

Date: Tuesday, 14 May 2024

Time: 1:30 pm

Location: Council Chamber, Wairoa District Council,

Coronation Square, Wairoa

AGENDA

Late Reports

Finance, Assurance & Risk Committee Meeting

14 May 2024

MEMBERSHIP: His Worship the Mayor Craig Little, Cr Jeremy Harker, Cr Denise Eaglesome-Karekare, Mr Philip Jones, Cr Benita Cairns, Cr Melissa Kaimoana

The agenda and associated papers are also available on our website: www.wairoadc.govt.nz

For further information please contact us 06 838 7309 or by email info@wairoadc.govt.nz

Order Of Business

8	Genera	al Items3
	8.1	Assets & Infrastucture Monthly Risk Update3

8 GENERAL ITEMS

8.1 ASSETS & INFRASTUCTURE MONTHLY RISK UPDATE

Author: Mike Hardie, Pouwhakarae - Hua Pumau | Group Manager Assets &

Infrastructure

Authoriser: Kitea Tipuna, Tumu Whakarae Chief Executive

Appendices: 1. WDC Service Delivery Risk Management Strategy_Draft &

2. WDC Assets & Infrastructure Risk Register Draft U

3. Capex Project Summary U

4. Revenue & Expenditure summary <a>J

PURPOSE

- 1.1 This report provides information for Committee on key risks for Council. No decisions are required by Committee at this stage.
- 1.2 This report has come to the Committee to ensure there is governance oversight on key risks across the Council, in particular the Assets & Infrastructure department, which holds the responsibility for the largest income and expenditure as well as the largest risks to Council.

RECOMMENDATION

The Pouwhakarae - Hua Pumau | Group Manager Assets & Infrastructure RECOMMENDS that Committee receive the report, and provide direction as required.

2. BACKGROUND

- 2.1 Council's core function of managing assets & infrastructure has the inevitable presence of risks.
- 2.2 Monthly updates are required to the Committee to ensure that there is governance oversight on managing these risks.
- 2.3 In 2022, a risk management strategy and risk register for the Assets & Infrastructure department was developed and intended to be used as the key risk process going forward for this department. Please see attachments 1 & 2 for further details on this (please note this is based on 2022, further updates to be provided in coming months).
- 2.4 Although this process is in place, it was not officially adopted, and sits in draft format. In order for this process to become embedded in Council, it needs to be adopted, officers need to use it, and there needs to be a governance oversight.

3. RISK REPORTING

- 3.1 Please see attached Capex Project summary (Attachment 3). This dashboard provides details surround capex projects (usually valued over \$100k), and commentary specifically around risks as well as any mitigation measures in place.
- 3.2 Please see attached Revenue & Expenditure summary (Attachment 4) for Assets & Infrastructure activities. This gives a high-level view on the financials for each activity.

Item 8.1 Page 3

3.3 Feedback required on format/details required for future reports.

Further Information

N/a

References (to or from other Committees)

For project specific details or further information, please see the Infrastructure Committee reports for the Asset & Infrastructure updates.

Item 8.1 Page 4

Project Number: 2-S5555.61

Service Delivery Risk Management Strategy

19 January 2022 CONFIDENTIAL



Recommendations Report DRAFT







Contact Details

Adele Jones

WSP Opus House 6 Ossian Street Private Bag 6019 Napier 4110 +64 6 833 5100

adele.jones@wsp.com

Document Details:

Date: December 2021 Reference: 2-S5555.62

Status: DRAFT

Prepared by Adele Jones

Reviewed by

Approved for release by Brendon Thomson



Document History and Status

Revision	Date	Author	Reviewed by	Approved by	Status

Revision Details

Revision	Details



Contents

Discla	ime	rs and Limitations	1			
1 1	Intro	oduction	2			
1	1.1	Background	2			
1	1.2	Existing risk management documentation	2			
1	1.3	Strategy purpose & scope	3			
2 1	Risk	management policy	4			
2	2.1	Approach to risk management	4			
2	2.2	Establishing the context	4			
4	2.3	Risk identification	6			
Ź	2.4	Risk assessment	6			
Ź	2.5	Risk evaluation	10			
2	2.6	Risk treatment	11			
3 5	Service risk management guidelines					
3	3.1	Risk management approach	12			
3	3.2	Identifying service risk	13			
3	3.3	Risk assessment	14			
3	3.4	Monitoring risk	15			
3	3.5	Risk registers	15			
3	3.6	Reporting risk	15			
4	Asse	t level risk assessment	16			
2	4.1	Asset risk	16			
4	4.2	Assessing asset criticality	16			
4	4.3	Determining likelihood of failure	20			
4	4.4	Determining asset level risk rating	20			
4	4.5	Reporting risk	21			
Apper	ndix	A: Asset criticality worked examples	22			
List o	f Fi	gures				
		Recommended Risk Management Scope				
		Risk ratingRecommended service risk management approach				
Figure	3-2	Service risk	12			
Figure	4-1	Asset risk	16			

List of Tables



6
6 7
8
10
10
10
13
16
17
18
ment process
18
19
19
20
20

Disclaimers and Limitations

This report ('Report') has been prepared by WSP exclusively for Wairoa District Council ('Client') in relation to Community Assets and Services risk management strategy and processes ('Purpose') and in accordance with the WDC Risk Management Strategy – Phase 2 Offer of Service dated 10 September 2021. The findings in this Report are based on and are subject to the assumptions specified in the Report. WSP accepts no liability whatsoever for any reliance on or use of this Report, in whole or in part, for any use or purpose other than the Purpose or any use or reliance on the Report by any third party.

In preparing the Report, WSP has relied upon data, surveys, analyses, designs, plans and other information ('Client Data') provided by or on behalf of the Client. Except as otherwise stated in the Report, WSP has not verified the accuracy or completeness of the Client Data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this Report are based in whole or part on the Client Data, those conclusions are contingent upon the accuracy and completeness of the Client Data. WSP will not be liable in relation to incorrect conclusions or findings in the Report should any Client Data be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WSP.



1 Introduction

Inherent with delivering a wide range of services to the community, the Wairoa District Council (WDC) is exposed to a variety of internal and external factors that add uncertainty to the successful delivery of services. These uncertainties are termed "risks" and, left unchecked, have potential to adversely affect the delivery of services.

The objective of risk management is to assess which risks pose unacceptable threats and advance plans to address them. A risk-based approach to assessment and mitigation enables WDC to make more informed, defensible decisions regarding the allocation of resources and planning future works, thereby enhancing the ability to deliver efficient and effective services.

1.1 Background

While WDC's leadership and management have established and documented a risk management policy and framework, implementing good risk-based asset management practice and decision-making at a service delivery level can be a challenge.

Over the last 18 months, WSP have been engaged by Wairoa District Council (WDC) to support the improvement of risk management practices for infrastructure-based services and activities. The process to date has included:

- Review of current risk management practices
- Workshops with staff to help understand the principles of risk management and highlight key risks they are aware of
- Development of a Draft Service Delivery Risk Management Strategy to support the improvement process
- Implementation of the corporate risk management policy through development of updated Activity Risk Registers

1.2 Existing risk management documentation

1.2.1 Corporate risk management policy (2017)

Council adopted a Risk Management Policy on 5 December 2017. This is a Council-wide policy overseen by the Chief Executive Officer. Staff, contractors, and elected members have a shared role to play in the identification, reporting and management of risk through risk management processes being integrated with planning processes and embedded in management activities.

1.2.2 Risk management framework review (2018)

Council previously commissioned a Risk Management Framework Review, completed by Crowe Horwath in March 2018. A full report was provided to Council including improvement recommendations for future implementation. It is not known if these recommendations have been implemented.

1.2.3 Corporate risk register template (2021)

A Corporate Risk Register template spreadsheet was provided as an input into the CAAS risk review. This template provided a revised "Consequence Table" to be used instead of the 2017 Policy Appendix 2: Consequence Levels. The key consequence categories are:

- Human
- Financial
- Regulatory
- Operations
- Employees
- Image and Reputation

1.2.4 Activity management plans & risk registers (2021)

Risk management features in all current Activity Management Plans (AMPs). However, the existing Risk Registers are out of date (last reviewed in 2017) and a key improvement item of the AMPs is to complete a review of risk management processes for all Activity areas.

1.3 Strategy purpose & scope

This Service Delivery Risk Management Strategy builds on the Draft Service Delivery Risk Management Strategy documented in July 2020.

The key objective of this Service Delivery Risk Management Strategy is to take WDC's existing foundational risk management framework components and apply it in our individual Service Areas in a way that provides value.

A further objective is to improve WDC team's knowledge and capability for practically based risk management.

As we have worked to implement the Risk Policy and incorporate risk into our Service Delivery approach, it has become apparent that further guidance is required on how to apply the policy and manage risk in practice.

The scope of this Strategy includes:

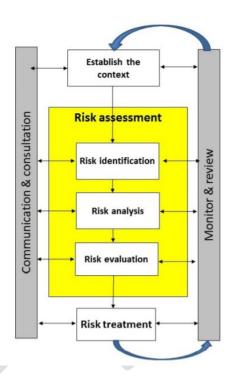
- **Risk Management Policy:** recommended changes to WDC's Risk Management Policy, which provides overarching principles and approach to risk management.
- Service Delivery Risk Management Guidelines: how the Policy can be applied to risk management approach for Service level risk management.
- Asset Criticality: how critical assets are identified and managed and develop a consistent way
 of assessing criticality.

2 Risk management policy

2.1 Approach to risk management

WDC's current corporate Risk Management Policy (adopted in 2017) defines an approach to recognise and manage the risks that have the greatest potential to affect Council's organisational objectives and the four well-beings: social, economic, environmental and cultural. WDC's risk management process (shown to the right) is based on the international standard for risk management, ISO 31000.

This policy has been used as the basis for completing the review of risk and development of Risk Registers for Community Assets and Services (CAAS). In implementing the policy principles and guidelines, we have found there are a number of opportunities for enhancement and clarification within the policy. This section provides key outcomes and recommendations from the CAAS risk review process.



2.2 Establishing the context

ISO 31000 outlines the need to clearly establish the scope, context and criteria for risk management activities. Establishing the risk management scope within an organisation is essential for outlining how the risk management process will be managed at different levels within an organisation, and risk registers can be structured accordingly.

The current policy outlines the risk context (levels of risk) in two key areas:

- Section 5 Roles: This section outlines the "Three Lines of Defence" approach to responsibilities for risk management.
- Section 6 Types of Risk: This section describes a prioritised approach to understanding the types of risk that WDC needs to identify, manage and report.

Risk levels are discussed with differing terminology throughout these sections.

2.2.1 Levels of risk

Section 6 of the policy describes levels of risk (Types of Risk) as:

- **Strategic:** generally emanate from WDC's strategic activities, systems and processes and would impact or impede achievement of WDC's strategies
- Tactical: generally emanate from key project activities, systems and processes and would impact or impede achievement of project objectives
- Operational: generally emanate from business unit and team activities, systems and processes and would impact achievement of specific business unit objectives

This section of the Policy also includes a further table that expands on this by providing four broad categories of risk, and types of risk within each category:

- Operational: potential losses or adverse impacts resulting from inadequate or failed internal processes, people and systems or from external events, excluding strategic risks
- Asset: the potential of financial loss or adverse impacts arising from WDC's assets
- Financial: the potential for loss or adverse impacts resulting from WDC's finance activities

• Council: the potential for loss or adverse impacts arising from poorly designed and implemented strategies, business decisions or improper implementation of those business decisions, unforeseen events beyond the Council's control, lack of or ineffective planning, lack of responsiveness to change, ineffective governance, external factors and changes.

Providing two different ways of defining the levels/categories of risk may lead to potential misunderstanding or inconsistent application across council. It may also lead to overlaps and/or gaps in risk management due to unclear alignment with roles and responsibilities

2.2.2 Roles

Three key levels of risk identification and management are established through roles and responsibilities as follows:

- First line of defence Council Staff: Risks reported to line managers
- Second line of defence Senior management: Risks reported to the Chief Executive and the senior management team
- Third line of defence internal audit: Risks reported to the Finance, Risk and Audit Committee

These generally align with the three types of risk indicated above, being Operational, Tactical and Strategic.

2.2.3 Recommendations

Recommendation 1: Clarify risk management scope

It is recommended that the policy states WDC's scope for risk management by clearly articulating the risk management structure (levels of risk) applied within the organisation. The International Infrastructure Management Manual (IIMM) 2020, outlines a three-tiered risk management structure similar to Figure 2-1. It is recommended that a risk management structure overview diagram be included in the policy to show the risk management scope, including key levels of risk and key responsibilities at these levels. Sections 5 and 6 of the policy can then be aligned and use consistent terminology.

Figure 2-1 Recommended Risk Management Scope

Risk Levels	Description	Informs	Responsibility
CORPORATE RISK Organisational level risks	Highest level covers risks for the entire organisation (e.g. WDC's strategies, business decisions)	Guides organisational policy & strategies	Finance, Audit & Risk Committee; Senior Management Team
SERVICE RISK Activity or asset-portfolio level risks	Considers risks from all perspectives affecting service delivery for an activity	Guides service strategies & plans Key input into works programmes	Team Leaders / Line Managers
OPERATIONAL RISK Operational or asset- specific level risks	Specific process risks (e.g. H&S), critical asset risks, project risks, specialised assessments for specific needs (e.g. Water Safety Plans, Seismic Assessments)	Guides specific actions Key input into Standard Operating Procedures	Operations & Technical staff

2.3 Risk identification

2.3.1 General guidance

The policy provides general guidance on risk identification, indicating that risks may be identified through a variety of means. The policy indicates there is a High-Level Risk Register (Section 5.4) to identify, assess, and monitor risks significant to the Council, but it does not clearly indicate how other levels of risk are identified and reported.

2.3.2 Recommendations

Recommendation 2: Align risk types to risk management scope

Using the risk structure as the basis for identifying risks ensures that risks are identified at all levels of the organisation. It is recommended that Risk Types in Section 6 be aligned to the three levels of risk indicated in the Risk Management Scope.

Recommendation 3: Clarify risk register requirements

To clarify how risk is managed at different levels of the organisation, it is recommended that risk registers be structured to align with the three levels in the risk management scope. The High-Level Risk Register (Section 5.4) will be used at the Corporate Risk level. Other Risk Registers will be used at Service Risk level (see Section 3) and Operational Risk level.

The risk registers should be used consistently across each level of the risk management scope, to enable comparison and prioritisation of risks at that level.

2.4 Risk assessment

2.4.1 Likelihood

Appendix 1 of the Policy provides descriptions for the Probability/Likelihood Levels as shown in Table 2-1.

Table 2-1 Existing probability / likelihood levels

Level	Description
1 Likely	 The event will probably occur in most circumstances; or Not quarterly but within 6 months. 70% chance of occurring in the next 12 months
2 Moderate	 The event will possibly occur at some time; or Not within 6 months but at least annually. 50% chance of occurring in the next 12 months
3 Rare	 The event could occur sometime; or Not annually but within 3 years. 20-30% chance of occurring in the next 12 months
4 Very Rare	 The event may occur only in exceptional circumstances; or Not every 3 years but at least every 10 years. 10-20% chance of occurring in the next 12 months
5 Unanticipated	 The event is not expected to occur; or Not within 10 years. 2% chance of occurring in the next 12 months

There are a number of aspects of this table that are unclear:

- Level Names: the naming convention for likelihood levels does not align with general risk
 guidelines and there is some discrepancy between the names and descriptors in terms of
 how often the event may occur e.g. a Rare event may happen every 2-3 years.
- Scoring: appears to be around the wrong way, with the highest score (5) against Unanticipated and the lowest score (1) against Likely.

• **Descriptors:** for each level are a mix of qualitative and quantitative descriptions. While this is appropriate, the different descriptors within each level do not necessarily align.

2.4.2 Consequence

Appendix 2 of the Policy provides descriptions for the Consequence Levels based on seven different categories:

- Health & safety
- Environmental contamination
- Statutory obligations
- Image & reputation
- Loss of service
- Project delay
- Financial loss

However, a revised consequence matrix has been provided by Council, that has been used in more recent organisational risk assessments, which has refined this to:

- Human
- Financial
- Regulatory
- Operations
- Employees
- Image & Reputation

In revising these consequence categories, there is no longer a clear link to 'Loss of Service' or 'Environmental' consequences.

2.4.3 Recommendations

Recommendation 4: Revised likelihood levels

It is recommended that the Likelihood descriptors in the Policy be revised as outlined in Table 2-2. This table uses common descriptors for Likelihood used in risk management guidelines.

Table 2-2 Recommended likelihood levels

Likelihood	Level	Description
Almost Certain	5	At least annually 70-90% chance of occurring in the next 12 months
Likely	4	Not within 1 year but at least every 2 years 50% chance of occurring in the next 12 months
Possible	3	Not every 2 years but at least every 5 years 30% chance of occurring in the next 12 months
Unlikely	2	Not every 6 years but at least every 10 years 10% chance of occurring in the next 12 months
Rare	1	Not within 10 years <5% chance of occurring in the next 12 months

Recommendation 5: Revised consequence levels

It is recommended that the Consequence descriptors in the Policy be revised as outlined in Table 2-3. This table uses includes categories against each of the four well-beings.

Table 2-3 Recommended consequence ratings

					Categories				
Community				Social			Economic	Environmental	Cultural
Well-beings	10		Safe, su	Safe, supported and well led community	d community		Strong and prosperous economy	Protected and healthy environment	Valued and cherished culture
Consequence Description	υ _	Human	Employees	Operations / Service Delivery	Image & Reputation	Regulatory	Financial	Environment	Culture
Catastrophic	N	More than one death (Wide-spread illness with more than one death)	A large number of senior managers or experienced employees leave the Council.	Total disruption to all Council operations or services. Significantly affects key community services. e.g. Total Business Disruption for >1 month.	Damage to reputation at national level, raised in national media. Major loss of stakeholder, political or community support. The Council under or potentially under administration of central government.	Serious regulatory breach or multiple significant breaches resulting in regulatory scrutiny. Restrictions on activity or responsibilities of Council. Action taken against management or Councillors.	Direct loss or increased cost of over \$1M	Serious environmental damage of national importance. Prosecution. Long term study. Impact not fully reversible.	Extremely serious impact on cultural values.
Major	4	One death (Significant illness with one death)	Increasing senior managers or experienced employees leave. Significant turnover of experienced employees. Widespread employee attitude problems.	Serious disruption to operations or services. Adversely affects multiple key groups. e.g. unable to operate for up to 1 month	Adverse news in regional media. Serious decrease in stakeholder, Council or community support.	Significant regulatory breach or systemic minor breaches. Reportable breach and action is possible - significant fines, audits/inspections or undertakings. Possible action taken against management.	Direct loss or increased cost of ~\$100K to \$1M	Serious environmental damage of national importance. Prosecution expected. Impact reversible within 5 years.	Major impact on cultural values.
Moderate	M	Injury or hospitalisation (Serious injury or illness requiring hospitalisation)	General employee morale or attitude problems in business area. Significant	Disruption of operations or services. e.g. unable to operate	Adverse news in the local media (paper/newspaper/TV Social medial/networking)	Multiple related minor regulatory breaches. Possibility of some fines. Systemic issue. Small financial	Direct loss or increased cost of ~\$50K to \$100K	Serious environmental damage of local importance. Prosecution probable. Impact	Moderate cultural impact on values.

Project Number: 2-S5555.62 Sewice Delivery Risk Management Strategy Recommendations Report

				Categories				
Community			Social			Economic	Environmental	Cultural
Well-beings		Safe, su	Safe, supported and well led community	d community		Strong and prosperous economy	Protected and healthy environment	Valued and cherished culture
Consequence Description	Human	Employees	Operations / Service Delivery	Image & Reputation	Regulatory	Financial	Environment	Culture
		employee turnover in unit area.	for up to a fortnight.	stakeholder, Council or community support.	impact to citizens. Reportable breach.		fully reversible in 1 year.	
Minor 2	Causes time off work to staff or community member (Minor injury)	General employee morale and attitude problems. Increase in employee turnover.	Minor disruption to operations or services. e.g. unable to operate for 1 day - 3 days	Adverse news in local media. Concerns of performance raised by stakeholders or the community.	Minor regulatory breaches occur, first of its kind, one-off issues. Minimal loss to citizens.	Direct loss or increased cost of -\$10 to \$50K	Material environmental damage of local importance. Impact fully reversible within 3 months.	Minor impacts on cultural practices.
Insignificant	Report of an incident or near miss (no injury)	Negligible or isolated employee dissatisfaction.	Minimal disruption to operations or services. e.g. unable to operate for less than 1 day	Reference to community consultation group/forum. Public awareness may exist but no public concern.	Small, non- systematic and/or technical regulatory breaches occur. No impact to citizens.	Direct loss or increased cost of up to \$10K	Negligible impact on environment. Reversible within 1 week.	Negligible impact on cultural practices.

2.5 Risk evaluation

The Policy outlines (Section 4.1 Step 4) that "the level of risk is calculated by multiplying the Probability/Likelihood of the risk occurring with the Consequence or Impact Levels. The final outcome is the risk rating". This is depicted in Table 2-2.

Figure 2-2 Risk rating



2.5.1 Levels of risk

Appendix 3 and 4 of the Policy include the Levels of Risk and the Risk Matrix respectively. The four levels of risk are shown in Table 2-4. The risk matrix is shown in Table 2-5.

Table 2-4 Policy levels of risk

Comp	arative levels of Risk	
Е	Extreme Risk	Immediate action required to manage risk - reported to Council
Н	High Risk	Senior management attention to manage risk - reported to FARC
М	Considerable Risk	Management responsibility must be specified and risk controls reviewed
L	Low Risk	Managed by routine procedures

Table 2-5 Policy risk matrix

		Consequence						
Likelihood		Insignificant	Minor	Moderate	Major	Catastrophic		
		1	2	3	4	5		
Almost Certain	5	М	Н	Е	Е	Е		
Likely	4	М	Н	Н	Е	Е		
Possible	3	L	М	Н	Е	Е		
Unlikely	2	L	L	М	Н	Е		
Rare	1	L	L	М	Н	Е		

It can be seen that the Risk Matrix does not align with the Risk Evaluation methodology in the Policy (i.e. risk rating not consistent with Likelihood x Consequence). This matrix favours the Consequence of the risk over the Likelihood, by rating all risks with Catastrophic consequences as Extreme risks regardless of their likelihood.

2.5.2 Recommendations

Recommendation 6: Revised risk rating matrix

It is recommended that the risk matrix be revised to present a more balanced approach based on scoring (i.e. Likelihood score x Consequence score) as shown in Table 2-6 and Table 2-7.

Table 2-6 Recommended risk level descriptions

Risk Level		Risk Score	Risk Tolerance	Action Required	Risk Acceptance Authority	
	E	Extreme	17 - 25	AVOID Risk cannot be tolerated	Urgent attention at most senior level. Immediate corrective actions to mitigate risk should be taken, where possible	Council

Risk Level		Risk Score	Risk Tolerance	Action Required	Risk Acceptance Authority
н	High	MITIGATE Risks should be 10 - 16 prioritised. Risk not acceptable without treatment. Mitigation plan must be in place within a month Risk reviewed monthly		Finance, Audit & Risk Committee	
М	Medium	5 - 9	MONITOR Risk can be tolerated, but requires active management	Mitigation plan may be considered Risk reviewed quarterly	Management
L	Low	1 - 4	ACCEPT Risk can be tolerated	Manage through routine procedures Risk reviewed annually to determine whether risk has changed	All Staff

Table 2-7 Recommended risk rating matrix - scoring

				Consequence			
Likelihood		Insignificant	Minor	Moderate	Major	Catastrophic	
		1	2	3	4	5	
Almost Certain	5	5 Medium	10 High	15 High	20 Extreme	25 Extreme	
Likely	4	4 Low	8 Medium	12 High	16 High	20 Extreme	
Possible	3	3 Low	6 Medium	9 Medium	12 High	15 High	
Unlikely	2	2 Low	4 Low	6 Medium	8 Medium	10 High	
Rare	1	1 Low	2 Low	3 Low	4 Low	5 Medium	

2.6 Risk treatment

Appendix 3 of the Policy provides guidance on overarching actions for the various risk ratings. While these are appropriate, further clarification on Council's risk tolerance would be beneficial.

Recommendation 7: Revised risk level descriptions

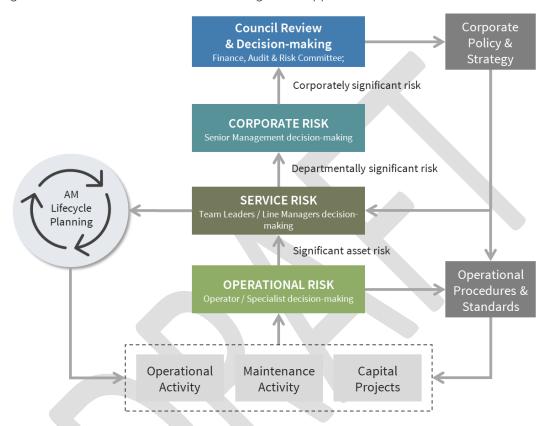
For each risk level, include details of risk tolerance, action required and risk acceptance authority as shown in Table 2-6 above.

3 Service risk management guidelines

3.1 Risk management approach

Further to the risk management scope established in the Risk Management Policy as recommended above, Figure 3-1 provides an approach that shows how Service Risk relates to Operational Risk (including asset specific risks) and asset management lifecycle planning and delivery.

Figure 3-1 Recommended service risk management approach



This Strategy covers two key levels of risk that CAAS are responsible for managing:

- Service Risks: those risks that impact WDC's ability to deliver the service to customers.
- Asset Risks: these are a type of Operational level risk that are associated specifically with the failure of assets or components required to deliver the service. The approach for assessing Asset level risk is detailed in Section 4.

3.1.1 Service risk

Service level risk ratings are determined by assessing the risk event's impact to service delivery and the likelihood of it occurring, as summarized in Figure 3 2.

Figure 3-2 Service risk

Service Risk

Impact to Service
Delivery
(Consequence)

Likelihood of
Occurence

3.2 Identifying service risk

3.2.1 Types of service risk

Looking more specifically at the second level of risk (Service Risk) described above, further levels of categorisation help to ensure all risks are identified.

It is recommended that this is further categorised for Service Risks as detailed in Table 3-1.

Table 3-1 Service risk areas & types

Risk Areas	Description	Risk Types		
Planning	Risks resulting from changes in the community	Strategic planning		
	and demand for services. Includes changing demographics, growth, service expectations, and	Asset management planning		
	risks arising from changing strategic direction and	Service levels		
	priorities of the organisation.	Demand		
Regulatory	Risks resulting from changes to rules governing	Compliance		
	service delivery such as regulations and compliance requirements of applicable legislation,	Changing legislation		
	laws, and bylaws.	Public health		
		Health & safety		
Management	Risks resulting from broken, inadequate or failed	Systems & Technology		
	corporate processes, people, tools, and management systems. Also includes financial	Data & information		
	risks such as those arising from service	People		
	affordability, external cost factors such as the price of goods and services, and escalating cost.	Financial		
Delivery	Risks related to procurement and contracting of	Procurement		
	services, continued availability of resources, communication with stakeholders etc.	Project Management		
	confindincation with stakeholders etc.	Contract Management		
		Communication		
Physical Asset	Risks related to the condition of assets,	Condition		
	unexpected failures, use of the assets, changes in natural systems, etc.	Lifespan		
	Haturar systems, etc.	Asset failure		
Environmental	Risks related to specific hazard events and	Natural hazards		
	incidents that impact the delivery of service (e.g. natural hazards, industrial accidents, fires,	Climate change		
	terrorism, flooding, earthquakes, etc.).	Environmental Damage / Impact		

3.2.2 Level of risk detail

A key consideration in identifying and recording risk is the appropriate level of detail. Given that **Service Risks** are activity or asset-portfolio level risks, the level of detail should focus on how risks affect service delivery for an activity.

Service Risks will identify general risks impacting service delivery, for example "bridge failure due to structural collapse", along with appropriate mitigations for the whole bridge network, such as 5 yearly structural inspections. If bridge failure is considered a high risk, then Asset Risk assessment based on asset criticality can be used to identify the highest risk bridges, which can be elevated to Service Risk level and included in the Service Risk register. Any more detailed individual bridge risk assessment will be held in the appropriate Asset Management Information System (e.g. RAMM) and supporting analysis reports.

3.3 Risk assessment

The Risk Management Policy (Section 4.1 Step 3: Risk assessment) indicates that risk assessment should take place at three stages:

- Stage 1: Inherent risk (or gross risk) the risk exposure prior to any management controls being put in place
- Stage 2: Managed risk (or current risk) the risk exposure with the current level of management controls
- Stage 3: Residual risk when no further controls are required and the risk is tolerance

For Service Risk assessment it is recommended that the Current Risk and Residual Risk be assessed and documented in the Service Risk Register.

3.3.1 Current risk

The Current Risk is the risk exposure with the current systems, processes or resources that are in place to manage the risk event. Comparison of the Current Risk against maximum acceptable risk (see Table 2-6) identifies where further improvement actions, or treatments, are required to reduce current risk levels.

Risks identified are broken down into three key components:

- Risk description
- Cause of the risk
- Impact (or consequence) of the risk

Risks should be assessed using the Likelihood and Consequence ratings in the Policy (see Section 2.4) and an overall Risk Rating assigned (see Section 2.5). Where possible the assessment should be backed up by available data, studies, consultation outcomes etc. An example Current Risk assessment is shown below.

Activi	ctivity Risk Register Template					Current Risk Assessment				
Risk ID	Risk Area	Risk Type	Risk	Cause	Impact (Consequence)	Consequence		Initial Risk		Current controls (any <u>existing</u> policy, procedures, etc)
1	Physical Asset	Asset failure	failure causing road closure		Inaccessibility and/or delays disrupting service for 1-5 days; Repair costs of \$100k to \$1M for repair	3	4	12	High	Critical asset assessment process to identify critical assets

3.3.2 Residual risk

Residual Risk is the risk remaining after the proposed risk treatment strategies have been undertaken. After identifying and mitigating the risks that are unacceptable to WDC (i.e. treat them), all risk will not be completely eliminated therefore some level of risk (Residual Risk) will remain.

Risk Treatment Strategies			Residual Risk Assessment				Risk Reduction		
Action Required Mitigation Plan	Status	Likelihood	Consequence	Residual Risk	Risk Assessment	Risk Reduction	Mitigation Cost (\$000)	Risk Reduction / Cost Ratio	
Other structures condition inspections of critical assets; Development of a forward works programme for maintenance and renewals; Emergency procedures for road closures	Inspection schedule developed	2	4	8	Medium	4	\$10	0.40	

Risk reduction details the level of benefit that can be attained from risk mitigation. The level of risk reduction that is being targeted is based on a combination of the cost to reduce or mitigate the issue and WDC's risk tolerance. Risk tolerance being the maximum acceptable risk, for a given issue. Risk reduction is helpful as it provides insights into the level of improvement that can feasibly be achieved with the level of funding available.

In some cases risk mitigation costs are unknown and risk reduction analysis will not be able to be undertaken.

3.4 Monitoring risk

The CAAS team will need to periodically review the risk assessment process, the Risk Register and the risk procedure to ensure it is up-to-date and reflects the external factors, internal organisational challenges, and current business. Each risk identified has a review frequency depending on the current risk level and tolerance.

How will Risk and Control be Monitored									
Department	Owner	Frequency of review	Date updated						
Land Transport	Transport Asset Manager	Quarterly	14/10/2021						

3.5 Risk registers

3.5.1 Revised risk register template

A Service Risk Register tool has been developed to support effective identification and assessment of service level risks. The risk register is a MS Excel workbook and should be simple for all staff to use.

It is recommended that the risk identification and assessment process is undertaken in a workshop format, bringing together key staff associated with the service from all levels of the organisation.

Once the 'Consequence' and 'Likelihood' ratings are entered, the sheet will automatically populate the risk score and risk rating, based on the risk rating matrix in Table 2-7.

3.6 Reporting risk

CAAS management team are required to report all risks with a High or Extreme risk rating to the Finance, Audit and Risk Committee. This will include providing a summary regarding the key threats and/or opportunities identified during the risk identification and assessment process.

As shown in Figure 3-1, all Service Risks will feed into asset lifecycle planning. This will include implementing the risk mitigation measures. It is also CAAS management team's responsibility to:

- keep track of identified risks
- monitor residual risks
- identify, analyse, and plan risk responses for newly arising risks.

4 Asset level risk assessment

4.1 Asset risk

Asset level risks are determined by assessing the criticality of an asset to service delivery and the likelihood of asset failure as shown in Figure 4-1.

Figure 4-1 Asset risk



The criticality of an asset is the inherent consequence of the loss of its function, including its impact on the function of a system or network of assets. While the loss of some assets or components may have little impact on service delivery and negligible risk of injury, the loss of others may severely impact services and may lead to fatalities or heavy financial losses.

4.2 Assessing asset criticality

Asset Criticality is the inherent consequence of the loss of asset function, including its impact on the function of a system or network of assets.

To assess the criticality of an asset the following three factors are considered:

- **Service Importance:** The importance of core asset groups providing the service to the community. This essentially considers the effect on the community of losing service provision.
- Functionality: Reflects how important the specific asset is to the functionality of the core asset groups providing the service. It answers the question: What is the impact on the service if the asset fails?
- **Down-time:** The time to return the asset to full non-temporary capacity (full service restored). It includes design, procurement of a replacement asset, construction or installation.

The Asset Criticality equation is shown below.

$$C_a = I_s * F_a * D_a$$

Where:

 C_a Criticality of an asset

 $I_{\rm s}$ Importance of the core asset groups providing service to the community

 F_a Functionality of core asset group providing service if the asset fails

 D_a Downtime of the asset before functionality is restored if failure occurs

4.2.1 Service importance

The Service Importance (I_s) rating reflects how important the service is to the community, and its impact on Council's wider business operations, if the asset is unable to provide the service.

To assess the importance of core asset groups providing key services in each Service Area, we recommend considering four importance factors that are directly linked to Council's four Wellbeing's as defined in Table 4-1.

Table 4-1 The factors considered when assessing the importance of a service

Importance Factor	Description
Oranga Social	How the service supports a safe, supported and well led community.

Importance Factor	Description
Ōhanga Economic	How the service contributes to a strong and prosperous economy.
Taiao Environmental	How the service supports a protected and healthy environment.
Ahurea Cultural	How the service supports a valued and cherished culture.

To allow the Service Importance (Is) rating to be assessed, we have developed a matrix in Table 4-2 based on the Importance Factors above. These also align with the risk consequences from WDC's Risk Management Policy.

Table 4-2 The importance scoring system

Importance	Importance Score				
Factor	1 (Low Importance)	2 (Moderately important)	3 (Important)	4 (Highly important)	5 (Extremely important)
Oranga Social	Not applicable OR Service of importance to small group of local community AND/OR provides minimal contribution to safety AND/OR limited public awareness of service related issues	Service of importance to multiple local community groups AND/OR contributes to minimising minor injury AND/OR service failure results in localised dissatisfaction	Service of importance to multiple key community groups AND / OR contributes to minimising risk of serious injuries or hospitalisation AND / OR service failure results in negative community media coverage	Service of district wide importance AND / OR contributes to minimising serious injury / death or significant illness AND / OR service failure results in negative regional media coverage	Service of district wide, regional & national importance AND / OR contributes to ensuring no deaths (> 1) or widespread illness AND / OR Service failure results in sustained negative national media coverage
Ōhanga Economic	Not applicable OR economic contribution AND / OR financial loss / cost impact <\$10,000	Minor economic contribution AND / OR financial loss / cost impact >\$10,000 <\$50,000	Moderate economic contribution AND / OR financial loss / cost impact >\$50,000 <\$100,000	High economic contribution AND / OR financial loss / cost impact >\$100,000 <\$1,000,000	Significant economic contribution AND / OR financial loss / cost impact >\$1,000,000
Taiao Environmental	Not applicable OR negligible impact on environment. Reversible within 1 week.	Material environmental damage of local importance. Impact fully reversible within 3 months	Serious environmental damage of local importance. Prosecution probable. Impact fully reversible in 1 year.	Serious environmental damage of national importance. Prosecution expected. Impact reversible within 5 years	Serious environmental damage of national importance. Prosecution. Long term study. Impact not fully reversible
Ahurea Cultural	Not applicable OR has negligible impact on cultural practices	Minor impacts on cultural practices	Moderate impact on cultural values	Major impact on cultural values	Extreme impact on cultural values

When selecting a specific rating, it is useful to justify the rating selection. This facilitates consistency between the different groups inputting data, and between core asset groups and Service Areas. Justification notes also provide insight to later updates. A full worked example has been included in Appendix A.

Once the individual importance factor ratings have been assessed, the importance of the service is calculated by summing the ratings provided for each of the four categories. Then to maintain the overall 5-point rating system, the total Service Importance rating score I_s is assessed, using the score bands detailed in Table 4-3.

Table 4-3 The overall importance rating (Is) score bands

Importance Rating	Importance Description	Score Bands		
5	Extremely important	Score >= 15		
4	Highly important	Score >= 12 and < 15		
3	Important	Score >= 8 and < 12		
2	Moderately important	Score >= 5 and < 8		
1	Low Importance	Score < 5		

In Table 4-4 we have completed an initial assessment of the Importance Factor Rating for suggested core asset groups in each Service Area. These are the highest asset level delivering key services within each Service Area, which provides a sufficient differentiation for decision-making purposes.

Table 4-4 Importance rating for core asset groups considered in the criticality assessment process

Service Area	Core Asset Group delivering	Im	portan	ce Facto	ors	O	Service
	key Services	Economic	Social	Cultural	Environmental	Importance Score	Importance of core asset group (I _s)
Land Transport	Road Pavements	5	5	4	3	17	5
	Bridges	5	5	3	2	15	5
	Other Structures	4	3	2	3	12	4
	Drainage	4	3	2	3	12	4
	Traffic Services & Lighting	2	3	2	1	8	3
	Footpaths & Cycleways	2	3	2	1	8	3
	Car Parking	2	2	2	2	8	3
Airport	Operational Airstrip	3	4	1	1	9	3
	Sealed Runway	3	3	1	1	8	3
	Edge Lighting	2	2	1	1	6	2
	Terminal Building	2	2	1	1	6	2
Built Spaces	Corporate Property	4	4	3	2	13	4
	Community Facilities	2	3	4	2	11	3
	Pensioner Housing	2	3	2	1	8	3
Open Spaces	Parks & Reserves	1	3	2	1	7	2
	Public Toilets	1	3	1	3	8	3
	Cemeteries	1	3	4	4	12	4
Waste	Landfill	3	3	3	5	13	4
Management	Recycling Centre	2	2	2	4	10	3
	Weighbridge	1	1	1	2	5	2
Water Supply	Intake	3	4	2	4	13	4
	Trunk Main Supply & Pipeline	3	4	2	4	13	4
	Treatment Plant	3	5	2	5	15	5
	Storage Tanks / Reservoirs	3	5	2	5	15	5
	Reticulation	3	5	2	4	15	5
Wastewater	Underground Network	3	5	2	4	15	4
	Pump Stations	3	5	2	4	15	4

Service Area	Core Asset Group delivering	Im	portan	ce Facto	ā	Service	
	key Services		Social	Cultural	Environmental	Importance Score	Importance of core asset group (I _s)
	Wastewater Treatment Plants	3	5	2	5	15	5
Stormwater	Reticulation	3	5	2	4	15	5
	Manholes & Sumps	2	4	2	4	12	4
	Stormwater Channel	2	3	2	3	10	3
	Stormwater Outlets	2	3	2	3	10	3
	Open Drains	2	3	2	3	10	3

4.2.2 Asset functionality

The functionality (F_{α}) rating reflects how important the function of the specific asset is to functionality of the core asset groups delivering key services in Table 4-4. It answers the question: What is the impact on the core asset group delivering the service if this asset fails?

By reviewing the functionality, the consequence of the specific asset failing can be assessed independent of the wider service importance assessment.

When assessing the functionality, the following should be considered:

- The level of redundancy in the core asset group to deliver the service with negligible impact;
- The ability to provide the service through alternative means, should it be required.

The rating metrics for asset function are included in the Table 4-5.

Table 4-5 The functionality rating system

Functionality Rating	Impact of Asset failure on Service
5	Total loss of service.
4	The service is severely impaired, but it can be delivered at a significantly reduced level.
3	The service is moderately impaired, but it can be delivered at a reduced level.
2	The service is impaired, but it can be delivered at a significant proportion of functionality.
1	No impact or very minor impact on service delivery.

4.2.3 Asset downtime

Duration that the asset will be "down", until return of the asset to full capacity, if it fails. It answers the question: **How quickly can the asset be repaired/replaced?** When assessing the downtime, the following should be considered:

- The time to procure a replacement including permitting, design, contracting and construction;
- The possibility that the service can be provided using alternative methods

Table 4-6 The downtime rating system

Downtime Rating			
5	Months (2 months or more)		
4	Up to a month		

Downtime Rating	Duration until Asset returns to full capacity if failure occurs		
3	Up to a week		
2	1 day - 3 days		
1	Less than 1 day		

4.2.4 Overall criticality rating

To obtain the overall Asset Criticality score, the importance, functionality and the downtime results are multiplied. The result of the multiplication is then used, based on the score bands detailed in Table 4-7, to assess the overall Asset Criticality rating.

Table 4-7 The overall criticality rating assessment bands

Overall Asset Criticality Rating	Asset Criticality Description	Score Bands
5	Extremely critical	Score ≥ 61
4	Highly critical	Score ≥ 46 and ≤ 60
3	Critical	Score ≥ 21 and ≤ 45
2	Moderately critical	Score ≥ 11 and ≤ 20
1	Low criticality	Score ≤ 10

To demonstrate the process, we have included scenarios for three different Asset Groups and provided worked examples. These worked examples are included in Appendix A.

4.3 Determining likelihood of failure

Using the ranking descriptions in Table 4-8, determine the likelihood of asset failure for each asset type being assessed. The remaining useful life can be used in the first instance, where data is available.

Table 4-8 Likelihood of failure ranking

Likelihood	Level	Description
Almost Certain	5	Remaining useful life is less than 2 years. Assets are in very poor, unacceptable condition and should be replaced or rehabilitated.
Likely	4	Remaining useful life is between 2 and 4 years. Assets are in poor condition and mostly below standard, with many elements approaching the end of their service life.
Possible	3	Remaining useful life is between 4 and 6 years. Assets are in fair condition and will be subject to mid-life interventions.
Unlikely	2	Remaining useful life is between 6 and 10 years. Assets are in good condition.
Rare	1	Remaining useful life is greater >10 years. Assets are generally in very good condition, typically new or recently rehabilitated

4.4 Determining asset level risk rating

Based on the asset criticality and likelihood of failure, the spreadsheet tool will calculate a risk index score and assign a risk rating to each asset type.

The Asset Risks should be rated consistent with the Policy as recommended in Table 2-6 and Table 2-7.

4.5 Reporting risk

Report the asset level risk ratings in applicable asset inventory database against each asset.

During asset investment decision-making, consider how asset level risk will be incorporated into operations and maintenance prioritisation, and into asset renewal and rehabilitation options analysis and prioritisation.



Appendix A: Asset criticality worked examples

Scenario One: Bridge Defect

Scenario: There is a major defect in bridge located on a key route, such that all light traffic needs to be diverted around a significant detour. The detour route is impassable for Heavy traffic and the detour is not economically viable.

Service Area: Land Transport

Asset: Bridge



Step 1 Service Importance

Importance Factors	Ratings	Assumptions
Social (Oranga)	5	Service of district wide & regional importance and contributes to ensuring no deaths (> 1)
Economic (Ōhanga)	5	Asset essential to movement of freight with significant economic contribution to district. Financial cost impact to replace / repair >\$1,000,000
Environmental (Taiao)	2	Environmental damage limited
Cultural (Ahurea)	3	Moderate impact on cultural values
Importance Total (out of 20)	15	
Importance Score (out of 5)	5	Extremely Important
Step 2 Functionality (F _a)	5	Total loss of service functionality for heavy vehicles and a significantly reduced level of service for light vehicles via detour route.
Step 3 Downtime (D _a)	4	Assumed it will take up to a month to restore.
Step 4 Asset Criticality		
Asset Criticality Score $(C_\alpha = I_s * F_\alpha * D_\alpha)$	100	5 x 5 x 4
Asset Criticality Rating	5	Extremely Critical

Scenario Two: Library Closed

Scenario: Wairoa Centennial Library is closed due to building defects. The costs of repairs are not excessive but will take time to remedy. The facility will be closed for up to two months. Some services relocated to operate out of other Council facilities, but closure not long enough to justify temporary relocation of all services.

GREAT THINGS
GREW HERE
HAMVES BAY NEW 25: AND

Service Area: Built Spaces

Asset: Community Facilities, Library

Step (1) Service Importance

Importance Factors	Ratings	Assumptions
Social (Oranga)	3	Service of importance to multiple key community groups. Service failure results in negative community media coverage.
Economic (Ōhanga)	3	Financial loss / cost impact >\$50,000 but <\$100,000
Environmental (Taiao)	1	Negligible environmental impact
Cultural (Ahurea)	2	Minor impacts on cultural practices
Importance Total (out of 20)	9	
Importance Score (out of 5)	3	Important
Step 2 Functionality (Fa)	3	The service is moderately impaired, but it can be delivered at a reduced level.
Step 3 Downtime (D _a)	5	Assumed to take up to a month to restore.
Step 4 Asset Criticality		
Asset Criticality Score $(C_a=I_s*F_a*D_a)$	45	3 x 3 x 5
Asset Criticality Rating	3	Critical

Scenario One: Water Reservoir Defect

Scenario: There is a defect identified with the supply into the new reservoir. Cost to repair is estimated at \$50 - \$100k. Repair timeframe is 2 weeks.

Service Area: Water Supply

Asset: Storage Tanks / Reservoirs





Importance Factors	Ratings	Assumptions
Social (Oranga)	4	Service of district wide importance and contributes to minimising significant illness. Service failure results in negative regional media coverage.
Economic (Ōhanga)	3	Financial loss / cost impact >\$50,000 but <\$100,000
Environmental (Taiao)	5	Serious environmental damage of local importance is possible.
Cultural (Ahurea)	3	Moderate impact on cultural values
Importance Total (out of 20)	15	
Importance Score (out of 5)	5	Extremely Important
Step 2 Functionality (F _a)	3	The service is moderately impaired, but it can be delivered at a reduced level.
Step 3 Downtime (Da)	4	Assumed to take 2 weeks to restore.
Step 4 Asset Criticality		
Asset Criticality Score $(C_a=I_s*F_a*D_a)$	60	5 x 3 x 4
Asset Criticality Rating	4	Highly Critical



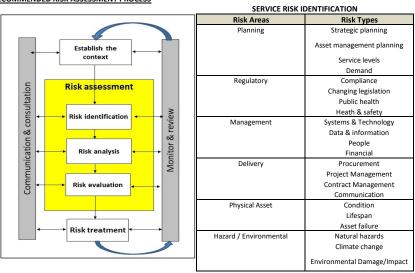
RISK CONTEXT - SERVICE LEVEL RISK MANAGEMENT

This Risk Register template has been developed to align with Wairoa District Council's Risk Management Policy (Adopted: 5 December 2017).

This is a SERVICE Level Risk Register that considers activity or asset-portfolio level risks from all perspectives affecting the management of the Activity and its assets (see below).

CORPORATE RISK Organisational level risks Highest level covers risks for the entire organisation (e.g. WDC's strategies, business decisions) SERVICE RISK Activity or asset-portfolio level risks OPERATIONAL RISK Operational or asset-specific level risks Specific process risks (e.g. H&S), critical asset risks, project risks, specialised assessments for specific needs (e.g. Water Safety Plans, Seismic Assessments) Highest level covers risks for the entire organisation (e.g. WDC's strategies with policy & strategies strategies & plans (E.g. Mactivity or asset-specific actions (E.g. H&S), critical asset risks, project risks, specialised assessments for specific needs (e.g. Water Safety Plans, Seismic Assessments) Guides service strategies & plans (E.g. H&S), critical asset risks, project risks, specialised assessments for specific needs (e.g. Water Safety Plans, Seismic Assessments)	Risk Levels	Description	Informs	Responsibility
Activity or asset-portfolio level risks OPERATIONAL RISK Operational or asset-specific level risks Operational or asset-specific level risks Considers risks from all plans Key input into works programmes New input into works programmes Specific process risks (e.g. H&S), critical asset risks, project risks, specialised assessments for specific level risks Specific needs (e.g. Water Safety Operating Procedures Team Leaders / Line Managers Managers Operations & Operations & Technical staff		entire organisation (e.g. WDC's	policy &	Committee; Senior Management
OPERATIONAL RISK Operational or asset- specific level risks critical asset risks, project risks, Specific level risks Specific needs (e.g. Water Safety Guides specific actions Key input into Standard Operating Procedures Technical staff	Activity or asset-portfolio	perspectives affecting service	plans Key input into works	
	Operational or asset-	critical asset risks, project risks, specialised assessments for specific needs (e.g. Water Safety	Key input into Standard	· ·

RECOMMENDED RISK ASSESSMENT PROCESS



RISK ASSESSMENT

LIKELIHOOD: The potential of an event occurring

Description		Details
Almost certain	5	At least annually 70-90% chance of occurring in the next 12 months
Likely 4 Not within 1 year but at least every 2 years 50% chance of occurring in the next 12 months		
Possible	3	Not every 2 years but at least every 5 years 30% chance of occurring in the next 12 months
Unlikely	2	Not every 6 years but at least every 10 years 10% chance of occurring in the next 12 months
Rare	1	Not within 10 years 5% chance of occurring in the next 12 months

Description		Categories							
		Social					Economic	Environmental	Cultural
		Safe, supported and well led					Strong and prosperous	Protected and healthy	
		community					economy	environment	Valued and cherished culture
		Human	Employees	Operations / Service Delivery	Image & Reputation	Regulatory	Financial	Environment	Culture
Catastrophic	5	More than one death (Wide-spread illness with more than one death)	A large number of senior managers or experienced employees leave the Council.	Total disruption to all Council operations or services. Significantly affects key community services. e.g. Total Business Disruption for >1 month.	Damage to reputation at national level, raised in national media. Major loss of stakeholder, political or community support. The Council under or potentially under administration of central government.	Serious regulatory breach or multiple significant breaches resulting in regulatory scrutiny. Restrictions on activity or responsibilities of Council. Action taken against management or Councillors.	Direct loss or increased cost of over \$1M	Serious environmental damage of national importance. Prosecution. Long term study. Impact not fully reversible.	Extremely serious impact on cultural values.
Major	4	One death (Significant illness with one death)	Increasing senior managers or experienced employees leave. Significant turnover of experienced employees. Widespread employee attitude problems.	Serious disruption to operations or services. Adversely affects multiple key groups. e.g. Unable to operate for up to 1 month	Adverse news in regional media. Serious decrease in stakeholder, Council or community support.	Significant regulatory breach or systemic minor breaches. Reportable breach and action is possible – significant fines, audits/inspections or undertakings. Possible action taken against management.	Direct loss or increased cost of ~\$100K to \$1M	Serious environmental damage of national importance. Prosecution expected. Impact reversible within 5 years.	Major impact on cultural values.
Moderate	3	Injury or hospitalisation (Serious injury or illness requiring hospitalisation)	General employee morale or attitude problems in business area. Significant employee turnover in unit area.	Disruption of operations or services. e.g. Unable to operate for up to a fortnight.	Adverse news in the local media (paper/newspaper/TV Social medial/networking) Minor decrease in stakeholder, Council or community support.	Multiple related minor regulatory breaches. Possibility of some fines. Systemic issue. Small financial impact to citizens. Reportable breach.	Direct loss or increased cost of ~\$50K to \$100K	Serious environmental damage of local importance. Prosecution probable. Impact fully reversible in 1 year.	Moderate cultural impact on values.
Minor	2	Causes time off work to staff or community member (Minor injury)	General employee morale and attitude problems. Increase in employee turnover.	Minor disruption to operations or services. e.g. Unable to operate for 1 day – 3 days	Adverse news in local media. Concerns of performance raised by stakeholders or the community.	Minor regulatory breaches occur, first of its kind, one-off issues. Minimal loss to citizens.	Direct loss or increased cost of ~\$10 to \$50K	Material environmental damage of local importance. Impact fully reversible within 3 months.	Minor impacts on cultural practices.
Insignificant	1	Report of an incident or near miss (no injury)	Negligible or isolated employee dissatisfaction.	Minimal disruption to operations or services. e.g. Unable to operate for less than 1 day	Reference to community consultation group/forum. Public awareness may exist but no public concern.	Small, non-systematic and/or technical regulatory breaches occur. No impact to citizens.	Direct loss or increased cost of up to \$10K	Negligible impact on environment. Reversible within 1 week.	Negligible impact on cultural practices.

RISK RATING: The l	evel of s	everity applied to a risk based on its impact to Council, the community and other stakeholder	lders
Description	Scoring	Details	
	47.05	land distance in the second se	

Description	Scoring	Details
Extreme Risk 17-25 Immediate action required to manage risk - rep		Immediate action required to manage risk - reported to Council
High Risk 10-16 Senior management attention to manage risk -		Senior management attention to manage risk - reported to FARC
Medium Risk 5-9 Management responsibility must be specified and risk controls reviewed		Management responsibility must be specified and risk controls reviewed
Low Pick	1.4	Managed by routine procedures

NOT HAT HA								
Likelihood		Consequence						
		Insignificant	Minor	Moderate	Major	Catastrophic		
		1	2	3	4	5		
Almost certain	5	5	10	15	20	25		
Likely	4	4	8	12	16	20		
Possible	3	3	6	9	12	15		
Unlikely	2	2	4	6	8	10		
Rare	1	1	2	3	4	5		

Likelihood		Consequence						
		Insignificant	Minor	Moderate	Major	Catastrophic		
		1	2	3	4	5		
Almost certain	5	Medium	High	High	Extreme	Extreme		
Likely	4	Low	Medium	High	High	Extreme		
Possible	3	Low	Medium	Medium	High	High		
Unlikely	2	Low	Low	Medium	Medium	High		
Rare	1	Low	Low	Low	Low	Medium		

	Transport Ris									Current Ris	k Assessment	Risk Treatme	ent Strategies	Residu	ıal Risk As	sessment	Ri	k Reduct	tion	Но	w will Risk and Co	ontrol be Monito	red
Risk ID	Risk Area	Risk Type	Asset	Risk	Cause	Impact (Consequence)	Likelihood	Consequence	Initial Risk	Risk	Current controls (any <u>existing</u> policy, procedures, etc)	Action Required Mitigation Plan	Status	Likelihood	Residual Risk	Risk	isk Reduction	Mitigation Cost (\$000)	isk Reduction / Cost Ratio	Department	Owner	Frequency of review	Date updated
1	Physical Asset	Condition		Inadequate investment in sealed pavement and surfacing renewals resulting in the age profile of sealed pavements and/or surfaces increasing, requiring increased investment and impacting LoS & Risk.	Inadequate investment in pavement rehabilitation and resurfacing creating a backlog of resurfacing; Inadequate knowledge of pavement and surface age/condition; Lack of condition forecasting and forward work programming Increased costs for renewals	• Financial - Major	4	4	16	High		Finalisation of 30-year FWP Improvements to data collection and performance measuring d'IIMS modelling Work with suppliers to innovate a reduce renewal costs	FWP finalisation underway, indicating an increase in investment is required in future LTP's DMP being implemented to improve data collection dTIMS modelling programmed for Year 3	3	1 12	High	4		æ	Land Transport	Transport Asset Manager	Annually	9/05/2024
4	Physical Asset	Condition		Roading network experiences increased storm events and damage which exacerbates a deterioration in pavement and surface condition		Financial - Major Service Delivery - Moderate	4	4	16	High	•	Culvert Capacity Assessments/Upgrades Proactive drainage maintenance, renewals and upgrades; Adequate condition assessment and monitoring	Culvert capacity upgrades underway Increased focus on proactive drainage maintenance, renewals and upgrades. Condition assessments underway	4	3 12	High	4			Land Transport	Transport Asset Manager	Annually	9/05/2024
5	Environmental	Climate change		The roading network is vulnerable to climate change impacts, affecting network resilience and accessibility	Climate Change; Inadequate planning for climate change impacts	Financial - Major Service Delivery - Moderate	4	4	16	High		Improved planning for climate change to understand impacts on the road network and inform future work programmes	Risk review underway, will lead in to resilience/climate change studies	4	1 16	Medium	0			Land Transport	Transport Asset Manager	Annually	9/05/2024
6	Planning	Strategic planning		Changes to gravel/aggregate extraction allocations, and constraints to development of new sources result in a shortage of aggregate for road maintenance purposes and increased costs		• Financial - Major	4	4	16	High		Ongoing engagement with HBRC at all levels of Council; Ongoing engagement and collaboration with contractors to understand constraints and identify alternative aggregate sources Early confirmation of FWP's to ensure aggregate availability and reduce costs	Aggregate sustainability study completed Alternative aggregate trials underway	3	3 9	High	7			Land Transport	Transport Asset Manager	Annually	9/05/2024
3	Physical Asset	Condition		Sealed pavements experience increased volumes of heavy traffic, causing damage (cracking, potholing etc) requiring increased investment in sealed pavement repairs and renewals.		• Financial - Major	5	3	15	High	Close engagement with forestry and other heavy industries; Proactive maintenance & renewals approach on key heavy vehicle routes	Proactive maintenance and renewals on heavy vehicle routes to	Forestry modelling underway Ongoing proactive maintenance	5	3 15	High	0			Land Transport	Transport Asset Manager	Quarterly	9/05/2024
24	Planning	Demand		Network growth lead to more investment in network upgrades engineering advice, network measurement and increased maintenance.	Changes to land use; Changes to population; Changes in demand for transport network	• Financial - Moderate	4	3	12	High	Regular engagement with key network users and stakeholders to understand future demand; Traffic Count programme to monitor network trends	Coordination with planning team to understand consented developments & input in to District Plan Aspirational ONF network to inform network upgrade requirements	•	3	2 6	Medium	6			Land Transport	Transport Asset Manager	Annually	9/05/2024
2	Physical Asset	Asset failure		Sealed pavement repairs prior to resurfacing are inadequate (poor quality or lack of funds), resulting in reduced seal lives.	Inadequate funding/budgets for pre seal repairs; Poor construction quality of repairs	• Financial - Major	3	4	12	High	Good management of contractors & QA	Ensure appropriate knowledge of pre seal repair requirements to feed in to asset management planning and financial forecasting Accurate maintenance cost collection	Understanding of pre-seal requirements is improving. Improvements to maintenance cost data collection is being implemented to inform future requirements	3	2 6	Medium	6			Land Transport	Transport Asset Manager	Annually	9/05/2024
9	Physical Asset	Condition		Incomplete knowledge of drainage asset condition leads to poor decision making and unplanned failures.	Inadequate Inspection Programme; Inadequate forward works programming	Financial - Moderate Service Delivery - Moderate	3	4	12	High	Ongoing drainage inspections to understand maintenance requirements	Completion of condition inspections and development of a drainage renewals forward works programme	Condition inspections underway	3	2 6	Medium	6			Land Transport	Transport Asset Manager	Annually	9/05/2024
15	Planning	Service levels		Inadequate accessibility for physically and visually challenged persons/ wheelchairs/ strollers/ walkers/ prams/ mobility scooters results in safety issues. This may be due to a lack of footpaths or inadequate level of service.	Lack of facilities Poor level of service due to defects	• Human - Moderate	4	3	12	High	Regular footpath inspections	Network planning to ensure network connectivity	•	3	9	Medium	3			Land Transport	Transport Asset Manager	Annually	9/05/2024
	Physical Asset	Asset failure		Retaining wall or other structure failure resulting in road closures, inaccessibility and/or delays due to partial closures.		Service Delivery - Moderate Financial - Major			12		•	Other structures condition inspections; Development of a forward works programme for maintenance and renewals	Inspection schedule developed	2			4	\$10		Land Transport	Transport Asset Manager	Annually	9/05/2024
19	Delivery	Contract Management		Contractors are not available to complete the required work programmes resulting in financial impacts and reputational damage	Lack of resource availability for local contractors due to high work loads; Inadequate engagement with contractors for forward works programmes; Lack of interest from contractors in tendering local contracts	Service Delivery - Moderate Financial - Major	3	4	12	High		programmes;	Good relationships developed with local contractors. Smart procurement process in place to ensure work packages are delivered	2	1 8	Medium	4		#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
23	Planning	Strategic planning		A lack of business continuity planning and procedures affects service provision through major events	Lack of business continuity planning & procedures	Service Delivery - Moderate Reputational - Moderate	3	4	12	High	·	Update business continuity plans; Ensure appropriate procedures and processes are in place for sharing and continuity of knowledge	•	2	3 6	Medium	6		#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
36	Management	Systems & Technology		Council filing systems and processes are inadequate, resulting in lost information and affecting decision making and compliance	Inadequate systems, processes and procedures	Service Delivery - Moderate Reputational - Moderate	4	3	12	High	·	Development of procedures and systems for filing information consistently	•			Low	12		#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024

29			Roads not design for heavy vehicles are being used by forestry and other industries creating safety hazards and requiring increased investment to address	,	• Financial - Moderate	4	3	12	High	Engagement with forestry companies	Increased investment in road safety improvement	Increased investment in road safety planned for current LTP period			Low	12	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
42	Management	Financial	Reductions in funding, by Council or Waka Kotahi impact ability to delivered the required programmes, resulting in reduced levels of service and increased risk	Changes to funding agreements Inadequate financial planning	Financial - Major Service delivery - Major	3	4	12	High	Ensuring appropriate forward works programmes and financial planning to inform future funding requirements Utilisation of investment decision making tools to inform decisions	Kotahi & Council to ensure funding	•	2	3	Low	6	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
11 F	Regulatory	Heath & safety	Inadequate street lighting provides poor visibility resulting in crashes and pedestrian accidents	Inadequate lighting; Lack of safety issues database/knowledge; Contractor inadequacies / response times to failures Vandalism/Damage	Human - Moderate	3	3	9	Medium		Road safety assessment to identify safety deficiencies, including lighting	•	2	3 (i Low	3		Land Transport	Transport Asset Manager	Annually	9/05/2024
13 F	Physical Asset	Condition	Inadequate signage/markings – due to vandalism, non-compliance with standards, missing, damage or deterioration results in road safety issues		• Human - Moderate	3	3	9	Medium	Regular network inspections to identify damage and repair promptly	Road safety assessment to identify safety deficiencies, including signage and traffic services; A deaptive understanding of maintenance and renewals requirements to inform asset management and financial planning; Proactive renewals and upgrades to target high priority locations		2	3	6 Medium	3		Land Transport	Transport Asset Manager	Annually	9/05/2024
16 r	Management	Financial	The footpath network does not meet requirements resulting in safety issues for pedestrians and vulnerable users	Inadequate	Human - Moderate	3	3	9	Medium	•	Identification and prioritisation of key sites to feed in to financial planning; Identification/utilisation of external funding sources to fund works	•	3	3 !	Medium	0		Land Transport	Transport Asset Manager	Annually	9/05/2024
25 F	Planning	Demand	Increased demand for carparking requires increased investment	Developments and changes in land use; Changes to population;	Financial - Moderate	3	3	9	Medium	•	Ensure appropriate planning for future developments	•	2	2	Medium	5	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
28 F	Planning	Asset management planning	Forestry predictions are inaccurate, impacting decision making and impacting levels of service	Inadequate consultation with forestry industry Inaccurate information provided	• Financial - Moderate	3	3	9	Medium	Ongoing engagement with forestry companies	models • Regular updates of forestry	Forestry modelling underway	2	3 (Medium	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
30 F	Regulatory	Heath & safety	Inadequacies in staff H&S processes and systems results in H&S and regulatory risks for staff and Council	Inadequate processes and systems Inadequate training	Human - moderate Regulatory - moderate	3	3	9	Medium	•	information/models • Continued review and development of H&S processes	•	2	3 (Low	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
33 E	Environmental	Environmental Damage/Impact	Tree planting by forestry companies occurs too close to roads creating a risk to the road corridor in the event of falling	activities	Service delivery - Moderate	3	3	9	Medium		Investigate councils options for regulating set backs	•	2	3 (Medium	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
38 [Delivery	Project Management	Project management processes, quality, plans, resources are weak, exposing council to risk and increased project costs	Inadequate training Inadequate processes Difficulty attracting qualified/experienced staff	Financial - Major Reputational - Minor	3	3	9	Medium	Use of Consultants to assist in project management Training of staff	Development / refinement / documentation of project management processes	•	2	3 (Low	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
39 [Delivery	Contract Management	Lack of contract management knowledge, training, understanding o contracts results in increased risks and project costs to Council	Inadequate training Inadequate processes Difficulty attracting qualified/experienced staff	Financial - Major Reputational - Minor Service delivery - Major	3	3	9	Medium	Use of Consultants to assist in project management Training of staff	Development / refinement / documentation of contract management processes	•	2	3 (Low	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
41	Management	Financial	Increased costs due to inflation or COVID supply issues impact programme delivery and level of service	Inflation increases COVID material supply impacts	Financial - Moderate Service delivery - Major	3	3	9	Medium	Close engagement with suppliers Allowance for inflation etc in financial forecasting in line with best practice rates	Ongoing engagement with suppliers	Ongoing engagement with suppliers	2	2	Low	5	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
17 F	Physical Asset	Asset failure	Bridge / critical structure failure resulting in road closures, inaccessibility and/or delays due to partial closures.	Lack of condition capacity information	Service Delivery - Moderate Financial - Major	2	4	8	Medium	Bridge condition inspections; Bridge capacity assessments; Proactive maintenance, renewals and strengthening	Continue to build on existing approach	•	1	4	Low	4		Land Transport	Transport Asset Manager	Annually	9/05/2024
32 F	Regulatory	Public health	Dust on unsealed roads resulting in health & amenity impacts for adjacent properties is not being addressed	Increased traffic loadings Inadequate dust control measures	Human - Minor Image & reputation - Minor	2	4	8	Medium	Dust register established to addresses high priority sites first Regular dust seals Dust suppressant and TTM trials	Continued trials of dust control measures Engagement and education with road users and landowners	•	2	3	Low	2	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
40 r	Management	Financial	Valuation outputs are inaccurate resulting in inadequate financial planning, impacting level of service and cost	Inaccurate data Inaccurate valuation processes	• Financial - Major	2	4	8	Medium	Use of experienced external providers to complete valuations	Continued improvements to asset data	DMP Implemented	1	3	Low	5	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
21	Management	People	Staff instability/turnover	Inability to retain staff, not just internal but contractors etc Inability to attract experienced/ specialist staff to the district; Inadequate training and development opportunities for internal staff	• Financial - Minor	3	2	6	Medium	·	Ensure staff are supported and trained, and have adequate progression paths to ensure they remain with council Train and develop staff within team Utilise consultants and contractors to provide support for specialist services	,	2	2	Medium	2	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
12 ľ	Management	Financial	Street lighting service is impacted by electricity cost escalation year on year, resulting in safety and amenity issues	Changes to electricity pricing	Human - Minor Image & reputation - Minor	2	3	6	Medium		Transition to LED's will reduce power bill; Adequate allowance for escalations in financial planning	•	2	2	Medium	2		Land Transport	Transport Asset Manager	Annually	9/05/2024

14	Management	Financial	Insufficient budget to continue current signage and marking regime results in safety deficiencies	Inadequate funding/budgets; Inappropriate forward works programming/evidence for proposed regimes	• Human - Moderate	3	2	6	Medium	•	Ensure adequate maintenance planning and programming to inform financial planning	•	3	2	6	Medium	0		Land Transport	Transport Asset Manager	Annually	9/05/2024
34	Environmental	Environmental Damage/Impact	Environmental spills, illegal dumping or lack of environmental controls result in consent breaches and environmental damage	Contractors not abiding by contract/consent requirements Inadequate monitoring of Contractors	Regulatory - Moderate Reputational - Moderate Environment - Moderate	2	3	6	Medium	Strong contract management by WDC team, supported by consultants as required	Continued focus on environmental monitoring by MSQA teams Training to develop understanding/skills	•	1	3	3	Low	3	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
7	Delivery	Contract Management	Loss of metal (attrition) due to poor or no compaction being achieved when grading unsealed roads resulting in increased metal replacement requirements and high maintenance costs	Inappropriate Grading Techniques; Inappropriate Machinery type	• Financial - Minor	2	2	4	Low	Walk n Roll providing good compaction	Ongoing review and trialling of grading techniques. Using spot grading	Trails and reviews ongoing	1	2	2	Medium	2		Land Transport	Transport Asset Manager	Annually	9/05/2024
8	Management	People	Experienced Grader Drivers Retire/Resign with no succession plan in place, resulting in loss of knowledge and impacting maintenance quality & outcomes	Inadequate training by Contractors	• Financial - Minor	2	2	4	Low	Good succession planning and training by Contractors	Ensure ongoing succession planning and training of younger/ new operators by contractors	Succession planning and training is a key focus of maintenance contracts	2	2	4	Medium	0		Land Transport	Transport Asset Manager	Annually	9/05/2024
10	Environmental	Environmental Damage/Impact	Surface water contamination during normal operation of the network results in consent breaches or environmental damage	Lack of environmental controls	Environment - Moderate Image & Reputation - Moderate	2	2	4	Low	•	Ensure adequate environmental controls to prevent contamination during works	•	1	2	2	Medium	2		Land Transport	Transport Asset Manager	Annually	9/05/2024
20	Delivery	Contract Management	Poor management of abandoned vehicles results in reputational damage and cost impacts for council	Inadequate procedures for managing abandoned vehicles	Image & Reputation - Minor	2	2	4	Low	Ensure appropriate resourcing and focus by contractor; Regular inspection and monitoring by Council staff	•	•			0	Low	4	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024
27	Planning	Strategic planning	Transport planning not being a focus for Council or poor alignment with District Planning leads	Lack of alignment between CAAS & Planning teams.	Image & Reputation - Moderate Cultural - Moderate Financial - Minor	2	2	4	Low	·	•	•			0	Low	4	#DIV/0!	Land Transport	Transport Asset Manager	Annually	9/05/2024

	ers Risk Regis									Current Risl
Risk ID	Risk Area	Risk Type	Asset	Risk	Cause	Impact (Consequence)	Likelihood	Consequence	Initial Risk	Risk Assessment
21	Planning	Demand	Wastewater	Wastewater inflow and infiltration during rainfall events contribute to a higher amount of wastewater generation. System overflows causing service disruption and contamination for crews to deal with	Climate Change; Increased incidence of more extreme/intense rainfall events; System not designed to cope with such intensive events	Operations - Major Image & Reputation - Moderate Regulatory - Major Financial - Major Environmental - Major Cultural - Moderate	4	4	16	High
5	Management	Financial	3-Waters	Inappropriate funding and forecasting (risk to financial sustainability)	Reactive renewal programmes	Operations - Major; Image & Reputation - Major; Financial - Major;	4	4	16	High
1	Planning	Asset management planning	3-Waters	Poor asset management practices including lack of information / knowledge on which to produce informed decisions on investment	Lack of knowledge; Incomplete asset data; Limited information and analysis to date	Operations - Moderate Image & Reputation - Major Financial - Major	4	4	16	High
33	Regulatory	Changing legislation	3-Waters	3-Waters reform leading to uncertainty over management of assets	The Government's Three Waters reform creates a high degree of uncertainty on the future ownership and delivery of 3-Waters services	Employees - Moderate Operations - Major Cultural - Moderate	5	3	15	High
7	Environmental	Environmental Damage/Impact	Water Supply	Reticulated water supply becomes contaminated	 Damage to reticulation system resulting in unknown groundwater or sewerage infiltration; Lack of maintenance and sediment build up; Major accident, spills, leaks causing 	Human - Catastrophic Operations - Catastrophic Image & Reputation - Catastrophic Regulatory - Catastrophic Financial - Catastrophic Environmental - Moderate	3	5	15	High
8	Environmental	Environmental Damage/Impact	Water Supply	Raw water becomes contaminated making treatment ineffective	Natural disaster including flooding, tsunami, earthquake; Third party damage; Terrorist/cyber attack	Human - Catastrophic Operations - Catastrophic Image & Reputation - Catastrophic Regulatory - Catastrophic Financial - Catastrophic Environmental - Moderate Cultural - Catastrophic	3	5	15	High
17	Physical Asset	Condition	Water Supply	Microbiological Contamination of drinking water	Failure of raw water pipeline due to deterioration of materials	Human - Major Operations - Moderate Image & Reputation - Moderate Financial - Moderate Cultural - Minor	5	3	15	High
29	Management	People	3-Waters	duties/ functions unable to be performed (e.g. requirement to have WWTP qualified staff to meet	retirement, resignation, illness, death etc; • Staff turnover due to other issues	Employees - Moderate Operations - Major Image & Reputation - Moderate Regulatory - Major Financial - Moderate	3	4	12	High
35	Delivery	Procurement	3-Waters	Lack of tenderers in procurement of Council services leading to no competition in decision process	Lack of expertise in the district; Contract size not financially viable for tenderers; Uncertainty around 3-Waters Reform	Operations - Major Image & Reputation - Moderate Environmental - Major	3	4	12	High

							_			
4	Physical Asset	Asset Failure	3-Waters	Unexpected failure of critical assets - refer to WSPs for detail	Asset life and condition is compromised due to lack of planned maintenance and renewals programmes	Operations - Major; Image & Reputation - Major; Regulatory - Major; Financial - Major; Environmental - Moderate; Cultural - Moderate	3	4	12	High
19	Environmental	Climate change	Stormwater	Higher volumes of rainfall resulting in flooding where capacity is insufficient.	Climate Change; Increased incidence of more extreme/intense rainfall events; Stormwater system under capacity	Operations - Major Image & Reputation - Moderate Financial - Major Environmental - Major Cultural - Moderate	3	4	12	High
20	Environmental	Climate change	3-Waters	3-Waters assets vulnerable to effects of climate change due to their location - flooding, inundation	Climate change causing increased flooding, more intense rainfall events, sea level rise; 3-Waters assets in locations vulnerable to these effects	Operations - Major Image & Reputation - Moderate Regulatory - Moderate Financial - Major Environmental - Moderate	3	4	12	High
10	Regulatory	Compliance	Water Supply	Failure to comply with New Zealand Drinking Water Standards (DWSNZ) 2008	SCADA system fails to raise alarm; Unclear roles and responsibilities between in house treatment / production and reticulation managed by external O&M Contractor.	Human - Major Operations - Moderate Image & Reputation - Major Regulatory - Major Financial - Moderate	3	4	12	High
	Regulatory	Compliance	Wastewater	Unplanned, unknown overflow for an unacceptable period of time resulting in one or more of: consent breach, health risk and environmental damage	SCADA system fails to raise alarm	Human - Moderate Operations - Moderate Image & Reputation - Moderate Regulatory - Moderate Financial - Moderate Environmental - Moderate Cultural - Moderate	4	3	12	High
22	Management	Financial	3-Waters	External funding - cost overruns resulting in Council needing to contribute to finish	Poor project / contract management; High level budgets at start which increase when more detail added at later stages; Scope changes; Unexpected issues	Operations - Moderate Image & Reputation - Moderate Financial - Major	3	4	12	High

				<u> </u>	<u></u>					
14	Environmental	Natural hazards	Wastewater	Loss of wastewater service (at pump station, reticulation or treatment plant)	Extensive damage by natural hazards (e.g. slips) or disaster or blockages or power outage	Operations - Major Image & Reputation - Major Regulatory - Major Financial - Major Environmental - Minor	3	4	12	High
16	Physical Asset	Asset Failure	Stormwater	Stormwater failures causing damage to roads, buildings, property etc - meaning Council may be liable for damages and/or unplanned remedial costs	Stormwater asset/ network failure due to - age/condition, lack of maintenance, storm event, seismic event, third-party damage; poor design	Human - Major Operations - Major Image & Reputation - Major Financial - Catastrophic Environmental - Moderate Cultural - Moderate	3	4	12	High
26	Delivery	Contract Management	3-Waters	Contractual Risks to Council relating to - procurement, liquidated damages, retentions, indemnities margins for direct appointments	Loose contract arrangements; Work outside of contract scope	Operations - Major Image & Reputation - Moderate Financial - Major Cultural - Moderate	3	4	12	High
36	Management	Financial	3-Waters	No contributions to Council for new developments leading to increased maintenance costs of an expanding network.	No formal developer contribution policy, clauses etc; Increasing volume of development / subdivisions	Operations - Moderate Image & Reputation - Moderate Financial - Moderate	4	3	12	High
27	Delivery	Procurement	3-Waters	Supply issues for critical parts means assets may not be able to work and provide the intended service / perform the intended function	Nationwide shortages caused by supply chain delays and covid issues; Obsolescence of equipment.	Operations - Major Image & Reputation - Moderate Financial - Major Output Description:	3	4	12	High
32	Management	Systems & Technology	3-Waters	Important asset data inaccessible to Council staff	Council information held on external contractors system (Maximo); Data held in multiple locations - local spreadsheets, different systems	Employees - Minor Operations - Moderate Financial - Moderate	4	3	12	High
34	Management	Data & information	3-Waters	Liability around accuracy of LIM and PIM information provided by Council staff	Incomplete or incorrect asset data / records; Time pressures on Council staff to provide information; Lack of understanding / training of the process and requirements	Employees - Minor Image & Reputation - Moderate Financial - Moderate	4	3	12	High
18	Environmental	Climate change	Water Supply	Unable to produce drinking water with NTU level under 4000 meaning production stops.	Increased rainfall intensity impacts on river turbidity pushing NTU over 4000	Operations - Moderate Image & Reputation - Minor Financial - Moderate Cultural - Minor	3	3	9	Medium
31	Regulatory	Compliance	Wastewater	Non-compliance on any of the 66 wastewater consent conditions	Implementation; Financials, funding shortfalls to comply	Image & Reputation - Moderate Regulatory - Moderate Financial - Moderate Environmental - Moderate Cultural - Moderate	3	3	9	Medium

	· · · · · · · · · · · · · · · · · · ·		·							
6	Planning	Service levels	Water Supply	High water loss from the reticulation system instead of being delivered to users	Inefficient management of water supply assets resulting in high leakage rates; Old or poorly performing reticulation assets	Operations - Moderate Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
39	Planning	Strategic Planning	3-Waters	Systems cannot cope with increased demand / flows from new development	System not designed for increases in volume - water demand, stormwater and wastewater flows; Increasing volume of development / subdivisions	Operations - Moderate Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
37	Management	Data & information	3-Waters	Property files not properly recording all test results etc	 Incomplete or incorrect asset data / records; Asset data not being updated correctly or in the right place; Lack of understanding / training of the process and requirements; Disconnect between Council teams / 	Employees - Minor Operations - Moderate Image & Reputation - Minor Financial - Minor	4	2	8	Medium
9	Planning	Demand	Water Supply	Water supply demand cannot be met	No alternative water source for Wairoa township (dependent on Wairoa River); Budget constraints for new works / upgrades; Demand faster than predicted (i.e. new industrial customer); Unexpected failure of a critical asset (i.e. reservoir failure, electrical fault, pipe burst); Consents restricting supply	Operations - Major Image & Reputation - Major Financial - Major	2	4	8	Medium
24	Management	Financial	3-Waters	Non-spend of funding within allocated timeframe - loss of opportunity for Wairoa, potential cost to Wairoa as the work still needs to be done eventually	Supply chain disruptions; Lockdowns; Shortage of suppliers/ contractors; Planning, scoping, project management issues	Operations - Moderate Image & Reputation - Moderate Financial - Major	2	4	8	Medium
23	Delivery	Project Management	3-Waters	3-Waters infrastructure projects unable to be completed or significantly delayed	Supply chain disruptions; Covid Lockdowns; Shortage of suppliers/contractors	Operations - Moderate Image & Reputation - Moderate Financial - Major	2	4	8	Medium
2	Regulatory	Public health	3-Waters	Public safety is jeopardised through administrative failure	Lack of communication between DHB and HBRC; Standard Operating Procedures (SOPs) incomplete or missing for critical activities; Lack of ERPs; Poor WSP understanding and implementation	Human - Major Operations - Major Image & Reputation - Major Financial - Major Environmental - Moderate Cultural - Moderate	2	4	8	Medium

Regulatory Meath & sufety Washewater Public actify comparemost for exemple by filling to exemple the company of the co				-							
person falling into open marble causing injury or death standing injury or death inju	13	Regulatory	Heath & safety	Wastewater	example by falling into a manhole or	Insufficient hazard controls	Image & Reputation - Major Regulatory - Major Financial - Moderate	2	4	8	Medium
Into the wastewater system breaching the construction of the method of the moderate of the construction of the method of the m	15	Regulatory	Heath & safety	Stormwater	person falling into open manhole	Stormwater manhole or pump	Image & Reputation - Major Regulatory - Major Financial - Moderate	2	4	8	Medium
unacceptable period of time resulting in one of more of construction through administration (I/I) exceeds a supplication administration and (I/I) exceeds a supplication administration (I/I) exceeds a s	30	Regulatory	Compliance	Wastewater	into the wastewater system breaching		Regulatory - Moderate Environmental - Moderate	2	3	6	Medium
Concections that are not properly recorded in the Water Billing system	12	Regulatory	Compliance	Wastewater	unacceptable period of time resulting in one or more of: consent breach, public health risk and environmental	failure; • Inflow and Infiltration (I/I) exceeds	Operations - Moderate Image & Reputation - Minor Regulatory - Moderate Financial - Minor Environmental - Minor	3	2	6	Medium
Increase Increase Increase Increase Increase Incomplete existing asset information; Unexpected issues arising. Increase Incomplete existing asset information; Unexpected issues arising. Increase Increase Increase Incomplete existing asset information; Unexpected issues arising. Increase Incre	38	Planning	Demand	Water Supply	Excessive use of water by customers	connections; • Leaky rural connections • Connections that are not properly	Image & Reputation - Minor	3	2	6	Medium
data sources (e.g. Morgan) separation of reticulation & treatment separation of reticulation & treatment separation of reticulation & treatment ownership split; Evolution of business practices * Unclear roles and responsibilities between in house treatment / production and reticulation managed by external O&M Contractor qualifications * Human - Moderate; Operations - Minor * Financial - Minor * Human - Moderate; Operations - Moderate; Image & Reputation - Moderate; * Regulatory - Moderate; * Financial - Mode	25	Management	Financial	3-Waters		Tight timeframes; Incomplete existing asset information;	Image & Reputation - Minor	3	2	6	Medium
consumers (quality and/or quantity) between in house treatment / production and reticulation managed by external O&M Contractor qualifications • Operations - Moderate; • Image & Reputation - Moderate; • Regulatory - Moderate; • Financial - Moderate;	28	Management	Systems & Technology		data sources (e.g. Morgan)	 Blurry Roles & responsibilities/ asset ownership split; 	Operations - Minor	3	2	6	Medium
Delivery Communication 0 Low	3	Planning	Service levels	Water Supply		between in house treatment / production and reticulation managed by external O&M Contractor	Operations - Moderate; Image & Reputation - Moderate; Regulatory - Moderate;	2	3	6	Medium
		Delivery	Communication							0	Low

March Marc		Risk Registe								(Current Ris	k Assessment		ent Strategies	Re	sidual Risl	Assessn	nent	Risl	Reductio	n			ontrol be Monito	
Part	sk ID Ri	k Area	Risk Type	Asset	Risk	Cause	Impact (Consequence)	Likelihood	Consequence	Initial Risk	Risk Assessment			Status	Likelihood	Consequence	Residual Risk	Risk Assessment	isk Reduction	Mitigation Cost (\$000)	isk Reduction / Cost Ratio	Department	Owner		Date upda
Manufacture	3			Airport	result in unauthorized access creating		Regulatory - Minor	3	3	9	Medium			•	1	3	3	Low	6		L	Property	Manager &	Annually	
The property of the control courty of the courty of	: Ree	gulatory	Compliance	Airport	requirements under relevant legislation, regulations consent	renewals fails to address deterioration of infrastructure resulting in unsafe facilities / conditions; • Insufficient knowledge of legislation (outside of consent conditions) that relates to the activity (OSH etc) or failure to monitor for change; • Failure to identify changes required by changing Council bylaws; • Insufficient funding for monitoring activities; • Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design knowledge to verify compliance; • Lack of labour resource to implement required changes and/or maintain standard; • Breakdown in communication between parties results in compliance	Regulatory - Major	2	4	8	Medium	•	programme; • Ensure engagement with other council processes; • Allocate sufficient funding in budgets; • Engage with consultants to support in-house resourcing; • Utilise Contractors and Consultants to support Council in-house team; • Engage regularly with CAA, Airways and other specialists to ensure		1	4	4	Low	4		L		Manager &	Annually	
In the control and control and price prices and control and prices are control and prices and control and prices are control and prices a	PI	inning	Strategic planning	Airport	allow airport operation during an	risk/critical asset identification;		2	4	8	Medium	•	possibility that an emergency event will also affect other modes of	•	2	3	6 1	Medium	2		L	Property	Manager &	Annually	
Management and other programmed and raceture and completed on free inclinate activation and the programmed and raceture and completed on free inclinate planting feedings and control of received activation of the completed or free inclinate and the programmed and received inclinate and received inclinate and the programmed	PI	nning	Service levels	Airport	airport users desired level of service and/or the community and users	users desires resulting in inappropriate targets; Insufficient knowledge of what services are currently being delivered to the airport users; Insufficient knowledge of what the airport users can/will pay for desired service; No awareness of alternative funding mechanisms; Insufficient resources to 'hook in to' funding mechanisms (time, cost,	• Financial - Minor	3	2	6	Medium	preparation for RocketLab arrival.	process/ plan for airport users; • Establish review process; • Develop consultation process/ plan;	•	1	2	2	Low	4	#1	DIV/O! L		Manager &	Annually	
renewals and preventative maintenance fails to ensure long term sustainability of the assets. Nonitor airport landing data for trends; Service Delivery - Minor Sustainability of the assets. Service Delivery - Minor Sustainability of the assets; Service Delivery - Minor Sustainability of the assets; S	De			Airport	and other programmed and reactive works are not completed on time and	completion of required activities resulting in escalated deterioration; • Lack of technical expertise to provide planning/design resulting in absence of or inappropriate planning/design; • Lack of labour resource to implement required changes and/or maintain standard; • Inadequate planning for the implementation of the annual program; • Inadequate monitoring of staff, consultants, and contractors results; • Maintenance and renewals not	Service Delivery - Minor	3	2	6	Medium	•	Consider alternative funding sources; Develop risk based (prioritised) asset management plan; Utilise Contractors and Consultants to support Council in-house team; Early engagement with Contractors to programme works; Ensure appropriate monitoring; Engage consultants and contractors		2	2	4	Low	2		L	Property	Manager &	Annually	
	PI	inning	Strategic planning	Airport	renewals and preventative maintenance fails to ensure long term	(increase); Incorrect demand projections (reduction); Asset inventory incomplete resulting in deterioration or loss of assets; Absence of or inaccurate asset condition information resulting in inappropriate maintenance or renewal; Absence of or inaccurate asset valuation information resulting in	Service Delivery - Minor	2	2	4	Low	•	Monitor airport landing data for trends; Establish plan for periodic review of inventory; Establish plan for periodic condition assessment; Establish plan for periodic valuation		2	2	4	Low	0		L	Property	Manager &	Annually	
0 Low 0 Low 0								+		0	Low				<u> </u>		0	Low	0						
														1								1			_

	Spaces Risk I	_								Current Ris
Risk ID	Risk Area	Risk Type	Asset	Risk	Cause	Impact (Consequence)	Likelihood	Consequence	Initial Risk	Risk Assessment
10	Delivery	Procurement	Open Spaces	Lack of formal contracts potentially resulting in the Council being liable for H&S, operational, regulatory, financial (other etc) issues / breaches /fines / prosecutions (other etc)	working for the Council with	 Employees - Moderate Operations - Major Image & Reputation - Moderate Regulatory - Moderate Financial - Major Environmental - Moderate Cultural - Moderate 	4	4	16	High
1	Planning	Asset management planning	Open Spaces	Poor asset management practices including lack of data/ information/ knowledge on which to produce informed decisions on investment	Lack of knowledge; Incomplete asset data; Limited information and analysis to date	Operations - Moderate; Image & Reputation - Moderate; Financial - Moderate	4	3	12	High
2	Planning	Asset management planning	Open Spaces	Overall asset life and condition compromised due to limited asset data/information, maintenance and renewal programmes	Limited condition assessments to date; Incomplete asset data; Limited funding for maintenance and renewals at asset component level	 Operations - Moderate; Image & Reputation - Moderate; Financial - Moderate 	4	3	12	High
10	Management	Data & information	Cemeteries	Inaccuracy and/or incompleteness of cemetery records. This disrupts the use/operation of the viable plots and may mean genealogy records cannot be confirmed.	 Data errors; Mapping/GIS issues; Loss of old records; Incomplete and/or conflicting asset records 	 Employees - Minor Operations - Moderate Image & Reputation - Moderate Financial - Moderate Cultural - Moderate 	4	3	12	High
8	Planning	Service levels	Cemeteries	Cemeteries do not meet community / family asset expectations	 Lack of maintenance; Poor appearance; Age of assets; Closure of some cemeteries; Lack of crematorium in district 	• Image & Reputation - Moderate	4	3	12	High
14	Regulatory	Public health	Cemeteries	Epidemic/pandemic resulting in large scale deaths – capacity of cemetery reached quickly and the need for large scale of burials/cremations in short time-frame.	 Pandemic/epidemic; Large scale deaths; Existing capacity overwhelmed; No cremation facilities 	 Human - Catastrophic Operations - Major Image & Reputation - Major Cultural - Major 	2	5	10	High

3	Physical Asset	Asset failure	Parks and Reserves	Parks asset failure resulting in injury to user	Faulty playground equipment; Vandalism; Asset age / condition; Asset component failure; Faulty floodlight equipment at sports grounds	Human - Moderate Image & Reputation - Moderate Regulatory - Minor Financial - Minor	3	3	9	Medium
19	Environmental	Climate change	Open Spaces	Open spaces vulnerable to effects of climate change	Climate change; Open Space assets in locations vulnerable to climate change effects	Operations - Moderate Image & Reputation - Moderate Financial - Moderate Environmental - Moderate Cultural - Minor	3	3	9	Medium
17	Management	Data & information	Cemeteries	Loss of Cemetery Records – incorrect information recorded about interments.	 Data errors; Mapping/GIS issues; Loss of old records; Incomplete and/or conflicting asset records 	 Employees - Moderate Operations - Moderate Image & Reputation - Moderate Financial - Moderate Cultural - Moderate 	3	3	9	Medium
5	Regulatory	Heath & safety	Parks and Reserves	Parks hazard results in injury to user	 Poor or lack of lighting; Limited safety by design; Vandalism; High winds and storms for trees; Lack of maintenance; Asset failure 	Human - Moderate Image & Reputation - Moderate Regulatory - Minor Financial - Minor	3	3	9	Medium
6	Environmental	Natural hazards	Open Spaces	Natural disaster damage to Open Spaces assets that would make them unavailable for use	Natural disaster damage to Open Space assets caused by: Major fire Earthquake Volcanic event Major floods / tsunami	Human - Moderate Operations - Moderate Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
7	Planning	Service levels	Parks and Reserves	Parks and reserves do not meet community / user asset expectations	 Lack of maintenance; Poor appearance / safety issues; Outdated designs; Location and/or accessibility 	• Image & Reputation - Moderate	3	3	9	Medium

8	Planning	Service levels	Public toilet facilities do not meet community or tourist expectations or demand	 Maintenance shortcomings (small contractors, no formal arrangements); Poor appearance; Outdated designs; Location and/or accessibility; Asset failure 	• Image & Reputation - Moderate	3	3	9	Medium
4	Planning	Demand	Capacity of cemeteries reached – capacity reached and no extra space for cemeteries identified	 Increased demand for spaces; Lack of forward planning; No new sites investigated. 	 Employees - Minor Operations - Major Image & Reputation - Major Regulatory - Moderate Financial - Moderate Environmental - Moderate 	2	4	8	Medium
12	Environmental	Environmental Damage/Impact	Fire on Parks and Reserves spreading to neighbouring properties	 Arson; Sustained hot and dry weather; Poor maintenance of grass and trees 	 Cultural - Major Human - Moderate Image & Reputation - Major Regulatory - Major Financial - Major Environmental - Major 	2	4	8	Medium
20	Delivery	Project Management	Property infrastructure projects unable to be completed or significantly delayed	 Supply chain disruptions; Covid Lockdowns; Shortage of suppliers/contractors 	Operations - Moderate Image & Reputation - Moderate Financial - Major	2	4	8	Medium
18	Physical Asset	Asset failure	Subsidence and/or instability of graves and cemetery land resulting in damage to graves.	Inadequate backfill practices; Geotechnical issues; Extreme rainfall events	Operations - Moderate Image & Reputation - Moderate Regulatory - Minor Financial - Minor Environmental - Minor Cultural - Moderate	2	3	6	Medium
11	Physical Asset	Condition	Vandalism – of assets in parks and reserves (e.g. furniture, playgrounds, trees).	 Inadequate security plan; Poor condition and/or non-existent lighting; Poor condition and/or fencing/gates 	 Image & Reputation - Moderate Financial - Moderate Cultural - Moderate 	2	3	6	Medium
	Delivery	Contract Management	Lack of clarity around ownership and operating agreements results in poor maintenance management	For a number of recreational facilities and sportsgrounds there is limited formal agreement on maintenance and operations responsibilities between Council and the clubs/organisations using the facilities.	Operations - Minor Image & Reputation - Minor Financial - Minor	3	2	6	Medium

15	Regulatory	Heath & safety	Cemeteries	Public Health and Safety – accidents causing injury and/or sickness to people, resulting in claims and or negative publicity	 Health and Safety failings; Poorly designed paths; Lack of maintenance; Open graves Illness from poor interment process 	 Human - Moderate Image & Reputation - Moderate Regulatory - Minor Financial - Moderate Environmental - Minor 	2	3	6	Medium
16	Regulatory	Heath & safety	Cemeteries	Security issues including vandalism and undesirable gatherings within cemeteries.	 Inadequate security plan; Poor condition and/or non-existent lighting; Poor condition and/or fencing/gates 	Image & Reputation - Moderate Financial - Moderate Cultural - Minor	2	3	6	Medium
9	Planning	Service levels	Public Toilets	Public toilets with limited or inadequate serviceability	 Inappropriate use of facilities; Vandalism; Flooding; Out dated design including disability access 	• Image & Reputation - Minor	3	2	6	Medium
	Planning	Strategic planning					1		0	Low
	Management	Systems & Technology							0	Low
	Delivery	Communication							0	Low
	Regulatory	Compliance							0	Low
	Management	Financial							0	Low
	Physical Asset	Lifespan							0	Low
	Management	People							0	Low
	Regulatory	Changing legislation							0	Low
									0	Low
									0	Low

	paces Risk Re	-								Current Ri
Risk ID	Risk Area	Risk Type	Asset	Risk	Cause	Impact (Consequence)	Likelihood	Consequence	Initial Risk	Risk Assessment
7	Environmental	Natural hazards		Natural disaster damage to administration buildings that would interrupt service delivery (server room is location in Council Administration Building) and not available for Civil Defence purposes	Natural disaster damage to administration buildings caused by: Major fire Earthquake Volcanic event Major floods / tsunami	Human - Catastrophic Operations - Catastrophic Image & Reputation - Moderate Financial - Catastrophic	4	5	20	Extreme
14	Planning	Asset management planning	Built Spaces	Reactive maintenance not solving underlying issues with Building Performance, leading to a continually degrading asset portfolio	 Reactive instead or proactive approach; Inadequacies in regular condition inspections; Lack of planned maintenance and forward works plans; Incomplete and/or inaccurate asset data; Limited funding for maintenance and renewals. 	Image & Reputation - Moderate Financial - Major	4	4	16	High
5	Physical Asset	Condition	Corporate Property	Risk of Council Administration Building used for Civil Defence purposes (i.e. critical assets) not being fit for purpose	Seismic deficiencies; Located in tsunami zone; Lack of condition and remaining life data; Insufficient renewal and maintenance funding	Operations - Major Image & Reputation - Moderate Financial - Major	4	4	16	High
8	Environmental	Natural hazards	Corporate Property	Council buildings damaged through earthquake that would interrupt service delivery, business interruption and community services	Significant seismic event; Wairoa District located in high risk zone; Under strength buildings; Incorrect seismic ratings	Human - Major Operations - Major Financial - Major	4	4	16	High
18	Environmental	Natural hazards	Housing	Natural disaster damage to social housing units that would make them unavailable for use by tenants	 Natural disaster damage to Council Housing caused by: Major fire Earthquake Volcanic event 	Human - Catastrophic Operations - Catastrophic Image & Reputation - Moderate Financial - Catastrophic	4	4	16	High

					т.		1			
20	Delivery	Procurement	Built Spaces	Lack of formal contracts potentially resulting in the Council being liable for H&S, operational, regulatory, financial (other etc) issues / breaches /fines / prosecutions (other etc)	_	 Employees - Moderate Operations - Major Image & Reputation - Major Regulatory - Major Financial - Major Environmental - Moderate Cultural - Moderate 	4	4	16	High
13	Regulatory	Compliance	Built Spaces	Council buildings are not up to Seismic code, therefore not safe to be occupied and at risk of catastrophic failure.	Errors found in previous seismic ratings/ assessments; Old construction methods, materials, designs and codes; Lack of planned maintenance.	 Human - Catastrophic Employees - Major Operations - Major Image & Reputation - Major Regulatory - Major Financial - Major Cultural - Moderate 	3	5	15	High
1	Planning	Asset management planning	Built Spaces	Poor asset management practices including lack of information / knowledge on which to produce informed decisions on investment	 Incomplete and/or inaccurate asset data; Limited condition assessments and/or condition data; Limited information and analysis to date; Historical under-investment 	 Operations - Moderate Image & Reputation - Moderate Financial - Moderate 	4	3	12	High
2	Planning	Asset management planning	Built Spaces	Overall asset life and conditions compromised due to limited asset information, maintenance and renewal programmes	 Incomplete and/or inaccurate asset data; Limited condition assessments and/or condition data; Limited funding for maintenance and renewals at asset component level; 	 Operations - Moderate Image & Reputation - Moderate Financial - Moderate 	4	3	12	High
19	Regulatory	Compliance	Housing	Identified building materials and lack of maintenance may result in potential risk and health issues for tenants	 Hazardous materials (asbestos, lead paint etc) in existing buildings; Poor maintenance, drainage and/or ventilation - water, mould, mildew resulting; Poor design - 'leaky buildings', lack of insulation 	 Human - Major Operations - Major Image & Reputation - Moderate Regulatory - Major Financial - Major Environmental - Moderate 	3	4	12	High
3	Regulatory	Public health	Built Spaces	Identified building materials and lack of maintenance may result in potential risk and health issues for building users and tenants	 Hazardous materials (asbestos, lead paint etc) in existing buildings; Poor practices with hazardous materials; Poor maintenance, drainage and/or ventilation - water, mould, mildew resulting; Poor design - 'leaky buildings', lack of insulation 	 Human - Major Operations - Moderate Image & Reputation - Moderate Regulatory - Moderate Financial - Moderate Environmental - Moderate 	3	4	12	High
4	Physical Asset	Asset failure	Built Spaces	Building asset component failure resulting in serious injury to building users or tenants	 Power failure; Undermaintained - mainly reactive renewals historically; Asset component overuse; Asset component past its useful/design life; Cheap / inadequate material; Incorrect usage; Design flaws 	Human - Image & Reputation - Regulatory - Financial -	3	3	9	Medium

10	Physical Asset	Asset failure		Facility temporarily closed due to equipment failure	 Poor performing asset; Old assets; Incomplete and/or inaccurate asset data; Limited condition assessments and/or condition data; Limited funding for maintenance and renewals of equipment; Reactive instead of proactive approach 	Human - Minor Operations - Moderate Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
11	Physical Asset	Asset failure	-	Pool asset component failure resulting in injury to user	 Poor performing asset; Old assets; Incomplete and/or inaccurate asset data; Limited condition assessments and/or condition data; 	Human - Moderate Operations - Moderate Image & Reputation - Moderate Regulatory - Minor Financial - Moderate	3	3	9	Medium
12	Physical Asset	Asset failure	-	Pool facility temporarily closed due to equipment failure	Poor performing asset; Old assets; Incomplete and/or inaccurate asset data; Limited condition assessments and/or condition data; Limited funding for maintenance and renewals of equipment; Reactive instead of proactive approach	Operations - Moderate Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
21	Environmental	Climate change		Property assets vulnerable to effects of climate change	Climate change; Property assets in locations vulnerable to climate change effects	Operations - Moderate Image & Reputation - Moderate Financial - Moderate Environmental - Moderate Cultural - Minor	3	3	9	Medium
6	Environmental	Environmental Damage/Impact		Fire damage to Council buildings that would interrupt service delivery (including IT, server room is location in Council Administration Building) and services for community (i.e. pools, libraries)	 Vandalism/arson; Electrical fault; Lightning; Fuel / chemical storage 	Operations - Major Image & Reputation - Moderate Financial - Moderate	3	3	9	Medium
15	Delivery	Procurement		Liability issues with third-party organisations using Council buildings	Informal lease agreements with organisations (e.g. sports clubs) on some Council owned buildings	 Image & Reputation - Moderate Regulatory - Moderate Financial - Moderate 	3	3	9	Medium
22	Planning	Service levels		Buildings do not meet community / user asset expectations	 Lack of maintenance; Poor appearance / safety issues; Outdated designs; Location and/or accessibility 	Image & Reputation - Moderate	3	3	9	Medium

23	Delivery	Project Management	Built Spaces	Property infrastructure projects unable to be completed or significantly delayed	 Supply chain disruptions; Covid Lockdowns; Shortage of suppliers/contractors 	 Operations - Moderate Image & Reputation - Moderate Financial - Major 	2	4	8	Medium
17	Physical Asset	Asset failure	Built Spaces	Emergency generators failing when required	 Lack of regular maintenance; Age of generators; Knowledge of generators held by a limited amount of staff 	Operations - Moderate Image & Reputation - Moderate Financial - Moderate	2	3	6	Medium
16	Regulatory	Compliance	Land	Liability and/or cost implications of non-Council owned buildings located on Council land - especially if the buildings are no longer used/abandoned	Historical decisions/agreements that have led to Non-council owned buildings on Council land; Building owner abandoning buildings; Lack of maintenance; Poor asset records	Image & Reputation - Moderate Financial - Moderate Cultural - Moderate	2	3	6	Medium
9	Physical Asset	Condition	Built Spaces	Significant vandalism / malicious property damage	 Vandals; Insufficient security systems/operations; Poor maintenance allowing access 	Human - Moderate Operations - Moderate Image & Reputation - Minor Financial - Moderate	2	3	6	Medium
	Regulatory	Changing legislation							0	Low
	Planning	Strategic planning							0	Low
	Management	Systems & Technology							0	Low

Naste	Managemen	nt Risk Registe	r						C	urrent Risk	Assessment	Risk Treatm	ent Strategies	Re	sidual Risk	Assessm	ent	Risk I	Reduction		How will Risk and (ontrol be Monito	red
Risk ID R		Risk Type	Asset	Risk	Cause	Impact (Consequence)	ро	nce	Risk	isk ent	Current controls (any existing policy,		Status	poc	nce	Xis k	tisk ent	e :	() I	Department	Owner	Frequency of	Date updated
							Likeliho	Consequer	Initial R	R	procedures, etc)	Mitigation Plan		Likeliho	Consequer	Residual R	R Assessme	Risk Reducti	Cost (\$00	/ Cost Ka		review	
1 [elivery	Procurement	Landfill	Experienced and knowledgeable Contractors/operators are difficult to attract and retain for operating a small/remote site, resulting in poor quality and compliance standards and high operating costs.	Council can afford; • Shortage of in house capability as	Regulatory - Major Image & Reputation - Major Financial - Major	5	4	20	Extreme	•	WSP to support WDC in-house team Review sustainability of continuing to operate landfill, not just financial	WSP supporting in-house team as required Waste Service Sustainability Review underway	5	4	20 E	ktreme	0		Property	Property Manage	Quarterly	17/01/2022
2 F	egulatory	Heath & safety	Landfill	Public or personnel incident and landfill site due to inadequate H&S controls results in ill health, injury or death	Explosion due to combustible atmosphere Contact with contaminated/hazardous materials Exclusion zones improperly enforced resulting in fall from height or interface between pedestrians and heavy machinery, falls/trips slips etc	Regulatory - Major Image & Reputation - Major	3	4	12	Extreme	Staff inoculations/PPE/training; Hazardous material handling procedures Contractor's H&S Plan including traffic management plan	Reviewing hazardous waste handling procedures to ensure immediate burial of asbestos-contain material Review exclusion zone procedures to ensure they re appropriate for protecting the public and staff from the significant hazards that exist at the tipping wall and as a result of moving machinery Regular review of the level of control in place to manage the risks	g •	2	4	8	High	4		Property	Property Manager	Annually	17/01/2022
3	1anagement	Financial	Landfill	Cost of landfill operation becomes unaffordable due to increasing costs of compliance and small waste stream	Increasing costs for purchasing NZU to offset gas emissions Increasing requirements for waste/emissions minimisation	• Financial - Major	4	4	16	High		Landfill/Waste Service Sustainability review to be completed to assess viability of WDC continuing to operate landfill	underway	4	3	12 N	ledium	4		Property	Property Manager	Annually	17/01/2022
4 E	nvironmental	Environmental Damage/Impact	Landfill	Inadequate use of odour, vermin or windblow rubbish results in public complaints and reputational damage	Controls implemented to manage risk are inadequate	Reputational - Moderate	3	3	9	Medium	•	Ensure cover requirements are being met Ensure compaction plan it appropriate and being used	g •	3	2	6 N	ledium	3		Property	Property Manager	Annually	17/01/2022
5 F	egulatory	Compliance	Landfill	Consent breach at Wairoa landfill due to leachate overload/discharge result: in compliance issues and potential fines/reputational damage		Regulatory - Major Image & Reputation - Major	5	4	20	High	WSP engaged to completed consent monitoring/testing		Existing systems being investigated as part of waste sustainability review	3	4	12 N	ledium	8		Property	Property Manage	Quarterly	17/01/2022
6 F	egulatory	Compliance		Consent breaches (not specific to leachate) due to inadequate processe or monitoring result in enforcement action being taken against Council	Inadequate implementation of	Regulatory - Major Image & Reputation - Major	4	4	16	Medium		Improvements to consent monitoring/discussions with HBRC Improvements to landfill operations to meet consent requirements	WSP to assist in consent monitoring	2	4	8	High	8	#DIV	/0! Property	Property Manager	Annually	17/01/2022
7 E	nvironmental	Natural hazards	Landfill	Fire damage to property specifically neighbouring Council owned forestry block due to landfill operations, resulting in financial and reputational	Landfill operations not sufficient to mitigate the risk Lack of firefighting equipment and	Image & Reputation - Major Financial - Major	2	4	8	Medium	•	Develop plans & procedures for fire events at the landfill Ensure adequate fire fighting is kept on site in accordance with plans and		2	4	8 N	ledium	0		Property	Property Manager	Annually	17/01/2022
8 [elivery	Contract Management	Landfill	Alternative means of disposal or storage of recyclables required due to market changes, resulting in increased costs		Financial - Moderate	3	3	9	Low	Waste would be sent to alternative location	Formalise agreement with alternative disposal site (e.g. Omarunui or other landfill)	•	2	2	4	Low	5		Property	Property Manager	Annually	17/01/2022
9 E	nvironmental	Natural hazards	Landfill	Landfill becomes unavailable due to natural disaster or other event impacting access, requiring alternative disposal options		Financial - Moderate Service deliver - Moderate	1	3	3	High	•	Contingency planning to be developed for landfill closures including establishing alternative disposal options	•	2	2	4 N	ledium	-1		Property	Property Manager	Annually	17/01/2022
10 F	lanning	Strategic planning	Landfill	Landfill reaches capacity and inadequate plans are in place for waste disposal (new cell or alternative disposal locations)	Site full Inadequate planning Increased disposal quantities	Financial - Major Image and Reputation - Moderate Service Delivery - Major	3	4	12	High	Allowance made in LTP for renewing consents and new cell design	Sustainability review underway to inform next step Allowance made in LTP for planning next steps/new cell	Service Sustainability review underway	2	3	6 N	ledium	6		Property	Property Manager	Annually	17/01/2022
11 P	lanning	Strategic planning	Landfill	Inability to adapt to future changes/opportunities results in inefficient landfill operations and high costs.	Lack of strategic planning Insufficient knowledge to identify challenges/opportunities and respond	• Financial - Moderate	3	3	9	Medium	•	Continue to monitor and investigate changes/opportunities. Engage with experts as required to support this.		2	3	6 N	ledium	3		Property	Property Manager	Annually	17/01/2022
12 F	egulatory	Changing legislation	h Landfill	Unforeseen changes to legislation require further investment to ensure compliance, impacting landfill sustainability	Legislation change Inadequate monitoring of legislation changes	• Financial - Moderate	3	3	9	High	Waste Sustainability review underway	Continued monitoring of legislation proposals. Supported by consultants/specialists as required WDC to submit on legislation changes where appropriate	WSP providing support in assessing the impact of proposed legislation changes.	2	3	6	Low	3		Property	Property Manage	Annually	17/01/2022
13 P	lanning	Service Levels	Landfill	Changes to Levels of Service as a result of budget cuts or constraints result in negative public feedback and increases in fly tipping	Budget reductions/constraints Lack of consultation with public	Image & Reputation - Moderate	3	3	9	Medium	Consultation with community completed previously.	Adequate financial/forward works planning Monitoring community feedback Communicating with public on LoS vs CoS	·	3	2	6 N	ledium	3		Property	Property Manager	Annually	17/01/2022

16	Enviro		Environmental Damage/Impact	Landfill	Remote waste dumping / fly tipping, public and private property due to landfill access results in image and reputational damage and increased costs	Closure of satellite transfer stations; Distance to landfill	Image & Reputation - Minor Financial - Minor	4 2	8	Medium	monitoring	Sustainability Review considering fly- tipping impacts & rated waste collection service options	3	2	6	Medium	2	Property	Property Manager	Annually	17/01/2022
17	Mana	igement I	Data & information	Landfill	contractors on stand alone systems	Inadequate asset information storage by WDC Lack of requirements for Contractors to deliver data	Regulatory - Minor Financial - Minor	4 2	8	Medium	Investigate transferring data to WDC systems, or receiving regular outputs from Contractors systems to add to WDC system Investigate contract requirements and look to improve data requirements in future contract revisions	•	2	1	2	Low	6	Property	Property Manager	Annually	17/01/2022
18	Mana	igement I	People	Landfill	High turnover within Contractors staffing and inadequate handower and training result in inefficient operations, and non-conformances with requirements exposing council to compliance risks		Regulatory - Minor Financial - Minor	4 2	8	Medium	Document key processes/procedures to aid in handover between staff Review contracts to ensure adequate training and experience of staff, and continuity of appropriately trained staff as a contract requirement	•	2	2	4	Low	4	Property	Property Manager	Annually	17/01/2022
19	Regula	atory	Compliance	Landfill	Contractors processes and policies not in place or appropriate affecting operations & obligations and exposing Council to compliance risks	to enforce compliance	Regulatory - Moderate Financial - Minor	4 3	12	Medium	Review procurement/contract requirements, transfer risk to qualified contractor where appropriate, and includes mechanisms for ensuring contractor compliance	•	2	3	6	Medium	6	Property	Property Manager	Annually	17/01/2022

Commentary	Emergency works projects have been added as variations to existing contracts. Gives good control of projects, but risk around expenditure/procurement	Emergency works projects have been added as variations to existing contracts. Gives good control of projects, but risk around expenditure/procurement	Emergency work projects have been added as variations to existing contracts. Gives good control of projects, but risk around around dimma forecomment	Timeline completion and budget overspend risks.	Timalina comulation rich and rich of funds haina ramound (TIE funding). The team have a collid project rulan and are managing	Timeline completion risk and risk of funds being removed (11f funding). The team have a solid project plan and are managing the risk Aiming for completion by November 2024	BAU Operational risks	A constitution of the manual desirability of the best of the second	Resource/Imeline risks. Expected completion date has passed.	Funding risk due to DIA requests.	Improve flats air quality and heat in line with central govt new standards. Complete	Reputational risk with differing public views.		Remaining funds to ge trawards building upgrade for CCC which will be completed as a side project. Time completion pressures	BAU Operational risks.	BAU Operational risks	Delayed compliance sign-off, pressure on operations	Budget overnan risk	BAU Operational risks	BAU Operational risks	BAU Operational risks	BAU Operational risks	Current projects underway, budget overrun risk	BAU Operational risks BAU Operational risks	BAIL Charactional lights	BAU Operational risks	BAU Operational risks	BAU Operational risks	BAU Operational risks	BAU Operational risks.	
Delivery date %		Jun 24 75	Jun 24 50	Jun 24	Jun 24		Jun 24 50		Apr 24 70	Jun 24 5		Jun 24 50	Nov 23 100	May 24 5	Jun 24 30	Mar 24 5	Dec 23 95	Nov 24 15	Jun 24	Dec 24 2	Dec 24 5	Mar 24 25		Jun 24 15	OC BC and	Apr 24			Jun 24 25	Jun 26 5	
Forecast spend D	50	50	Opoiti Br and Avalon Br	1,201,043	526,345	229,000	262,000	000	000,888	310,000	198,000	716,000	240,000	150,000	120,000	120,875	5,700,000	2,450,000	250,000	520,000	1,500,000	450,000	637,000	85,000	425 000	39,500	000'06	365,000	100,000		
Spend to date Fc		4,405,906 On Going	10,915,234 Opoiti Br	\$ 1	16 910 \$	16,818 \$	100,000 \$	4	\$ 000'05/	φ.	113,000 \$	350,000 \$	\$ 220,000 \$	·	\$ 000'05	2,500 \$	\$ 000'002'5	250,000 \$	\$	v. 0	n vn	\$	٠,	s s	t	· ·	\$ 000'9	\$1,500 \$	v.	\$ 926'8	
Variation Budget Spe	\$ 120,000 \$	\$ 1,000,000 \$	\$ 000'000'6 \$	\$ - \$		un.	\$ 262,000 \$	500	\$ 6/4,000 \$	\$ 310,000 \$	\$ 198,000 \$	\$ 716,000 \$		\$ 150,000 \$	\$ 380,000 \$	\$ 120,875 \$	\$ 2,700,000 \$	\$ 2,450,000 \$	•	\$ 506,010 \$		\$ 450,000 \$	· ·	· · · · · · · · · · · · · · · · · · ·		\$ 39,500 \$	\$ 65,000 \$		· · · · ·		24
Budget	\$ 1,355,000	\$ 1,100,000	\$ 926,930	\$ 800,000	\$ 526,345	\$ 229,000	\$ 212,000	4	\$ 165,000	· •	. \$	\$ 66,000	\$ 240,000	\$ 120,000	\$ 120,000	\$ 120,875	\$ 3,000,000	\$ 1,916,000	\$ 250,000	\$ 1300,000	\$ 1,500,000	\$ 250,000	\$ 637,000	\$ 85,000	425,000	\$ 39,500		\$ 365,000	\$ 100,000	\$ 2,135,000	High
Phase	Delivery	Delivery	Delivery	Design	Delivery	Design	Delivery		Deinery	Design	Design	Delivery	Completed	Delivery	Delivery	Delivery	Delivery	Delivery	Design	Design	Design	Design	Delivery	Design Design	conjugation of the control	Delivery	Design	Delivery	Investigative	Investigative	Considerable
Project Commenced	1/06/2021	1/10/2021	1/12/2022	1/12/2023	1/02/2024	1/01/2023	1/12/2022	5000	1/12/2022	1/03/2024	1/12/2022	1/02/2023	1/04/2023	1/01/2024	1/07/2022	1/07/2022	13/07/1905	1/01/2023	1/07/2023	1/09/2023	1/10/2023	1/11/2023	1/11/2023	1/01/2024	1,006,0004	1/01/2023	1/01/2022	1/02/2024	1/01/2024	1/01/2024	Risk Key Low
Project name and a second seco	od Damage Repairs, Mohaka Waiau, Package 4	21/06 Flood Damage Repairs Walkaremoana Ruakituri Package 3	22/04 Structural Bridge Repairs 2022	Blacks Beach Revetment	uctural Bridge Kepairs 2023/24	oping Centre	foliets Upgade, Nuhala, Onala (TIF round 6).	10 7 10 10 10 10 10 10 10 10 10 10 10 10 10	Kamp Ground Upgrade (IIF round 6).	Tual Destination Playground	Pensioner Housing Healthy Homes	stination Playground & Spaces (Community Partnership)	itandring Netball Courts resurface	Library Roof Replacement	talis Refurbishment	Cemetery Beams, Access extension plus septic waste field upgrade	Building	uiding	Rural Drainage Improvements	North Clyde Toilets Replacement & site development	waii oa Aufori, nuliway Exterisioni Wairoa Riverbank Enhancement	Paul Street Pumping Main Replacement	pelines Renewals	Reservoir Renewals CCTV Stormwater Networks	Morto Dirana l Cietam	mortanty waste Craposan system Frasertown Public Toilets Septic Disposal Field replacement	Library Kiosk	et Stormwater Replacement	Ker bside Expansion Stage 1	Resource Recovery Centre/Transfer Station Upgrade	
	ort	ort	ort	ans ort Blacks Bear	ort	<u> </u>		#REF!	Au Camp Group			Mahia Des	Standring	Library Ro	Halls Refu.	Cemetery ,	Gemmells Building	Winters Building	Rural Drair	#REF! North Clyd	Wairoa Riv	Paul Street	Wairoa Pip	Reservoir CCTV Storr	Modern		ty Library Kio	Grey Stree	Kerbside E.		

Wairoa District Council 1140. Cemeteries Cost Centre Account Details For Period 2023/24 - June

Account	2023/24□ YTD□ Actuals□ June	2023/24□ YTD□ Budgets□ June	2023/24□ Full□ Year□ Budget
Revenue	(30,519)	(29,232)	(29,232)
Subsidies	(2,568)	(2,916)	(2,916)
Fees and Charges	(27,951)	(26,316)	(26,316)
Expenditure	125,521	144,396	144,396
Depreciation and Amortisation	1,472	2,052	2,052
Internal Interest Charges	13,566	1,908	1,908
Internal Charges	30,511	38,328	38,328
Other Operating Expense	79,972	102,108	102,108
Grand Total	95,002	115,164	115,164

Wairoa District Council 1110. Parks and Reserves Cost Centre Account Details For Period 2023/24 - June

	2023/24□ YTD□	2023/24□ YTD□	2023/24
Account	Actuals⊡ June	Budgets⊡ June	Full□ Year□ Budget
Revenue	(338,876)	(475,668)	(475,668)
Capital Subsidy	(290,201)	(438,000)	(438,000)
Fees and Charges	(48,676)	(37,668)	(37,668)
Expenditure	1,304,035	1,564,056	1,564,056
Depreciation and Amortisation	131,337	165,000	165,000
Employee Benefit Expenses	70,601	178,884	178,884
Internal Charges	154,021	190,452	190,452
Other Operating Expense	948,076	1,029,720	1,029,720
Non Current Assets	675,641	540,600	540,600
Work in Progress	675,641	540,600	540,600
Grand Total	1,640,799	1,628,988	1,628,988

Wairoa District Council Transport Reporting Classification Account Details For Period 2023/24 - June

	2023/24□ YTD□ Actuals□	2023/24□ YTD□ Budgets□	2023/24□ Full□ Year□
Account	June	June	Budget
Revenue	(33,902,772)	(24,690,660)	(24,690,660)
Targeted Rates	207	96	96
Subsidies	(33,877,057)	(5,943,408)	(5,943,408)
Capital Subsidy	0	(18,692,700)	(18,692,700)
Fees and Charges	(25,922)	(54,648)	(54,648)
Expenditure	35,741,365	14,725,632	14,725,632
Depreciation and Amortisation	5,685,542	4,976,856	4,976,856
Employee Benefit Expenses	(90,260)	(128,952)	(128,952)
Finance Costs	0	4,560	4,560
Internal Interest Charges	61,485	234,972	234,972
Internal Charges	1,318,651	1,602,984	1,602,984
Other Operating Expense	28,765,947	8,035,212	8,035,212
Non Current Assets	2,508,779	13,353,372	13,353,372
Grand Total	4,347,371	3,388,344	3,388,344

Wairoa District Council Waste Management Reporting Classification Account Details For Period 2023/24 - June

	2023/24 YTD	2023/24□ YTD□	2023/24□ Full□
Account	Actuals□ June	Budgets □ June	Year□ Budget
Revenue	(1,322,007)	(1,101,252)	(1,101,252)
Targeted Rates	440	1,152	1,152
Subsidies	(98,033)	0	0
Fees and Charges	(1,224,415)	(1,102,404)	(1,102,404)
Expenditure	2,027,298	2,786,880	2,786,880
Depreciation and Amortisation	111,738	122,568	122,568
Internal Interest Charges	47,744	75,804	75,804
Internal Charges	182,819	226,452	226,452
Other Operating Expense	1,684,997	2,362,056	2,362,056
Grand Total	705.291	1.685.628	1.685.628

Wairoa District Council Water Services Reporting Classification Account Details For Period 2023/24 - June

	2023/24	2023/24□	2023/24
	YTD□	YTD□	Full□
	Actuals□	Budgets□	Year□
Account	June	June	Budget
Revenue	(348,814)	(718,560)	(718,560)
Targeted Rates	1,846	384	384
Subsidies	0	(249,996)	(249,996)
Capital Subsidy	0	(104,004)	(104,004)
Fees and Charges	(350,660)	(364,944)	(364,944)
Expenditure	5,870,614	6,326,364	6,326,364
Depreciation and Amortisation	1,928,702	2,188,152	2,188,152
Employee Benefit Expenses	163,825	308,388	308,388
Internal Interest Charges	302,715	161,724	161,724
Internal Charges	712,235	886,284	886,284
Other Operating Expense	2,763,136	2,781,816	2,781,816
Non Current Assets	3,220	127,404	127,404
Work in Progress	3,220	127,404	127,404
Grand Total	5,525,019	5,735,208	5,735,208