, with latest official estimates showing a gross domestic product (GDP) of around \$21.7 billion for the year ended March 2022. This comprises 6% of the national GDP. Notably, the region ranks 1st for percentage change in GDP (43.6%) for 2017-2022.</p> <p>However, the region's GDP per capita is currently around \$62,673, ranking tenth among the regions. The national average is around \$70,617. When a region has a lower GDP per capita despite a high regional GDP, this can indicate that the region has a greater income disparity. This can have implications for a community's ability to afford levels of service. The following factors are expected to have a significant impact over the next ten years.</p> <p>Climate Change: The largest risk to Council and community in the long term. Council has built climate change forecasts into resource management and flood protection planning, but the wide range of scenarios lead to a wide range of potential interventions and costs.</p> <p>Legislative Change: Council is directly affected by Government requirements/legislation. This is particularly true for RMA reform and any new environmental/freshwater standards.</p> <p>Growth and Inflation: Bay of Plenty continues to grow, and is forecast to have a 12% (16,000) increase in rating units over the LTP. This increase will not be uniform over the region. Inflation and interest rates are forecast to increase as we recover from COVID-19.</p>	

Impact on activity	
<p>A strong economy can spur development, leading to increased demand for infrastructure such as flood protection, drainage systems, and recreational facilities. Economic downturns can lead to budget constraints and potential delays or cancellations of projects. The economic situation can have a significant impact on the future demand for all of Council's infrastructure activities through factors such as population growth, land use and development, and climate change. These have been discussed elsewhere.</p>	
Maritime	<p>The Ōpōtiki Harbour Development impact on the Maritime activity is yet to be determined. There are currently no navigation assets owned or maintained by Council in the existing navigable areas, and it remains unclear whether the project will result in new Council assets. Similarly, the Te Rāhui marina development in Whakatāne also has an unclear impact. There may be a need for increased patrols and activities, but not necessarily more navigation assets. Both projects may potentially lead to increased tension between different water users, resulting in a need for more speed signs and informative signage. Future coastal developments could create new or larger navigable areas requiring additional navigation assets, Maritime vessels, and storage areas to be managed and patrolled by the Regional Council.</p>
Regional Parks and Coastal Catchments	<p>Economic conditions can affect tourism levels, with a strong economy encouraging more visitors and increasing demand for infrastructure like regional parks and recreational facilities. During the peak season, there will likely need to be a relative increase in the amount of maintenance required, such as toilet cleaning, track maintenance, etc. This will require an increase in staff time.</p>
Rotorua Lakes	<p>With no more Government funding, Council will need to fund the activities required to deliver the agreed levels of service. This may result in reduced levels of service if communities are not willing to fund the additional funding required following the end of Central Government funding.</p>

7.3.5 Stakeholder expectations

Demand Driver	Stakeholder expectations
Forecast	
Rivers and Drainage	<p>Stakeholder expectations for flood protection infrastructure are likely to grow as the effects of climate change increase the risk of flooding. The increased frequency and severity of flood events have, and will continue to impact upon insurance companies' reluctance to insure in high-risk areas without specified conditions, if at all. Residents and businesses in flood-prone areas will expect increased protection from flooding to safeguard their properties and livelihoods.</p> <p>Certain stakeholders will expect flood protection measures to be environmentally sustainable, considering factors such as habitat preservation, water quality, and ecological impacts.</p>
Maritime	<p>Technological advances have led to increased customer demand for real-time monitoring and better quality information in the Maritime Operations activity. Outdoor and individual recreation is growing, with a noticeable increase in users after the Covid-19 pandemic.</p>
Rotorua Lakes	<p>Community expectations for improved lake water quality poses challenges, as each lake has specific Trophic Level Index (TLI) targets, and water quality variations do not necessarily indicate program failure. Communities now expect better access to data, particularly from live monitoring sites. Current data availability has led to accusations of lack of transparency, emphasising the need for more consistent, accessible data.</p> <p>Conflicts may arise with iwi values and views regarding the cultural impact of structures and activities like alum dosing and the Ōhau Diversion Wall.</p> <p>Land use change to reduce nutrient inputs is a long-term solution, but improvements may take years due to groundwater nutrient legacy. Improved water quality due to short-term interventions may affect landowners' motivation for long-term land use change.</p>
Regional Parks and Coastal Catchments	<p>Recreation trends influence customer expectations, with outdoor and individual activities becoming more popular. While Regional Parks are currently limited to walking, there may be increased demand for additional recreational facilities such as cycle trails, campgrounds, and other activities, along with their associated assets and facilities.</p> <p>Ratepayers often expect more for less, which can lead to demands for additional facilities like play areas, disabled access, and cleaner toilets. Advancements in technology and the widespread use of smartphones can lead to expectations for live updates on park information.</p>
Property	<p>The purpose of Council's offices and depots are to enable the Council to meet objectives and provide facilities for Council teams across the region.</p> <p>In recent times there has been a shift towards open plan office spaces and better facilities. Modern facilities and technology are increasingly in demand, with staff attraction, retention, and well-being becoming critical.</p> <p>The Covid-19 pandemic significantly impacted the Property activity, leading to increased remote working. These flexible work arrangements have become the new normal.</p>

Impact on activity	
Rivers and Drainage	The Rivers and Drainage activity is influenced by various stakeholders, such as landowners, community groups, Iwi, and the general public, who may have differing expectations and risk tolerances. Impacts may include changes in required service levels, risk mitigation, future proofing for climate change and environmental effects, increased demand for development in high-risk areas, maintaining or increasing access for recreational users like whitebaiters, and growing demand for ecotourism and natural environments. These diverse expectations will shape how the activity is managed.
Maritime	<p>For the Maritime Operations activity, there is increasing customer demand for better quality information when it comes to real time monitoring of conditions. Advancements in technology, such as real-time monitoring, have become more affordable, leading to increased demand for assets like bar cameras and wave buoys. This gradual implementation may increase capital and operational expenditure.</p> <p>Outdoor and individual recreation is becoming more popular and the volume and different type of recreation in navigable areas is also increasing. As maritime recreation grows, potential impacts include increased tension between users, more patrols, collisions, and enforcement activities. Additional or larger recreation zones may require more assets like markers or signage.</p>
Rotorua Lakes	<p>Trophic Level Index: Complaints and questioning of the lakes programme spending when algal blooms occur.</p> <p>Cultural Impact: Could lead to shorter consents and/or possibly non-approval at consent stage. Negativity towards Ōhau wall operation and works; which may be required longer than 50 years.</p> <p>Land Use Change: If positive outcomes are not realised quickly, landowners and the public may see this as a failure, leading to reduced motivation for land use change.</p> <p>Council Data: If information and data is not available, people will draw their own conclusions which may be unhelpful, and lack of transparency.</p>
Regional Parks and Coastal Catchments	<p>Customer expectations drive demand for new and better assets, such as live updates on visitor numbers and parking availability, leading to potential investment in webcams or electronic signs. Increased usage may require wheelchair-friendly tracks, children's play areas, and more frequent maintenance, all of which incur additional expenditure.</p> <p>Expansion of recreational facilities, such as cycle trails and campgrounds, can attract more visitors but may cause tensions between different user groups.</p>
Property	<p>COVID-19 has increased cleaning costs and expectations around remote working may lead to reduced office space utilisation, prompting Council to consider leasing or sharing space. The need to retain staff and satisfy stakeholders might lead to asset upgrades or new facilities.</p> <p>Expectations on facilities for Civil Defence and emergency response may lead to new facilities or asset upgrades, resulting in increased expenditure for the Property activity.</p>

7.4 Demand Management

Forecasting future demand and associated impacts is an important part of delivering Council’s Strategic Direction. If all activities covered by this SAMP have a strong understanding of future demand and associated impacts to each asset portfolio, this ensures a balanced approach to prioritising investment across the activities.

Anticipating changes to operational and capital expenditure over the long term due to managing future demand is a key component of developing the Long Term Plan. The demand management programme will be used to inform the programme of works found in each activity AMP.

The approach to be adopted by each activity for demand management will follow:

- 1 Non-asset demand management will be prioritised ahead of new assets, and assessed on a cost-benefit-risk basis.
- 2 A package of demand management initiatives will be considered as opposed to isolated management projects.

7.4.1 Existing Demand Management strategies

The objective of demand management planning is to actively seek to modify customer demands for services, in order to maximise utilisation of existing assets or to reduce or defer the need for new assets or services, including non-asset solutions. Council primarily employs the following non-asset demand management strategies.

Table 21: Non-asset demand management approaches.

Component	Management approach
Legislation/ regulation	<ul style="list-style-type: none"> • Manage resources and supporting infrastructure in line with legislation e.g. regulating and monitoring of gravel extraction rates and water take quantities. • Incorporating alternative designs into new subdivisions and other development, for example setting minimum floor levels • Monitoring development and providing incentives to develop in less flood prone areas • Provide a maritime patrol programme to reduce demand on Maritime safety assets.
Education	<ul style="list-style-type: none"> • Educating the community around River and Drainage related activities in order to manage expectations and reasons for undertaking activities. • Educating water users to improve safety and reduce demand on Maritime safety assets. • Educating the community on land use and effects on water quality in Rotorua Lakes
Incentives	<ul style="list-style-type: none"> • Provision of small landowner environmental grants to promote minor works activities that complement Council activities, i.e. out of scheme channel improvements.

Operation	<ul style="list-style-type: none"> Continual improvements to assets through stakeholder ownership of assets, i.e. landowners who have assets on their land are more likely to look after them when that asset benefits them. Regional Parks seeks to increase demand (visitor numbers) by enhancing the visitor experience, for example via facilities, wayfinding and interpretation, and improving access
Demand sub	<ul style="list-style-type: none"> Maximum use of alternative and/or 'soft' materials (i.e. tree plantings) for erosion protection and channel training activities.

The following Council-wide strategies are also already in place. These cover most if not all activity portfolios, and support in managing demand for assets and services.

Table 22: Council strategies that support demand management across numerous drivers.

Management Strategy	Description	Demand Driver				
		Dem	CC	L/R	Ecn	StEx
Climate Change Action Plan	Mitigation and Adaptation resilience programme.		✓	✓		✓
Long Term Plan	10-year plan delivering community outcomes.	✓		✓	✓	✓
Funding Needs Analysis & Financial Strategy	Financial management and strategy to deliver activities to achieve community outcomes.	✓		✓	✓	✓
Lifecycle Asset Management	Considers entire lifecycle of assets in their management.	✓	✓		✓	
Levels of Service Framework	Transparent communication, stakeholder engagement and performance reporting.			✓	✓	✓

7.4.2 Proposed Demand Management strategies

This SAMP has identified further possible demand management strategies, outlined in (Table 23), that will support managing demand across multiple demand drivers (Table 24). These are discussed more in Part 11: .

Table 23: Strategies identified to support demand management.

Management strategy	Description
Asset Management Sustainability Framework	A set of principles, guidelines, and processes that aims to integrate sustainability into activity asset management practices and ensure the long-term reliability and effectiveness of infrastructure by enhancing the resilience of assets.
Nature-based Solutions	Integrate natural processes into infrastructure management to enhance overall resilience, reduce long-term costs, and provide additional benefits such as improved water quality and biodiversity.
Levels of Service Framework	A framework ensuring levels of service are developed and reviewed consistently across activities, including stakeholder engagement.

Table 24: Demand management strategies and the drivers they address.

Management strategy	Demand Driver				
	Demographic	Climate Change	Legislation/regulatory	Economic	Stakeholder expectation
Asset Management Sustainability Framework		✓	✓		✓
Nature-Based Solutions	✓		✓	✓	✓
Levels of Service Framework			✓	✓	✓

Part 8: Levels of service

The purpose of asset management is to provide desired levels of service (LoS), for current and future customers, in the most cost-effective manner, whilst meeting legislative requirements. “Levels of Service” is an asset management term that incorporates the service element of delivering a community activity in conjunction with measurable targets that can be used to determine how effectively the activity has been delivered.

Asset management planning enables the relationship between LoS and the cost of the service (the price/quality relationship) to be determined. This relationship is then evaluated in consultation with the communities, stakeholders and Council, to determine the service levels that are willing to be paid for.

If LoS are set too high this can cause overinvestment and unsustainable customer expectations combined with a dependence on high levels of future rates. If set too low, under investment can create unsatisfied customers, a backlog of maintenance, and increasing levels of risk and costs for future generations. The aim is to provide affordable service levels that the community both desire and are willing to pay for. This is achieved through community consultation, customer research, and service level reviews.

LoS are statements that describe the services Council intends to deliver to its customers. Defined LoS can then be used to:

- Inform customers of the proposed LoS.
- Develop asset management strategies to deliver LoS.
- Measure performance against defined LoS.
- Identify the costs and benefits of services offered.

Council is committed to sustainable asset management which involves managing the levels of service, risk and investment on infrastructure assets in an optimal manner throughout their lifecycle. Council aims to ensure that LoS align with Council’s Strategic Direction.

8.1 Levels of Service Drivers

One of the basic cornerstones of sound asset management is: “To provide the levels of service that the current and future community want and are prepared to pay for”. LoS therefore provide the platform for all decisions relating to infrastructure management, as illustrated in Figure 12: Developing LoS and Performance Measures (Source: NAMS, 2007).below. Before developing detailed asset management plans and programmes, Council needs to agree the LoS with the community with consideration given to the following:

- Strategic drivers (e.g. Council’s Strategic Direction).
- Legislative requirements and technical constraints.
- Community expectations and values.

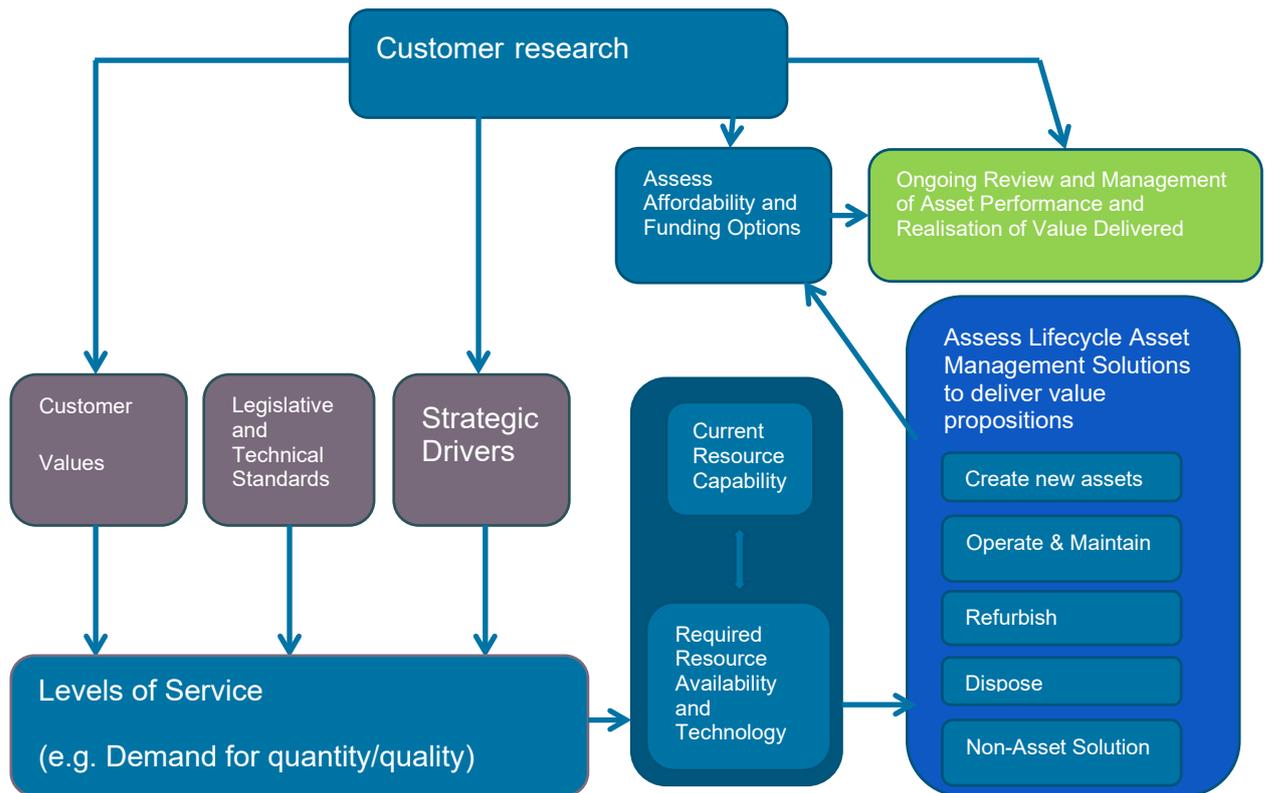


Figure 12: Developing LoS and Performance Measures (Source: NAMS, 2007).

8.1.1 Legislative requirements

Community outcomes are the results that a local authority aims to achieve through the provision of infrastructure services. The Local Government Act (LGA) prescribes local authorities to determine its role in promoting social, economic, environmental, and cultural wellbeing of their communities. It provides a framework for local authorities to decide how they will undertake activities. The LGA requires service levels to be developed with the community to ensure that there is a community perspective applied to the development of technical service levels.

Schedule 10 of the LGA outlines the general requirements for the development of service levels. These requirements are:

- Statement of intended LoS provision for the activity including performance measures.
- Performance measures and targets that will enable the community to assess the LoS for major aspects of the service that have not already been set as standard measures.
- A summary of any material changes to the cost of providing the service and the associated reasons for the change.

The activity LoS provide the link between these community outcomes, to the more detailed operational activities and work programmes. This is represented within each AMP document which shows the links between community outcomes, customer values, levels of service and performance measures.

8.1.2 Strategic drivers and Customer values

This SAMP is prepared under the direction of the Council’s Strategic Direction and 2024-2034 Long Term Plan (LTP). The LTP outlines the community outcomes that the Council’s vision, mission, and commitments aim to achieve. The community outcomes that the Council aims to achieve can be delivered through the provision of infrastructure and agreed levels of service.

Table 4 from 4.1 illustrated how each activity contributes to delivering Council’s Strategic Direction, including community outcomes. Linking Council’s community outcomes and levels of service ensures activities are aligned with the community’s broader goals and priorities, and enables Council to establish appropriate performance measures and targets. Council can ensure resources are directed towards activities that contribute most to achieving community outcomes.

The AM Policy sets the overarching framework for the delivery of Council’s services that rely on the use and management of infrastructure assets. The AM Policy contains principles, objectives and actions for undertaking asset management. The AM objectives transform the organisation’s strategic objectives into asset-based activities which are documented and measured in the activity AMPs as levels of service.

Table 25: How levels of service contribute to asset management objectives.

AM Objective	Actions to delivery
Actively and transparently engage on levels of service and how the assets are to be managed.	Actively engage with stakeholders to understand expectations and deliver services, e.g. <ul style="list-style-type: none"> • Community groups • River Scheme Advisory Groups • Engagement through LTP Consultation Process
Take a continual improvement approach.	Apply continual improvement practices and innovation within the context of sound performance monitoring and review process. Provide progress reporting to track performance of improvement plan actions. Determine what asset management skills are required and provide appropriate training if required. Assess the timelines and recommendations resulting from internal/external audits e.g. Audit NZ
Consider climate change and implications for Māori	Ensure climate change adaption information is included into existing and future capital improvement and maintenance programmes. Acknowledge the relationship with Māori and utilise the range of mechanisms available to engage. Ensure Māori views and perspectives are appropriately represented in the decision-making process.

Customers and stakeholders were covered in 3.1.1. Customers and stakeholders specific to individual activities are covered within each activity AMP.

8.2 Levels of Service Framework

8.2.1 LoS development process

LoS are developed as part of the long term planning process which sets the LoS that Council will deliver to the community. This is a multi-stage process and involves:

- Identifying our communities and stakeholders so we can consult and engage with them to understand their values and desires.
- Review and reset of the Council's Strategic Direction including Community Outcomes. This is carried out with Council, and endorsed by Council's Strategy and Policy Committee
- Staff led goal-setting workshops that review and update existing LoS to create a set of clear LoS and measures/targets designed to deliver on Council's Strategic Direction.
- A series of Council workshops where Councillors consider draft LoS and measures alongside work programmes and financial implications and refine these for Consultation.

The outcome of the above process is a defined a set of high level LoS statements and measures that are included in the draft LTP. This set of LoS and measures is then subject to consultation with the community on service delivery options and their associated costs, as required by the LGA 2002 through the Special Consultative Procedure.

A change in LoS will either be reflected as a requirement to increase or decrease the LoS. Any significant change will need to be consulted on with key stakeholders and the community. The outcomes of this consultation are then incorporated into the decision making process.

8.2.2 LoS delivery process

Council delivers its asset-related levels of service through various delivery mechanisms:

- Internal staff – for the Maritime Operations and a large proportion of the Rivers and Drainage activities;
- External contractors – for the delivery of work associated with the maintenance and renewal of Rivers and Drainage and Rotorua Lakes assets;
- Government and other agencies such as Department of Conservation – for work associated with the Rotorua Lakes activity

Activity AMPs will aim to define its LoS in two different ways, with customer (community) LoS and technical LoS. The former defines how the community will receive the service, whereas the latter will focus on what the Council does to deliver the service. Technical LoS support the community LoS and relate to the allocation of resources to assets to ensure that they deliver upon desired community outcomes.

To support delivery and monitoring of LoS, activity groups will develop performance measures that follow the 'SMART' rule, defining measures that are specific, measurable, achievable, relevant and timebound.

8.2.3 LoS monitoring and reporting

Council publishes a selection of key LoS within the LTP. These are reported on by Council in periodic reports, such as the Annual Plan. To ensure assets are managed in a sustainable manner, it is important that LoS are periodically reviewed to understand the financial impacts associated with a reduction or increase in service provision. The LoS are reviewed every three years as part of the LTP process.

The other LoS not included within the LTP that can be found within individual activity AMPs, are monitored and reported on by activity asset managers. These LoS and performance measures are monitored every four months and reported to the Organisational Asset Management Steering Group (OAMSG) each quarter, who in turn provide an annual report to Council.

Improvement – Develop a bespoke levels of service framework, creating consistent processes for developing, reviewing and reporting levels of service across all activities.

8.3 Levels of service and performance measures

The table below sets out the LoS contained in the 2021-2031 Long Term Plan (LTP) for the activities within the scope of this SAMP. The individual activity AMPs contain additional LoS statements that support the delivery of the strategic LoS in the LTP.

Table 26: Levels of service and performance measures in LTP for each activity.

Activity	Level of Service	Measure	2022/23 Target	2022/23 result
Rivers and Drainage	Provide flood protection and drainage	Percentage of maintenance and repairs completed in accordance with the Rivers and Drainage Asset Management Plan.	85%	121%
		Percentage of capital works completed in accordance with the Rivers and Drainage Asset Management Plan.	75%	32%
Regional Parks and Coastal Catchment	Manage our Regional Parks sustainably	The number of visitors to Regional Parks.	124,068	99,288
		Visitor satisfaction for visitors to Regional Parks.	75%	(21/22) 98%
Rotorua Lakes	Improve indigenous biodiversity and waterbodies in the Bay of Plenty catchments	Number of Rotorua Lakes that have reached their Trophic Level Index (TLI), based on the three year rolling TLI.	3	5
Maritime	Minimising risks and effects of maritime oil spills and navigation hazards	The percentage of navigation aids of "good" quality or higher.	95%	99%
Property	Reduce carbon emissions through utilising sustainable and energy efficient solutions	Change in total council emissions compared to prior year	5% reduction from prior year	52% increase

8.3.1 How have we performed

The following sets out key challenges in achieving levels of service by activity group.

Rivers and Drainage

The AMP includes a Capital Programme showing budgets and timing of works to meet the desired design standards for those assets. The renewals target for 2022/23 was not achieved. The budget for the year 2022/23 consisted of several multi-year projects. However, certain key projects encountered delays for various reasons, leading to either missed construction windows or delays to construction commencement for the physical works. Challenges were faced with working in with our project partners timeframes, consultant delivery, extended resource consent processes, engaging with landowners and securing contractors during this period. This has resulted in carry forward of work into 2023/24.

Rotorua akes

Activity outcome is heavily influenced by environmental factors outside of Council control. So in making LoS targets we need to be mindful that the outcomes may not be achieved at all times, simply due to prevailing weather conditions or ongoing impacts from climate change.

Regional Parks and Coastal Catchments

Council did not achieve the visitor numbers target set out in the LTP for 21/22 or 22/23. New Zealand experienced the La Nina weather pattern of the El Nino Southern Oscillation over the 22/23 summer, which brought heavy rainfall, storm events, and low pressure systems (e.g. cyclones) across parts of northern, central and eastern North Island. This impacted the number of visitors to the Regional Parks.

It is anticipated that the return to El Nino conditions, combined with the opening of the Pāpāmoa Hills Upgrade Project facilities in October 2023, will lead to visitor numbers rebounding in 2023/24.

Maritime Operations

No issues identified. Although it is worth noting that following the Port Ōpōtiki Development and the Te Rahui Marina in Whakatāne, Maritime Operations are likely to inherit a number of new navigation aids related to these two developments. Discussions are currently ongoing around these new assets. When further information becomes available regarding this, Maritime AMP will be updated

It is anticipated that the capital expenditure for these new assets will be covered by a third party, but Council will take over the ongoing management of these assets. This will mean an increase in the number of assets that need to be maintained to meet the required standard set out in the levels of service. Resources for this will need to be planned and allocated.

Corporate Support (Property)

The carbon emissions target for 2022/23 was not achieved. This is primarily due to the increased operation of flood pumps as a result of significant wet weather events that occurred during the year.

The number of staff working for Council has increased significantly over recent years. Council currently has accommodation for around 500 people. There is forecast to be approximately over 560 staff working for Council over the next few years based on the nature of the organisation's services and the significant amount of regulatory reform planned over the next ten years. Council's Property team will need to carefully plan for space requirements.

Part 9: Asset Management approach

9.1 Asset Management Framework

Every asset based service we deliver to our community should contribute to achieving the vision, goals and priorities that form Council’s Strategic Direction that has been agreed for the region. Therefore, it is critical that Council has the infrastructure that enables it to deliver its services and activities to achieve the community outcomes.

One considerable challenge is ensuring we match the work we do to immediate needs but in a way that is mindful of likely future requirements, so as to maximise the community return on its infrastructure investment. This is why Council has developed and embedded an Asset Management Framework to ensure that infrastructure assets, activities and service levels are provided in the most cost effective manner.

There are a range of technical documents that together form the Asset Management Framework. As shown in the diagram below, Council’s vision and community outcomes (Strategic Direction) provide direction to and informs the Asset Management Policy (see next page), this SAMP and the Infrastructure Strategy, cascading down through to the tactical Asset Management Plans for each activity.



Figure 13: Council's Asset Management framework.

Table 27: Roles and responsibilities with respect to AM Framework and documents.

Role	Responsibility
Council	Setting Strategic Direction and overall Governance including setting of plans and budgets including through Long Term and Annual Plans to enable delivery of Councils Infrastructure Strategy and Asset Management activities.
Leadership Team	Overall responsibility for delivery of Council’s Infrastructure Strategy and asset management (AM) activities. Approval of internal AM Policy
General Managers	Delivery of asset management improvement programmes within their areas.
AM Steering Group	An internal centre of expertise for sharing best practice and driving consistency across Council. Ensures delivery of AM improvements identified in each group’s AMP and the update of AMPs in time for each AP/LTP cycle. Also provides advice to the Leadership Team on asset management.
Activity Managers	Operational delivery of Asset Management Plans, responsibility for maintaining and updating AMPs, members of ASMG.

9.1.1 Asset Management Policy

Council developed its first Asset Management (AM) Policy in April 2015. It is currently in its second iteration having been approved by Council in September 2020. The next review is scheduled for 2024, to ensure it continues to effectively guide our AM approach and will incorporate any changes reflected in Council’s 2024-2034 LTP.

The intent of the AM Policy is to guide the delivery of Council’s services that rely on the use and management of infrastructure assets. The AM Policy is set to help achieve Council’s Strategic Direction by providing appropriate, affordable, quality assets and services for current and future generations.

The AM Policy stipulates good asset management is based on:

- ▶ Governance and asset stewardship.
- ▶ Knowledge of customer and stakeholder requirements now and going forward.
- ▶ Knowledge including condition and performance required to deliver service.
- ▶ Knowledge of the risks associated with our assets.
- ▶ Understanding of the long-term works and costs associated with the assets.
- ▶ Understanding what is required to provide services sustainably.
- ▶ Legislative compliance.

Improvement – Update AM Policy to align with 2024-34 LTP and ensure AM principles inform and guide the development of revised AM Objectives.

9.1.2 Implementing the Asset Management Policy

The AM policy is implemented, maintained and monitored through the Asset Management Steering Group (AMSG). Implementing the AM Policy involves integrating its principles into daily operations and decision-making processes. This is achieved by clear role allocations, training programs, and regular AMSG meetings.

To achieve the Policy outcomes, Council has developed a set of objectives and actions that guide its asset management practices. These AM objectives reflect the organisational objectives and community outcomes outlined in the Strategic Direction. In order to fulfil its Strategic Direction, Council is committed to best *appropriate* practice in asset management to achieve the following AM objectives.

Table 28: Asset management objectives and actions.

Policy objective	Actions to delivery
1. Recognise the importance of Asset Management planning and ensure adequate resourcing.	1.1 Asset management is used as a key role for achieving Council's strategic direction and promotes the practice as business as usual.
	1.2 Oversee asset management planning and ensure ongoing continual improvement.
	1.3 The AM Policy is adopted and delivered.
	1.4 The Operational Asset Management Plans are updated annually and approved by Leadership Team.
	1.5 The AMPs provide the basis for relevant LTP budgets.
	1.6 Appropriate structure and resource is provided to deliver these objectives.
2. Actively and transparently engage on levels of service and how the assets are to be managed.	2.1 Actively engage with stakeholders to understand expectations and deliver services, such as through: <ul style="list-style-type: none"> • Community groups • River Scheme Advisory Groups • Engagement through LTP Consultation Process
3. Manage asset networks in a prudent manner.	3.1 Assets must be fit-for-purpose, managed and maintained in an efficient, effective manner to meet present and future expectations.
	3.2 Asset information is reliable and accurate to allow for robust decision making.
	3.3 AMPs include long term expenditure and funding to maintain the assets to agreed levels of service.
	3.4 Develop robust work programmes that consider climate change, risk and financial implications, to deliver agreed levels of service.
	3.5 Asset activity managers ensure that risks are determined and plan action to address them.
	3.6 Valuation and annual depreciation are recognised in the organisation's financial processes in accordance with financial reporting standards.
4. Maintain the Asset Management System to a high quality.	4.1 Asset Management processes are documented and opportunities for improvement and efficiencies are identified.
	4.2 Ensure improvement plan items are actioned and reported back to the Asset Management Steering Group.
	4.3 Practices represent global best practice (International Infrastructure Management Manual).

5. Take a continual improvement approach.	5.1 Apply continual improvement practices and innovation within the context of sound performance monitoring and review process.
	5.2 Provide progress reporting to track performance of improvement plan actions.
	5.3 Determine what asset management skills are required and provide appropriate training if required.
	5.4 Assess the timelines and recommendations resulting from internal/external audits e.g. Audit NZ.
6. Use the most appropriate approach for service delivery.	6.1 Physical works will be delivered through a competitive market.
	6.2 Maintenance will be performance/outcome based.
	6.3 Consideration of non-asset solutions is to be undertaken.
	6.4 Council's procurement contract requirements will be followed.
7. Consider climate change and implications for Māori.	7.1 Ensure climate change adaption information is included into existing and future capital improvement & maintenance programme.
	7.2 Acknowledge the relationship with Māori and utilise the range of mechanisms available to engage.
	7.3 Ensure Māori views and perspectives are appropriately represented in the decision making process.

Council has already planned and implemented numerous strategies for the asset portfolio and asset management system, to deliver the AM Objectives outlined above. Further strategies and improvement have been identified and these are collated and presented within the Improvement Plan (11.3).

Table 29: Existing strategies to address AM objectives.

AM Strategy	Adheres to Policy objective	Addresses action
Establish an Asset Management Steering Group	1, 4	1.3, 1.4, 1.6, 4.2
Establish dedicated Asset Management roles.	1	1.3, 1.4, 1.6
Develop and Implement a comprehensive Asset Management Framework	1	1.1, 1.2, 1.3, 1.4, 1.5
Public access to AM documents	2	2.1
LTP and Annual Plan processes and engagement	1, 2, 3	1.5, 2.1, 3.3, 3.6
Develop corporate risk management standards	3	3.1, 3.4, 3.5
Implement a robust AM information system	3	3.2
Develop a continuous improvement programme	4, 5	4.1, 4.2, 5.1, 5.2, 5.4
Provide ongoing training and development	4, 5	4.3, 5.3, 5.4
Implement and maintain a formal audit schedule	5	5.4
Climate Change Action Plan	3, 6, 7	3.1, 3.4, 3.5, 6.3, 6.4, 7.1
River Scheme Sustainability Programme	2, 3, 7	2.1, 3.1, 3.4, 3.5, 7.1, 7.3

9.2 Developing the Asset Management Plans

In the development of Asset Management Plans (AMPs), our approach encompasses a variety of important aspects of asset management, and includes the following steps:

- 1 **Understanding and Defining Needs:** AMP development commences by fully understanding Council's strategic direction, the strategic AM objectives, and the needs of our stakeholders. These serve as the foundation for the AMPs. Each AMP needs to outline their approach for achieving the strategic AM Objectives.
- 2 **Asset Analysis:** The phase involves comprehensive examination of the assets across each activity area. This process collects data pertaining to each asset's age, condition, performance, and maintenance history. Such analyses enable us to grasp the present state of asset performance and the projected lifecycle.
- 3 **Levels of Service:** This step involves assessing the performance of our existing levels of service. We identify any areas of underperformance and investigate the underlying causes, whether they be age, condition, or external factors such as changing demand. This analysis provides invaluable insights into whether our current LoS meet our community's needs and align with the strategic objectives of the Council. In addition, we consider any necessary changes to existing levels of service or new measures proposed.
- 4 **Future Demand:** At this stage, future demand is assessed, considering specific drivers affecting the asset activity. These range from demographic trends, land use plans, climate change, regulatory requirements, natural hazards, and stakeholder expectations. This understanding helps us to plan for new assets or necessary asset upgrades, and non-asset demand management strategies.
- 5 **Lifecycle Management Planning:** Following the determination of future demand, we formulate strategies for the operation, maintenance, renewal, and disposal of assets (see subsequent section). These strategies aim to achieve the optimal lifecycle cost while maintaining the desired LoS. The strategies are developed with future demand, lifecycle costs, and performance requirements in mind.
- 6 **Risk Management:** This step involves the review and update of asset-related risks, assessing the likelihood and impact of each identified risk. It serves to inform the development of mitigation strategies and contingency plans.
- 7 **Financial Forecasting and Planning:** Using the lifecycle management plans as a reference, we project the cost estimates for the operation, maintenance, renewal, and disposal of assets. These estimates are integrated into the long-term financial plan, supporting the Council's budgeting process.
- 8 **Audit and Improvement:** The final section of our AMPs - Audit and Improvement. These activities involve regular, systematic reviews of our asset management plans and processes. This enables us to identify areas for improvement. As part of this process, we utilise both internal and external audits to provide an objective assessment of our practices. Based on the findings from these audits, we make necessary adjustments and improvements to our AMPs, ensuring they continue to align with best practices.
- 9 **Stakeholder Engagement and Approval:** After drafting the AMPs, they are shared with our stakeholders for review and feedback. Based on the responses we receive, we make necessary revisions to the AMPs before they are approved, budgeted and implemented.

9.2.1 Rivers and Drainage

This is Council's largest physical asset portfolio with an optimised depreciated replacement value of \$438 million. The Rivers and Drainage AMP is a 50-year plan that provides information about the assets and how they are maintained and managed to provide agreed levels of service.

Rolling 10-year capacity reviews (or 15-year reviews in Lake Rotorua streams) and geotechnical investigations of each of the schemes determines whether the assets are providing agreed levels of service and informs whether upgrades are required. Additional capital works may flow on from this process and the cost estimates for this work are provided to the proposed LTP capital budget as indicative placeholder figures.

Specific workshops are held with River Scheme Advisory Groups focused on the LTP and AMP financial planning and proposed budgets. This enables the group members to provide comment and input into the proposed capital and operations budgets.

9.2.2 Rotorua Te Arawa Lakes

This AMP focuses on the in-lake and in-stream interventions to improve water health. Operational projects in the Rotorua Lakes Catchment programme are generally short to medium term projects which support improvements in water quality. As a result, the majority of these assets do not require future capital renewal. However, the programme's longer term assets like the Ohau Diversion Wall and environmental monitoring bores require ongoing capital renewal and maintenance.

Maintenance is a relatively fixed spending regime with the activity continuing to maintain existing performance levels. This will continue until these projects cease.

9.2.3 Maritime Operations

The focus of the Maritime AMP is primarily the Council owned aids to navigation (beacons, buoys, markers and signs) assets. The Maritime Operations activity has a relatively fixed capital spending regime associated with the navigational aid assets.

Regular maintenance is undertaken on the navigational aid assets to ensure each asset is regularly inspected for condition defects. This is also a relatively fixed spending programme and the activity is maintaining existing performance levels.

9.2.4 Regional Parks and Coastal Catchments

The assets that are supported under the Regional Parks AMP are unlike other infrastructure e.g. significant trees, regenerating native bush, significant archaeological and cultural sites. The majority of the tangible assets have come from the legacy of farming on the land prior to becoming parks e.g. fencing, tracks, farm buildings. This activity AMP also contains a number of the Kaituna Re-diversion assets including the salinity block, boat ramp, a floating pontoon and fixed pier.

The Regional Parks & Coastal Catchments activity has a relatively fixed capital and operational spending regime that is associated mostly with new farm assets (e.g. new fencing), asset upkeep (e.g. track maintenance) and landscape restoration (e.g. land retirement and native replanting). However, projects may be proposed to help meet levels of visitor growth as well as enhance visitor experience.

9.2.5 Corporate Property

The Corporate Property AMP outlines the management of land and buildings that staff use to deliver Council's core services from. This long-term planning approach is necessary given the large capital and operating expenditure, the long lives of the assets and the lead times in planning for upgrades of new assets when required.

9.3 Asset lifecycle management

Asset lifecycle asset management is the cycle of activities associated with planning for, creating, operating, maintaining, replacing, rehabilitating, and disposing of assets. The lifecycle management programme covers three key lifecycle categories necessary to manage an asset over its whole life and deliver required service levels.

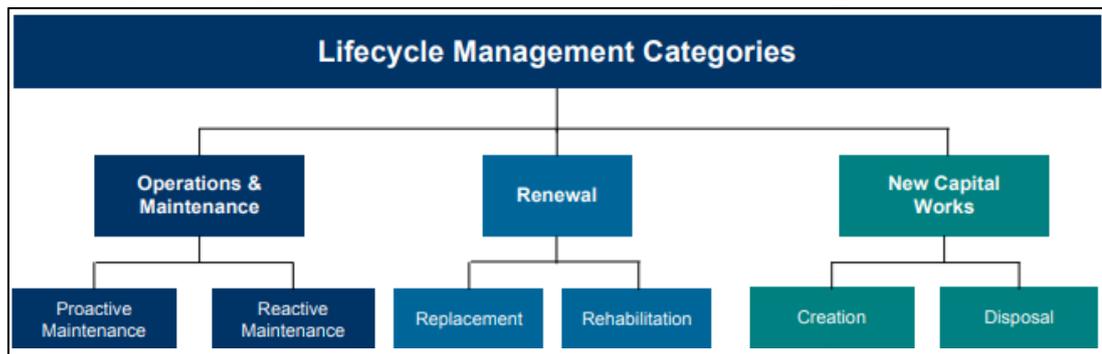


Figure 14: Lifecycle management categories.

Our approach to the life cycle management of our infrastructure is designed to ensure effective and sustainable management of our assets throughout their entire lifecycle, from acquisition or creation through to disposal. It is closely linked with other aspects of our asset management approach, including our risk management practices, financial planning, and service level objectives. This approach reflects our commitment to delivering consistent, high-quality services to our community while also ensuring fiscal responsibility and sustainability.

Lifecycle management strategies not only vary across different asset activity portfolios but can also vary across different asset types within a particular activity portfolio. The varied nature and function of our assets necessitates unique approaches to their lifecycle management. For example, within our Regional Parks portfolio, the approach to managing natural assets such as forests may not be the same as for built assets like tracks. Similarly, within our Rivers and Drainage portfolio, the approach to managing natural assets like river corridors differ significantly from the management of engineered structures like floodbanks and drainage systems.

Detailed lifecycle management strategies are presented in each activity AMP. This SAMP outlines a broad, overarching approach to lifecycle management that guides the more detailed strategies found in the individual AMPs. Two areas identified for improvement across several activity areas for asset lifecycle management are outlined below. Improvements have been identified to address these areas for specific portfolios within individual activity AMPs.

Asset condition and performance monitoring: Understanding the condition and performance of our assets is pivotal to implementing effective lifecycle management strategies. Monitoring asset performance helps us ascertain if an asset is meeting its intended service level objectives and provides insight into when an asset may need maintenance, renewal, or eventual replacement.

Proactive maintenance and renewal planning: An essential aspect of lifecycle management is shifting from reactive to proactive strategies, but ultimately finding the right balance. Proactive maintenance involves scheduling and executing maintenance actions before asset failure occurs. Proactive renewal planning focuses on predicting when an asset is nearing the end of its useful life and planning its renewal or replacement in a timely manner.

9.3.1 Principles and guidelines

Our approach to the lifecycle management of our assets is informed by the principles outlined earlier in our AM Policy, as well as our overarching strategic objectives. Key components of this are summarised below (note risk management is covered in 9.4.3).

Service level objectives: Our lifecycle management strategies are designed to ensure that our assets can continue to deliver the levels of service that our community expects and relies on. We regularly review our service level objectives and adjust our lifecycle management approaches as needed to continue meeting these objectives. For example, as presented earlier in Part 8: the Regional Parks & Coastal Catchments activity failed to meet their service level relating to the number of users visiting the regional parks. This portfolio then utilised their new capital works strategy to plan and design infrastructure to attract more park visitors.

Whole-of-Life: We strive to achieve optimum value for money in our asset management activities by considering the total cost of assets over their entire lifecycle. This whole-of-life perspective ensures that we make fiscally prudent decisions that not only consider initial acquisition or creation costs, but also the ongoing costs of operation, maintenance, renewal, and eventual disposal. It is through this approach that we can truly optimise resource allocation, balancing short-term costs with long-term sustainability and service delivery objectives.

Stakeholder engagement: We believe that effective asset management requires transparency and active engagement with all stakeholders. This includes clearly communicating our decisions and their rationale, as well as seeking input from stakeholders in our decision-making processes. An important aspect of this is supporting enhanced Māori participation in decision-making, where outcomes inform and drive asset lifecycle management.

Sustainability: This has become a significant driver within Council, evidenced by several goals across Council's new community outcomes within their 2024-2034 Long Term Plan. The SAMP strives for sustainable management of infrastructure assets, as we balance the needs of the present with considerations for the future. A pivotal part of our commitment to sustainability is the transition towards a low-carbon economy. Infrastructure asset management plays a critical role in achieving this goal. By ensuring our assets are managed and maintained in a manner that reduces carbon footprint and promotes environmental sustainability, we can directly contribute to the broader sustainability objectives of our Council and community.

Improvement – Develop and implement an Asset Management Sustainability Framework to integrate sustainability into activity asset management practices.

Resilience: Recognising the challenges posed by natural hazards and climate change, we incorporate resilience into our lifecycle management approach. This includes considering aspects such as asset design, materials, and location to ensure that our assets can withstand and recover from disruptions. We are also focusing on incorporating nature-based solutions where possible.

Improvement: Integrate nature-based solutions into the criteria used by each asset activity area for evaluating and prioritising maintenance, renewal and new capital projects.

Our lifecycle management strategies may vary across different asset types and activity portfolios. However, these principles and guidelines provide a consistent and overarching framework that guides these strategies, ensuring we continue to manage our assets effectively and responsibly across the board.

9.4 Decision-making framework

ISO 55002 requires a Strategic Asset Management Plan (SAMP) to include a decision-making framework, outlining the criteria and methods used in the decision-making process. A decision-making framework is essential to ensure consistent, evidence-based decisions that align with our organisational goals and the needs of the communities we serve.

Our decision making in asset management across the asset activity areas requires improvement. Council is committed to making decisions based on the optimal combination of asset lifecycle costs, risks and performance, but acknowledges that currently there is no formalised decision-making process in place across our activity areas for non-significant decisions.

It is important that Council makes appropriate decisions at each stage of an asset's lifecycle to ensure the asset is appropriately managed, and that organisational benefits can be realised. It is also important that the decision technique chosen is appropriate for the decision being made, and that it provides the most effective solution to deliver the objective sought. Council recognises that not all decisions carry equal weight; some have higher impact, complexity, and risks, justifying more significant effort, data collection, and analysis. In contrast, low-impact decisions do not warrant the same level of resources and delegated authority can be assumed.

9.4.1 Significant Decisions

Under the Local Government Act 2002, Council is required to engage communities in the decision-making process when the decision in question is considered 'significant'. As per the organisation's Significance and Engagement Policy, Council applies the following thresholds and criteria on a case-by-case basis when assessing whether a decision is significant.

Criteria	Threshold
Financial cost of the decision.	It involves unbudgeted expenditure exceeding 10% of Council's total expenditure for the year.
Likely effect on Council's ability to fulfil its statutory functions or perform its statutory roles.	It potentially adversely affects Council's ability to fulfil its statutory functions or roles under any enactment.
Likely impact of the decision on the community.	There are major potential impacts on the environmental, social, economic or cultural interests of most of the Bay of Plenty community.

Figure 15: Thresholds and criteria for significant decisions.

If a decision meets any of the thresholds above, then the decision has a high degree of significance. If a decision does not exceed the thresholds, further consideration of significance will be determined by consideration of whether:

- The decision is within existing budgets and implements the current long term plan or annual plan.
- The financial costs and implications of the decision are known and provided for.

When any issue is determined as being 'significant', certain steps must be taken to meet Council's statutory requirements. Before Council makes a significant decision it will consult the community. Community engagement is when we purposely approach affected communities to help shape decisions about our proposed plans and actions. Where practicable, significant decisions will be included in the consultation document for each long term plan.

9.4.2 Non-Significant Decisions

Non-significant decisions are those that do not meet the thresholds set in our Significance and Engagement Policy, but nevertheless may still play an important role in our overall asset management strategy. These decisions, which are often numerous and routine, can cumulatively have a significant impact on our asset performance and service delivery.

Acknowledging the variability in data reliability and availability, as well as asset management maturity, across the different asset activity areas, it is necessary to adopt a flexible approach to decision-making. This approach allows for adaptability and flexibility based on the unique requirements of each decision and the availability and reliability of the data being used.

Until a more formalised decision-making process based on costs, risks and performance is implemented, all activity areas will use Council's Strategic Direction, AM Policy and objectives, and Key Risk Framework to guide decision-making. Risk is currently one of the foundational elements in our decision-making process. As evidenced within activity AMPs, risk-based maintenance and renewal are common strategies across all portfolios. As outlined in the next section, risk assessment allows us to understand the potential adverse impacts associated with our assets and their management. By quantifying the likelihood and consequences of various risks, we can prioritise our actions and resources effectively and proactively.

Asset activity areas also recognise the value of stakeholder engagement in decision-making and actively seek input from the community and other stakeholders to inform our decisions. For example, specific workshops are held with River Scheme Advisory Groups focused on the financial planning and proposed budgets for the Rivers and Drainage AMP. This enables the group members to provide comment and input into the proposed capital and operational budgets.

Lifecycle costing and Cost-Benefit Analysis (CBA) are key tools that can enhance decision-making within asset management. Lifecycle costing accounts for all costs associated with an asset over its entire life, from planning and acquisition to operations, maintenance, and disposal. This provides insight into the full financial implications of our decisions, promoting long-term financial sustainability. Simultaneously, CBA enhances decision-making by assessing the economic advantages and disadvantages of different asset management actions, such as investing in new assets, renewing existing assets, or changing maintenance

practices. By comparing costs and benefits over the asset lifecycle, we can select options that offer the greatest net value to the community.

However, the effectiveness of both these approaches is heavily reliant on the availability of robust and accurate data and the specific skills necessary for their implementation. Presently, not all activity areas have access to the detailed, reliable data or possess the analytical capacity to perform comprehensive lifecycle cost analyses or apply CBA for non-significant decisions. Recognising these challenges, we acknowledge the need to enhance our data quality and analytical capabilities.

Over time, as our asset management practices mature, we will continue to refine and enhance our decision-making processes, incorporating additional criteria and more sophisticated evaluation methods where appropriate.

9.4.3 Risk management

Risk management is an integral component of our asset management framework and is embedded in all our processes and decision-making. Effective risk management helps us prevent potential adverse events and capitalise on opportunities, enabling us to deliver reliable, consistent service levels to our community.

Council has developed a 'Key Risk Framework' which provides a definition for risk as "the threat that an event or action will adversely affect an organisation's ability to achieve its objectives or to successfully execute its strategies". Our risk management approach begins with the identification of risks, which can range from potential asset failures to financial, environmental, social, and cultural risks.

Once risks are identified, we conduct an assessment on the likelihood and potential impact of each risk. The Key Risk Framework provides risk criteria and scoring matrices that are aligned to the ISO 31000:2009 risk management standard. Risk is quantified by multiplying likelihood by consequence to obtain a risk score (Figure 16).

Likelihood	Consequence				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Frequent (5)	5	10	15	20	25
Often (4)	4	8	12	16	20
Likely (3)	3	6	9	12	15
Possible (2)	2	4	6	8	10
Rare (1)	1	2	3	4	5

Figure 16: Risk scoring matrix from Key Risk Framework.

Risk Score	Level of risk	Action Required	Attention of /assigned to
15-25	Extreme risk	Requires immediate assessment of actions	ELT/Council (as required), Statutory bodies
8-12	Significant risk	Requires remedial assessment and action via the annual planning process	GM, Programme Sponsor, Programme Steering Group
4-6	Moderate risk	Address via new procedures and/or modification of existing practices and training	Programme manager, Workstream Leaders
1-3	Low risk	No formal requirement for further action, unless escalation of risk is possible.	Workstream Leads, project Mangers

Figure 17: Required response from Key Risk Framework.

The risk appetite, or boundaries of acceptable risk, is an essential aspect to consider. It defines unacceptable risk levels, where risk-reducing action is mandatory, as well as acceptable risk levels that don't warrant further reduction (Figure 17). The zone in between these extremes is where risk-based decisions are needed (see next section). The residual risks, with controls in place, must be tolerable and further reductions judged to be impractical or disproportionately costly.

Based on these risk assessments, activity portfolios develop and implement risk management strategies. This involves determining the most appropriate response for each risk, which may include mitigating, transferring, accepting, or avoiding the risk.

Part 10: Financial planning

Financial planning for our assets constitutes a robust process designed to meet the financial demands at every stage of an asset's lifecycle. It is a collaborative approach, involving both asset activity managers and financial managers. The process ensures the financial needs of our assets, and the crucial services they deliver, are adequately considered and accommodated for within the Council's fiscal parameters.

Our financial planning approach encompasses a variety of strategies, including those designed to generate income, allocate and invest funds, undertake borrowing, and repay debts. The overarching goal is always maintaining Council's overall financial stability. This coordinated approach allows us to secure the funds necessary to manage our assets effectively, ensuring that we can fulfil our current asset management requirements while also preparing for the future and any unexpected eventualities that may arise.

The Organisational Asset Management Steering Group (OAMSG), including Council's Finance Manager (or delegate), ensures the timely production of AMPs for each LTP or Annual Plan cycle. This process involves close collaboration with individual asset activity managers, who draw on specialist expertise as required from the OAMSG or external parties. The OAMSG provides the draft AMPs, including financial forecasts, to the Executive Leadership Team and to Council.

10.1 Funding strategy and policies

Section 101(1) of the Local Government Act requires us to manage our revenue, expenses, assets, liabilities, investments and general financial dealings prudently, and in a manner that promotes the current and future interests of the community. Council must determine the appropriate sources of funding that will meet the funding needs of each activity. The Revenue and Financing Policy describes how Council will use revenue and financing sources to fund its activities. Council has assessed the sources of revenue and finance for each activity via a review of its Revenue and Financing Policy as part of the LTP2024-2034 development.

Capital expenditure on new assets is generally not directly funded by rates as this places the entire cost on current ratepayers. Instead, the use of reserves and/or borrowing, allows for the cost to be spread over time through interest and depreciation so that all beneficiaries of the asset contribute towards the cost. Any net operating surpluses are accumulated into various reserve funds. A specific asset replacement reserve is accumulated through funding depreciation and available for renewal of existing assets.

Changes in funding levels can directly impact the service levels we provide, and conversely, changes in expected service levels can necessitate changes in expenditure. Lower funding levels generally translate to decreased maintenance, renewal, or new capital works. This can lead to a decline in the condition and performance of our assets over time, and consequently, a reduction in service levels. The challenge lies in finding and maintaining the optimal balance between expenditure and service levels.

Improvement – Implement an investment decision-making framework across all activity areas, that supports informed trade-off decisions between costs, service levels and risk in operational and capital expenditure decisions.

10.2 Financial forecasts

Expenditure forecasts provide a projection of the costs associated with managing and maintaining our assets over the long term. These costs are divided into operational and capital expenditure and provide the financial context for our AM decisions.

Our expenditure forecasts are based on a comprehensive analysis of each asset portfolio, taking into account factors such as the condition and age of our assets, expected maintenance and renewal needs, planned upgrades or disposals, and other relevant factors. While our forecasts provide a useful guide, they are subject to various assumptions, uncertainties and risks. Key assumptions that could affect our expenditure forecasts are presented in 0. Further, activity-specific assumptions can be found within individual activity AMPs.

10.2.1 Operational Expenditure

Operational expenditure refers to the ongoing costs associated with managing and maintaining our assets, such as staff costs, maintenance expenses, and other routine operational costs. Section 10.2.3 provides a summary of our projected operational expenditure for the next ten years.

10.2.2 Capital Expenditure

Capital expenditure refers to the costs associated with acquiring, upgrading, improving or disposing our assets. This includes costs for new assets, as well as major upgrades or improvements to existing assets. Section 10.2.3 illustrates our projected capital expenditure for the next ten years.

10.2.3 Total Expenditure

Draft Long Term Plan 2024-2034

Activity: Asset management Combined

Run: 07 June 2024 - Long Term Plan Ledger: 25PJL.10

Version: 10

	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
UNINFLATED	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Operating revenue										
Rotorua Lakes	9,462	10,958	9,657	10,549	10,626	10,685	9,811	10,417	8,252	8,230
Catchments	13,785	13,101	13,598	13,561	13,710	13,731	14,070	14,134	14,141	14,160
Rivers & Drainage	19,742	20,943	22,747	29,103	24,110	24,445	24,918	25,139	25,326	24,400
Maritime	4,232	4,187	4,366	4,367	4,425	4,477	4,488	4,503	4,504	4,503
Facilities	103	103	103	103	103	103	103	103	103	103
Total operating revenue	47,324	49,292	50,470	57,682	52,974	53,440	53,389	54,296	52,326	51,395
Operating expenditure										
Rotorua Lakes	9,989	9,539	8,175	9,992	9,996	9,776	9,366	10,432	5,908	5,840
Catchments	9,989	9,613	9,600	9,534	9,409	9,135	9,161	9,072	9,006	8,844
Rivers & Drainage	13,415	12,348	13,114	20,153	13,825	13,600	12,949	12,681	14,510	12,093
Maritime	2,293	2,299	2,311	2,314	2,325	2,334	2,309	2,310	2,313	2,292
Facilities	4,243	4,287	4,621	4,723	4,700	4,636	4,570	4,499	4,379	4,249
Sub total expenditure	39,929	38,086	37,820	46,716	40,255	39,481	38,354	38,994	36,116	33,318
Overhead and corporate charges										
Corporate Costs	5,550	5,510	5,456	5,189	5,102	5,075	4,978	4,988	4,943	4,896
Total expenditure	45,479	43,596	43,277	51,904	45,357	44,555	43,332	43,982	41,059	38,213
Net deficit (surplus) to fund	(1,846)	(5,696)	(7,193)	(5,778)	(7,617)	(8,885)	(10,057)	(10,313)	(11,267)	(13,182)
Funding required										
(Increase) / decrease in reserves	(1,846)	(5,696)	(7,193)	(5,778)	(7,617)	(8,885)	(10,057)	(10,313)	(11,267)	(13,182)
Total operating funding	(1,846)	(5,696)	(7,193)	(5,778)	(7,617)	(8,885)	(10,057)	(10,313)	(11,267)	(13,182)
Capital										
Rotorua Lakes	2,000	2,051	2,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Catchments	1,984	2,259	2,568	1,948	1,830	954	1,015	1,012	1,008	1,008
Rivers & Drainage	14,986	16,540	10,917	964	1,981	1,553	2,380	2,430	3,790	3,230
Maritime	127	305	126	125	300	124	121	120	120	120
Facilities	1,784	3,316	5,628	37	37	37	37	36	36	36
Total capital expenditure	20,882	24,471	21,240	4,074	5,148	3,668	4,552	4,598	5,955	5,395
Capital funding										
Grants, subsidies and insurance revenue	9,802	7,571	8,393	-	-	-	-	-	-	-
Increase in debt	11,080	16,900	12,847	4,074	5,148	3,668	4,552	4,598	5,955	5,395
Total capital funding applied	20,882	24,471	21,240	4,074	5,148	3,668	4,552	4,598	5,955	5,395

10.3 Asset valuation

As required by statutory financial reporting, Council revalues its fixed assets at least every five years, though in most cases this process occurs more frequently, as detailed within individual activity AMPs. All infrastructure assets are valued in accordance with the methodology prescribed in the New Zealand Infrastructure Asset Valuation and Depreciation Guidelines 2006. This includes consideration of whole-of-life asset costs, from acquisition or creation to maintenance, renewal, and disposal.

The asset valuation process is integral to our understanding of the overall financial investment in our asset portfolio and informs our capital budgeting, maintenance, and renewal strategies. Different types of assets can require different methods of valuation. Generally, our asset valuation methods include current replacement cost and depreciated replacement cost. Some asset types, such as land and property are valued using the market/fair value method. A description of valuation methods bespoke to each activity and asset portfolio are included within their respective AMPs.

The following table presents a summary of the total value of each asset activity. It is important to note that these figures should be seen as an estimation as they will fluctuate over time due to various factors such as depreciation, improvements, and market changes. It is also important to remember that while these asset valuations provide a valuable snapshot of our financial position, they are not a definitive measure of the service potential or performance of our assets. Other considerations such as condition, risk, and criticality significantly impact our asset management strategies.

Asset area	Asset group/type	Optimised Depreciated Replacement Cost (ODRC) or Book Value \$m	Replacement Value (ORC) \$m
Rivers and Drainage	<ul style="list-style-type: none"> Erosion protection Pump stations Stopbanks Structures Waterways 	\$438.02*	\$519.90
Regional Parks and Coastal Catchments	<ul style="list-style-type: none"> Fencing and styles Pathways/walkways, car parks Dams Farm buildings, dwellings, and toilets Water supply-tanks and pumps Park furniture Timber plantations Signage Land 	\$25.91	\$27.10
Rotorua Te Arawa Lakes **	<ul style="list-style-type: none"> Phosphorous Locking plants Ohau Diversion wall: Rotoiti. Koaro fish passage Wetlands: Okaro and Rotoehu (floating) Outlet Structures: Okareka, Rerewhakaaitu, Rotomahana 	\$16.10	\$24.90

Maritime Operations	<ul style="list-style-type: none"> • Beacons • Buoys • Markers • Signs 	\$1.51	\$2.12
Property	<ul style="list-style-type: none"> • Offices • Depots • Carparks 	\$45.98	\$49.20
		\$527.52	\$623.22

**Excludes an impairment of \$2.15m relating to the Whakatane-Tauranga River scheme. The ODRC including impairment is \$436m.*

10.4 General assumptions

There are a number of principles, legislative and policy requirements that apply across Councils asset management planning, these include:

- Use best currently available information.
- Where completed use the most up to date condition assessments.
- Seek to maintain the existing levels of service.
- Comply with:
 - Legislative requirements,
 - Council's funding, financial and operational policies and strategies,
 - Relevant financial reporting standards issued by the New Zealand Institute of Chartered Accountants,
 - Industry best practices and norms, and
 - Generally Accepted Accounting Practice (GAAP).

In addition to the assumptions described above, individual AMPs will draw on information specific to the particular asset class and at different levels of comprehensiveness depending on the maturity of the activity and associated AMP.

Part 11: Audit and improvement

Audit and improvement planning are important asset management (AM) practices that assist Council to develop and implement continuous improvement programmes. Being responsive to change and improvement enables Council to effectively deliver their AM objectives. Required improvements to AM practices can occur for several reasons, including innovation and technology, changes in governance and regulation, and meeting customer expectations.

Organisational Asset Management Steering Group (OAMSG)

The OAMSG, formed in 2010 and reinstated in 2019, establishes a culture of AM throughout the organisation and allows better communication, consistency and sharing of AM initiatives across the activity portfolios. With a group mission statement of: “Delivering efficient and effective infrastructure asset management practices for our communities”, the primary function of the group is to oversee the implementation and three yearly review of Council’s suite of asset management documents (AM Policy, SAMP, Infrastructure Strategy, and Activity AMPs).

The OAMSG enables the sharing of knowledge and best practice to ensure we manage our assets effectively and efficiently and to coordinate documented reviews and communication with Council and stakeholders.

11.1 Our approach to audits

Council is committed to applying and improving sound management practices in alignment with industry best practice. This is important to provide fiscally prudent and reliable services that our communities can have confidence in. This involves continually reviewing the efficacy of systems and procedures and working towards improvement in a cost-effective manner.

External review of our business is conducted systematically, with reviews by Audit New Zealand of our budget planning processes as part of the Long Term Plan process being a good example. This involves reviewing the methodology for budget generation, including how budgets relate to the AMPs and the processes used in AMP budget development.

External peer review is also standard practice with the auditing of our annual valuations. Financial expenditure reporting is conducted on a regularly basis including regular (typically quarterly) reporting to Council and through the Annual Report which is audited externally.

External reviews and audits of Council’s asset management planning and practices also take place on a regular basis. The most recent review took place in 2022 where all activity AMPs and this Strategic AMP were reviewed against international best practice and recommendations identified to advance maturity to meet agreed levels.

11.1.1 Past audits

External audit of BOPRC AM Maturity (2019)

An audit was undertaken by KPMG in 2019 which assessed the maturity of Council's AM practices against the relevant and specific aspects of the IIMM (International Infrastructure Management Manual, 2015), and ISO 55001 (2014), the recognised global standard for asset management. The audit was completed comparing the AM processes employed across all Council activity portfolios (Maritime Operations, Rivers and Drainage, Regional Parks, Rotorua Lakes, Property).

The overall rating assigned was 'developing'. The review established 16 improvement opportunities relating to five key priority areas. One of the key priority areas was to "Establish a single, Council-wide strategic level SAMP to sit above the portfolio level AMPs".

Council addressed the above key improvement area by developing its first SAMP in 2020, which was approved by Council in June 2021. The current version of the SAMP is its second iteration following the external review below.

External audit of Strategic Asset Management Plan (2022)

A high-level review of Council's 2021 SAMP was undertaken by Asset BowManagement Ltd in 2022. The review assessed the SAMP against international best practice guidance and identified improvements to improve the document. Strengths and opportunities were identified against each section of the SAMP.

In general, the review found very positive areas within the SAMP. The report identified thirteen improvements to advance and update the SAMP document. These improvements have all been addressed as part of the most recent SAMP update. Further improvements were identified and these form the basis of the current improvement plan.

11.1.2 Audit plan

The SAMP together with all the AMPs are included with the information provided for external Audit as part of the development of each LTP. Any recommendations out of this regular Audit process, will be considered via the Asset Management Steering Group.

11.2 Our approach to improvement planning

For over the last decade Audit NZ have reviewed a large number of Long Term Plans (LTP) and Asset Management Plans (AMP) from Local Government and identified large areas for improvement. Council aspires to advance their AM maturity to an 'appropriate' level, in line with industry best practice.

Council has adopted a strategic management approach to improvement planning, administering AM maturity assessments, continually developing AMPs, and implementing improvement processes and practices. The intention is to improve AM practices and processes towards an appropriate future state. This involves continually reviewing and identifying improvements in AM practices and processes.

Identifying improvements is relatively straightforward, implementing the improvements requires sustained planning and investment. This will be achieved through implementing principles of continuous improvement and by developing, implementing, funding, and maintaining an AM improvement plan.

11.2.1 Continuous improvement cycle

In order to advance asset management practices at Council, this SAMP has adopted a continuous improvement cycle where current AM performance is assessed, a desired future state is determined, and improvement items are identified to close the gap between current and future performance.

Establishment of a robust, continuous improvement process ensures we are making the most effective use of resources to achieve an appropriate level of AM practice.

Any number of improvements may be identified during this process, so they will likely need to be prioritised to ensure the most effective improvements are progressed with the limited resources available. As the improvements are being implemented, the OAMSG will monitor and review the effectiveness of the outcomes, and subsequently make any changes necessary.

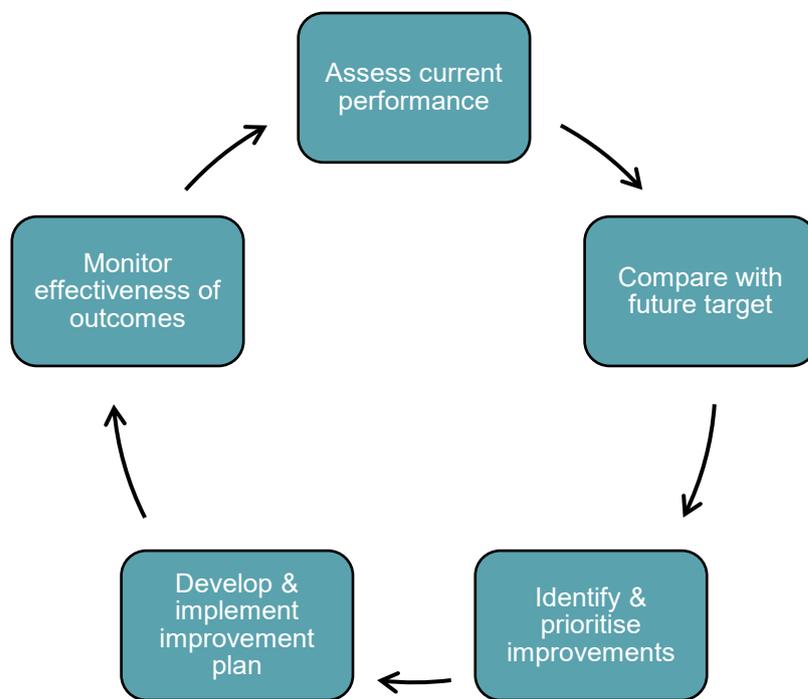


Figure 18: Continuous improvement cycle.

11.2.2 Asset Management maturity

Asset Management (AM) maturity is often used as an assessment tool to determine whether an organisation's AM practices are appropriate for the level of risk it faces. It provides an opportunity to assess the current state of AM maturity and identify areas of improvement to bridge any existing gaps.

A careful assessment of AM maturity calls for consideration of several crucial factors associated with each asset activity area. These factors include the size, complexity, value, and the risk related to the asset. As per the guidelines in the International Infrastructure Management Manual (IIMM), the level of AM maturity must be 'appropriate' to the nature and risk associated with the activity.

The 'appropriate' AM maturity level for each of the asset activity areas that fall within the scope of this SAMP is specified in the table below. This represents a baseline from which we will strive to improve. Aiming for higher AM maturity levels aligns with our commitment to continually improve our asset management practices.

Table 30: Asset management maturity across activity areas.

Asset activity area	IIMM maturity level
Rivers and Drainage	Intermediate to Advanced
Rotorua Te Arawa Lakes	Core
Regional Parks and Coastal Catchments	Core
Maritime	Core
Property	Core

11.2.3 ISO 55002

The ISO 55000 series is recognised globally for its guidelines in asset management. It allows organisations to reach their objectives by managing their assets effectively and efficiently. Among these guidelines, ISO 55002 offers explicit directives (in Annex C) regarding the content of a typical Strategic Asset Management Plan (SAMP).

This SAMP has been developed to comply with these requirements. To showcase this, a table is included in Appendix 2, which cross-references the requirements with the corresponding sections within this SAMP where each is addressed.

Our objective is not just to tick off boxes in a compliance checklist but to meaningfully integrate the principles of the ISO 55000 suite into our asset management practices. We recognise the value and impact of strong asset management on our organisational performance. Hence, our commitment to these standards is not only about regulatory adherence but also about operational efficiency, financial performance, and above all, delivering value to the community we serve. Aligning our SAMP with the ISO 55000 standards is a clear demonstration of this commitment and sets a strong foundation for future improvements in our asset management.

11.3 Improvement plan

The purpose of this improvement plan is to document the key actions that Council can undertake to maintain and improve the AM practices that assist in optimising service provision to the community. In addition to the improvements identified through the SAMP maturity assessment, continuous improvement was a key theme during the update of this SAMP.

Fourteen improvement items were identified throughout the document and have been collated below in Table 31. Project lead and timing for each item will be determined by the Asset Management Steering Group. Improvement plans are also within each activity AMP, where improvements are specific to that activity.

Improvement – Develop project briefs for each key improvement item.

Table 31: SAMP improvement plan.

Item	Section Ref	Improvement Action	Project Lead	Hours	Timing
1	3.1	Conduct a SWOT analysis against PESTLE components. Develop strategies for SAMP to leverage strengths and opportunities, address weaknesses and mitigate threats.	TBC	80	TBC
2	3.1.1	Undertake a stakeholder analysis explicitly for the SAMP.	TBC	20	TBC
3	Part 5:	Undertake maturity assessment and/or SWOT analysis on the current AM System.	TBC	60	TBC
4	5.1	Develop an AM System Handbook to outline, describe and illustrate the scope of the Asset Management System.	TBC	40	TBC
5	5.2.1	Develop a business case to understand costs and benefits of having a centralised team to manage and improve the AM System. As part of this complete a RASCI assessment to identify AM capability and capacity needs.	TBC	40	TBC
6	0	Identify and record all key asset management processes.	TBC	100-200	TBC
7	7.1	Engage external expertise for assessing the potential impact of future demand on capital and operational expenditure across each asset activity portfolio	TBC	100-150	TBC
8	8.2.3	Develop a bespoke levels of service framework, creating consistent processes for developing, reviewing and reporting levels of service across all activities.	TBC	25	TBC
9	0	Update AM Policy to align with 2024-34 LTP and ensure AM principles inform and guide the development of revised AM Objectives.	TBC	40	TBC
10	9.3.1	Develop and implement an AM Sustainability Framework to integrate sustainability into activity asset management practices.	TBC	60	TBC
11	9.3.1	Integrate nature-based solutions into the criteria used by each asset activity area for evaluating and prioritising maintenance, renewal and new capital projects.	TBC	100-150	TBC
12	9.4.2	Implement an investment decision-making framework across all activity areas, that supports informed trade-off decisions between costs, service levels and risk in operational and capital expenditure decisions.	TBC	100	TBC
13	0	Develop project briefs for each key improvement item.	TBC	20	TBC
14	0	Develop a performance framework to monitor SAMP progress.	TBC	30	TBC

11.4 Monitoring and review

Monitoring the progress of the SAMP involves a structured review process and clearly defined roles and responsibilities. Monitoring the improvement plan ensures that the performance and progress of each improvement, as well as the effectiveness of outcomes, are monitored on an ongoing basis and reported to senior management at specific periods throughout the year.

11.4.1 Roles and responsibilities

The implementation of the SAMP and improvement plan will be actively monitored by the Corporate Planning Lead on a regular ongoing basis. Performance and progress will be reported to the OAMSG on a quarterly basis. Council acknowledges that the absence of defined metrics or indicators presents a challenge for monitoring SAMP progress. This has been identified as an area requiring improvement.

Ongoing implementation of the improvement projects and associated improvement items will be the responsibility of the identified Project Lead.

Designated staff within each asset activity area are entrusted with the day-to-day management and implementation of the SAMP. Their duties include regular monitoring of the performance in their respective areas, assessing the alignment with the SAMP objectives, and providing feedback and updates to the OAMSG.

The OAMSG has overall responsibility for the SAMP, including overseeing its creation, updating, implementation, and regular reviews. The SAMP review is scheduled to take place on an annual basis. These reviews will examine the implementation of the SAMP, track our progress against the defined objectives, and identify any areas where adjustments may be necessary. The OAMSG will present a report to the Executive Leadership Team (ELT) on this progress each year.

In addition to these internal roles, external stakeholders such as consultants and auditors may also contribute to the SAMP's monitoring and review, bringing in additional expertise and independent perspectives.

Improvement – Develop a performance framework to monitor SAMP progress.

11.4.2 Review

The SAMP is considered a live document that requires regular review and updates to ensure it continues to align with our organisational objectives, strategic direction, and changing external environment. The SAMP will be formally reviewed on an annual basis, with updates made as necessary.

The OAMSG will lead the review process, with input from the wider organisation. Improvements to the SAMP will be identified through this review process, as well as through ongoing monitoring of the SAMP's implementation and performance.

The SAMP improvement plan will be updated, and changes recorded, to reflect:

- Progress made on each improvement item,
- New information that is made available,
- Additional improvement items identified throughout the year,
- A change in desired maturity.

The SAMP improvement plan will be comprehensively reviewed at three-yearly intervals, aligning with Council's LTP planning schedule.

Appendix 1:

Key policies, plans and strategies

Council has developed various policies and works in partnership with other agencies, to fulfil its role and align its activities to other agencies and organisations throughout the region. This means that in establishing its programmes, Council must be aware of the following policies, strategies and guidelines.

Policies and guidelines

Policy/guideline name	Status
Statement of Significant Accounting Policies (LTP)	Current
Funding Impact Statement (including Rating Policy)	Current
Policy on Determining Significance	Current
Liability Management Policy	Current
Revenue and Financing Policy	Current
Policy on Partnerships between the Council and the Private Sector	Current
Erosion and Sediment Control Guidelines for Land Disturbing Activities	Current
Hydrological and Hydraulic Guidelines	Current
River Gravel Management Guidelines	Current
Environmental Code of Practice for River & Drainage Maintenance Activities	Current (to be reviewed)
Stopbank Design and Construction Guidelines	Current

Plans and strategies

Plan and Strategy name	Status
Regional Policy Statement	Operative
Regional River Gravel Management Plan	Operative
Regional Coastal Environment Plan	Operative
Regional Water and Land Plan	Operative
Waioeka-Ōtara Floodplain Management Strategy	Adopted
Whakatāne-Tauranga Floodplain Management Strategy	Staged
Rangitāiki-Tarawera Floodplain Management Strategy	Staged
Regional Plan for the Tarawera River Catchment	Operative
Kaituna River and Ongatoro/Maketu Estuary Strategy	Adopted
Kaituna Floodplain Management Strategy	Planned
Ngā Whakaaetanga-ā-Ture ki Te Taiao ā Toi Statutory	Operative
Rivers and Drainage Asset Management Plan	Operative
Infrastructure Strategy (flood protection and control works) (LTP 2021-31)	Adopted
Finance Strategy (LTP 2021-2031)	Adopted
Invest Bay of Plenty Plan	Adopted
Te Ara Whanui o Rangitāiki – Pathways of the Rangitāiki.	Adopted
Regional Parks Policy	Adopted
Kaituna River Document	Adopted

Appendix 2:

SAMP Requirements (ISO 55002)

ISO 55002 Requirements	Addressed in..
Executive summary that includes key issues, rationale and highlights of the SAMP.	Executive Summary
An overview of the organisation's context, external and internal issues, stakeholder needs and requirements and a summary of the organisational plan.	Introduction Strategic Environment Strategic Direction
Role of AM System in achieving objectives.	Asset Management System
High-level overview of the asset portfolio, capability, performance, challenges, risks and opportunities, while considering future demand.	Asset Overview, Future Demand
Strategic AM Objectives derived from organisational objectives.	Asset Management Approach
The approach for implementing the AM Policy, developing the AM Plans and AM System.	Asset Management System; Asset Management Approach, Audit & Improvement
Decision-making criteria.	Asset Management Approach
Scope of the AM System.	Asset Management System
Approach for achieving the strategic AM Objectives, at the portfolio level, to enable organisational objectives.	Asset Management Approach; Audit and Improvement
Risks, opportunities, approach, assumptions and parameters for delivering objectives.	Asset Management System; Future Demand; Asset Management Approach
Asset portfolio plan and associated financials to achieve AM objectives.	Financial Planning
Critical capabilities of the organisation and resources.	Asset Management System
Plans for creating and improving the AM System.	Asset Management System Audit and Improvement
Approach for monitoring SAMP progress.	Audit and Improvement
Roles and responsibilities for the creation, updating and implementation of the SAMP.	
Arrangements for review/update and improvement of SAMP.	

