



Kaipara te Oranganui

**KAIPARA
DISTRICT**

Two Oceans Two Harbours

Audit, Risk and Finance Committee Open Agenda

Date: Thursday 11 June 2020
Time: 10.00 am
Location: KDC Mangawhai Office
Unit 6, 6 Molesworth Drive
Mangawhai

Committee members: Stana Pezic (Chair)
Councillor Peter Wethey (Deputy Chair)
Deputy Mayor Anna Curnow
Councillor Jonathan Larsen
Councillor David Wills
Councillor Eryn Wilson-Collins

*For any queries regarding this meeting please contact
the Kaipara District Council on (09) 439 7059*

Thursday, 11 June, 2020

10:00 am

To be confirmed

Pages

1. Opening

1.1 Karakia

1.2 Apologies

1.3 Confirmation of agenda

1.4 Conflict of interest declaration

2. Confirmation of minutes

2.1 Audit, Risk and Finance Committee meeting 12 March 2020

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3. Open agenda

3.1 Audit action update

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Bryce Hendersen and Vera Chian from Deloitte will be in attendance.

3.2 Treasury Policy update

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Alex Wondergem from PricewaterhouseCoopers will be in attendance.

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4.6	Recommendation to return to open session 11 June 2020	
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Audit, Risk and Finance Committee meeting

12 March 2020

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020

Recommendation/Ngā tūtohunga

That the Kaipara District Council:

- a) Confirms that the open minutes of the Audit, Risk and Finance Committee meeting held on 12 March 2020 are a true and correct record.

Attachments/Ngā tapiritanga

	Title
A	Unconfirmed open minutes of Audit, Risk and Finance Committee meeting 11 March 2020

Minutes of the first meeting of the Audit, Risk and Finance Committee

Date: 12 March, 2020
Time: 10:04 a.m. - 2:39 p.m.
Location: Mangawhai Club
219 Molesworth Drive
Mangawhai Heads

Members present: Stana Pezic (Chair)
Councillor Peter Wethey (Deputy Chair)
Deputy Mayor Anna Curnow
Councillor Jonathan Larsen
Councillor David Wills
Councillor Eryn Wilson-Collins
His Worship the Mayor Jason Smith

Non-members: Councillor Victoria del la Varis-Woodcock (present but not voting)

1. Opening

1.1 Karakia

Mayor Smith opened the meeting with a karakia.

1.2 Apologies

No apologies.

1.3 Confirmation of agenda

Moved: Cr Wethey

Seconded: Cr Larsen

That the agenda for 12 March 2020 be confirmed with the following additions, at the request of the Committee:

- a) Verbal update on Council's response to COVID-19 added to item 2.4 health and safety update
- b) Verbal update on the Provincial Growth Fund risks added to item 3.1 organisational risk register.

Carried

1.4 Conflict of interest declaration

Nil.

2. Open minute items

2.1 Proposed work programme to June 2021

Moved: Cr Wethey

Seconded: Cr Larsen

That Audit, Risk and Finance Committee:

- a) Approves the proposed Audit, Risk and Finance Committee reporting work programme for 2020/2021, with the following additions:
 - a. Independent internal audit programme to be commenced annually
 - b. Audit action update to be reported six-monthly (for all audits)
 - c. Risk framework to be reviewed annually
 - d. Annual Plan or Long Term Plan to be reported annually (for information only)
 - e. Northland Transportation Alliance to be reviewed against original business case.
- b) Recommends to Council to make following additions to the Audit, Risk and Finance Committee Terms of Reference:
 - a. 'Policy compliance' [2nd bullet point in risk responsibilities]
 - b. Review effectiveness of risk management and internal control systems [in risk responsibilities]
 - c. Monitor operating and capital expenditure programme [in finance responsibilities].

Carried

2.2 Deloitte independent assurance report

Moved: Deputy Mayor Curnow

Seconded: Mayor Smith

That Kaipara District Council:

- a) Notes the independent assurance report ending June 2019.

Carried

2.3 Proposed risk management framework: policy and process

Moved: Deputy Mayor Curnow

Seconded: Cr Wilson-Collins

That the That Audit, Risk and Finance Committee:

- b) Adopts the Risk Management Framework (with the exception of Appendix 5: Risk Appetite Statements), with the following amendments:

Risk categories (page 15 of the Framework)

- a. Consequence rating changed to:
 - i. 1 Minor
 - ii. 2 Low
 - iii. 3 Moderate
 - iv. 4 High
 - v. 5 Extreme
- b. Financial risks to be moved over 1 column (into higher risk categories)
- c. Minor/environmental risk – change in wording to ‘limited’ damage
- d. Extreme/reputational risk – change to ‘for district-wide issues or implications’

Risk reporting (page 16 of the Framework)

- e. Extreme risks to be reported to Council and the Chair of the Audit, Risk and Finance Committee.
- c) Delegates the Chief Executive and the Chair of the Audit, Risk and Finance Committee to approve the amendments as above and any minor editorial changes that do not change the intent of the Risk Framework.
- d) Requests that a workshop session be held to discuss the Risk Appetite Statement, with all elected members, staff (Executive Team) and the Chair of the Audit, Risk and Finance Committee to be invited.

Carried

Meeting adjourned for morning tea at 11:23 a.m.

Meeting reconvened at 11:33 a.m.

2.4 Health and safety update

[Secretarial note: General Manager People and Capability gave a verbal update on Council's readiness for a possible COVID-19 pandemic during this item.]

Moved: Deputy Mayor Curnow

Seconded: Cr Wethey

That the Audit, Risk and Finance Committee:

- e) Notes the health and safety update for October—December 2019.

Carried

Meeting adjourned for lunch at 12:12 p.m.

Meeting reconvened at 12:43 p.m.

2.5 Legal compliance update

Moved: Mayor Smith

Seconded: Cr Wilson-Collins

That the Audit, Risk and Finance Committee:

- f) Notes the legal compliance update.

Carried

2.10 Public excluded items 12 March 2020

[Secretarial note: With the Chair's approval, the public excluded session was brought forward to accommodate the presenters.]

Moved: Cr Wethey

Seconded: Mayor Smith

- g) That the following items are considered with the public excluded:

Item	Grounds for excluding the public
Review of Organisation Risk Register	Protect the information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely to damage the public interest (Section 7(2)(c)(ii))
Cybersecurity assessment and response	Prevent the disclosure or use of official information for improper gain or improper advantage (Section 7(2)(j))

Contract monitoring and reporting	Enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) (Section 7(2)(i))
Investigation update	Protect the privacy of natural persons, including that of deceased natural persons (Section 7(2)(a)) Avoid prejudice to measures protecting the health or safety of members of the public (Section 7(2)(d)) Enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities (Section 7(2)(h))

Carried

3. Public excluded session

Meeting went into public excluded session at 1:01 p.m.

In the public excluded session, the Audit, Risk and Finance Committee resolved to make the following information publicly available after the meeting:

3.3 Contract monitoring and reporting

[Secretarial note: With the Chair's approval, this item was brought forward to accommodate the presenters.]

Moved: Cr Wilson-Collins

Seconded: Mayor Smith

That the Audit, Risk and Finance Committee:

- h) Notes the contract monitoring report for period ending December 2019, for the following contracts:*
 - CON860 Maintenance of Parks, Reserves, Cemeteries, Public Toilets, Buildings and Dargaville Gardens
 - CON888 Roding Network Maintenance
 - CON798 3 Waters Operations and Maintenance
 - CON706 Solid Waste.
- i) Agrees that this decision be published in the open minutes of this meeting, and that the report will remain confidential due to the commercially sensitive information contained within the report.*

Carried

3.1 **Review of Organisation Risk Register**

[Secretarial note: The Committee also discussed risks associated with the Provincial Growth Fund.]

Moved: Cr Wethey

Seconded: Deputy Mayor Curnow

That the Audit, Risk and Finance Committee:

- a. Notes the risk registers presented for discussion.*
- b. Agrees that the decision be published the open minutes of this meeting, and that the report remain confidential due to the confidential information contained within the report.*

Carried

3.2 **Cybersecurity assessment and response**

Moved: Cr Wilson-Collins

Seconded: Cr Wethey

That the Audit, Risk and Finance Committee:

- a. Notes the cybersecurity assessment and response report.*
- b. Agrees that the decision be published in the open minutes of the meeting, and that the report remain confidential due to the confidential information contained within the report.*

Carried

3.4 **Investigation update**

Moved: Cr Larsen

Seconded: Cr Wethey

That the Audit, Risk and Finance Committee:

- j) Notes the investigation update report.*
- k) Agrees that this decision be published in the open minutes of this meeting, and that the report remain confidential due to the confidential information within the report.*

Carried

2. Open minute items

Meeting returned to open session at 1:58 p.m.

2.6 Policy Register review programme update

Moved: Mayor Smith

Seconded: Deputy Mayor Curnow

That the Audit, Risk and Finance Committee:

- l) Notes the updated Policy Register.
- m) Requests that the Chief Executive review which policies are reported to the committee, separating internal and Council-adopted policies, to be reported to the next meeting.

Carried

2.7 Treasury management report

Moved: Deputy Mayor Curnow

Seconded: Cr Larsen

That the Audit, Risk and Finance Committee:

- n) Notes the treasury management report for January 2020.

Carried

2.8 LGFA draft Statement of Intent

Moved: Cr Wethey

Seconded: Mayor Smith

That the Audit, Risk and Finance Committee:

- o) Notes Local Government Funding Agency's draft Statement of Intent for 2020/2021.

Carried

2.9 Quarterly finance report

Moved: Cr Wethey

Seconded: Cr Wills

That the Audit, Risk and Finance Committee:

- p) Notes the quarterly finance report at 31 January 2020.

Carried

4. Closure

4.1 Karakia

Mayor Smith closed the meeting with a karakia.

Meeting closed at 2:39 p.m.

Kaipara District Council

Unconfirmed

Audit action update

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Sue Davidson, GM Sustainable Growth & Investment

Purpose/Ngā whāinga

The Audit, Risk and Finance Committee monitors progress in addressing actions identified by Council's auditors and received communications in relation to the audits conducted. This report enables the Committee to review and agree the scope of the external audit to be conducted by Deloitte

Executive summary/Whakarāpopototanga

Under the Local Government Act 2002 (LGA 2002), Council is required to have its Annual Reports and Long Term Plans (including Long Term Plan Amendments) audited.

Council's auditor, Deloitte, has provided a Planning Report for their audit for the year ended 30 June 2020 (**Attachment A**).

Following completion of the audits, Deloitte produces a report to Council detailing finding from each review and highlighting areas of improvement.

The report outlines the plan and areas of the focus for the audit of the financial statements for the Council year ended 30 June 2020.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Approves Deloitte's scope of Audit Planning Report for Council's financial statements for the year ending 30 June 2020.

Context/Horopaki

Under the Local Government Act 2002 (LGA 2002), Council is required to have its Annual Report audited. This is completed by Deloitte on behalf of the Auditor-General.

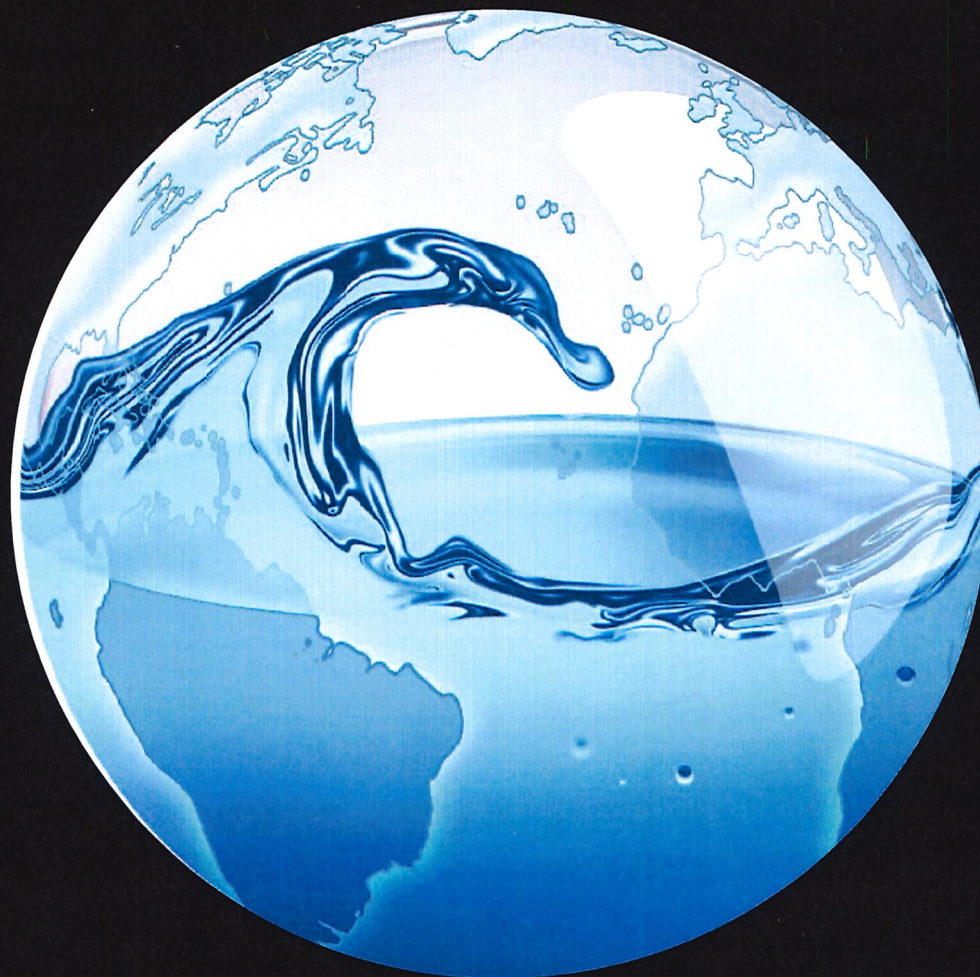
The Planning Report (**Attachment A**) produced by Deloitte outlines the audit scope and areas of focus for the audit of financial statement ended 30 June 2020. This audit and its fees (**Attachment B**) results in a 1.5% increase in fees as compare with 2019 fees.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Attachments/Ngā tapiritanga

	Title
A	Kaipara District Council Planning Report to the Audit, Risk and Finance Committee for the year ended 30 June 2020
B	Audit fees 2020



Kaipara District Council

Planning Report to the Audit, Risk and Finance Committee
for the year ended 30 June 2020

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- Appendix 2: Fraud responsibilities and representations
- Appendix 3: Independence and professional fees



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A. Partner introduction

Thank you for the opportunity to present our audit plan for the financial statement audit of Kaipara District Council for the year ending 30 June 2020.

This report is designed to outline our respective responsibilities in relation to the audit, to present our audit plan and to facilitate a two-way discussion on the plan presented. Our report includes:

- Our audit plan, including key areas of audit focus and our planned procedures; and
- Key accounting, regulatory and corporate governance updates, relevant to you.

We have an evolving audit plan that is established with input from management. The audit plan is tailored to Kaipara District Council's environment and revised throughout the year to adjust for business developments, additional relevant matters arising, changes in circumstances and findings from activities performed.

This plan is intended for the Audit, Risk and Finance Committee (and other Council members) and should not be distributed further.

We appreciate the opportunity to serve Kaipara District Council.

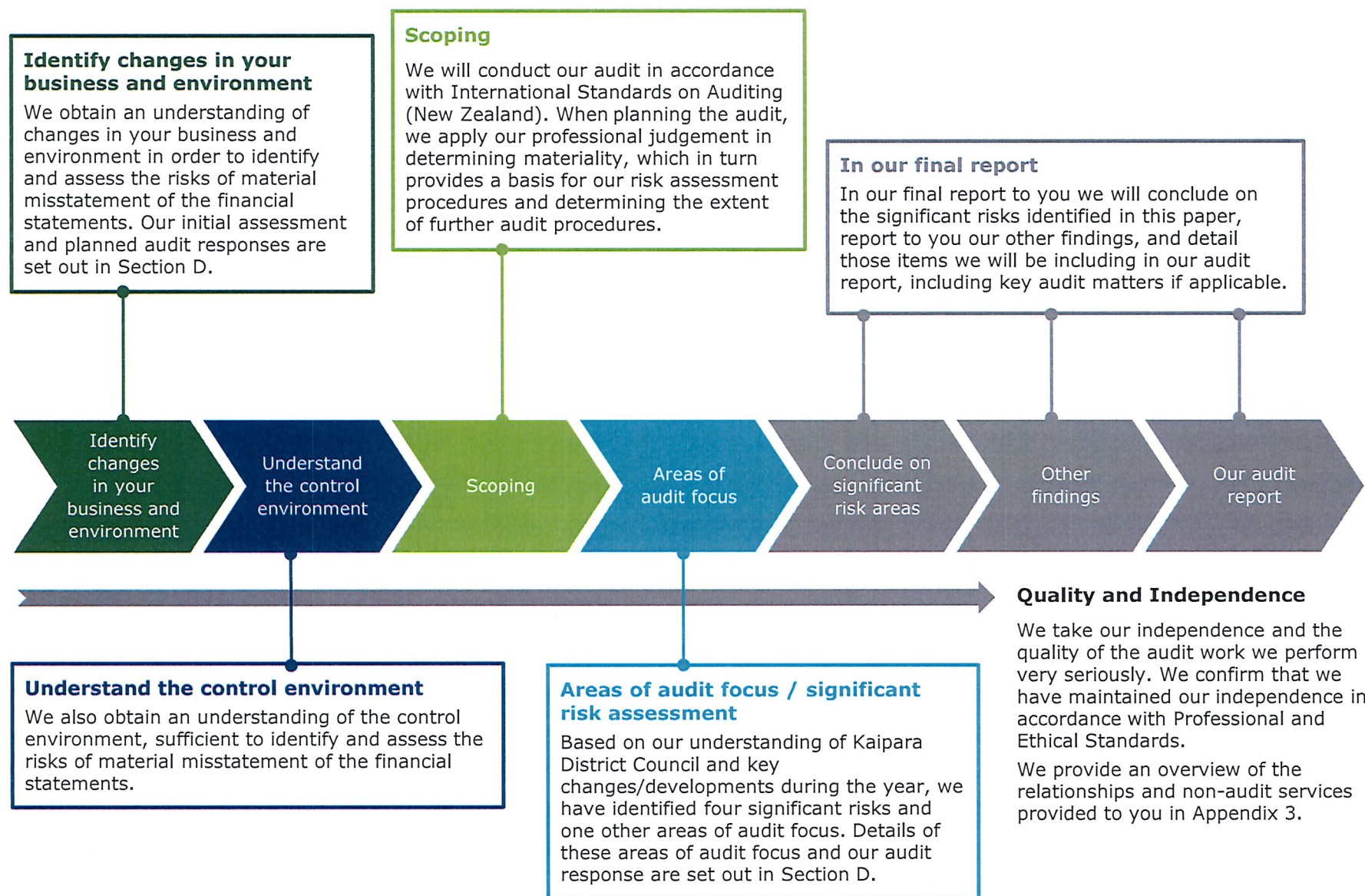
We hope the accompanying information will be useful to you, and we look forward to answering your questions about our plan.



**Bryce Henderson, Partner
for Deloitte Limited
Auckland | 26 May 2020**



B. Our audit explained – a tailored approach



C. Identifying the areas of audit focus



Identification of audit risks

Our audit approach is underpinned by the identification of relevant audit risks and tailoring appropriate audit responses to address those risks. We consider a number of factors when deciding on the significant areas of audit focus, such as:

- the risk assessment process undertaken during the planning phase of our engagement;
- the impact of Covid-19 on the financial statement line items;
- our understanding of the business risks faced by Kaipara District Council;
- discussions with management during the course of our audit;
- the significant risks and uncertainties previously reported in the financial statements, including any NZ PBE IPSAS IAS 1 critical accounting estimates or judgements;
- our assessment of materiality; and
- any changes in the business and the environment it operates in since the last annual report and financial statements;

The next page summarises the significant risks and other areas that we will focus on during our audit.

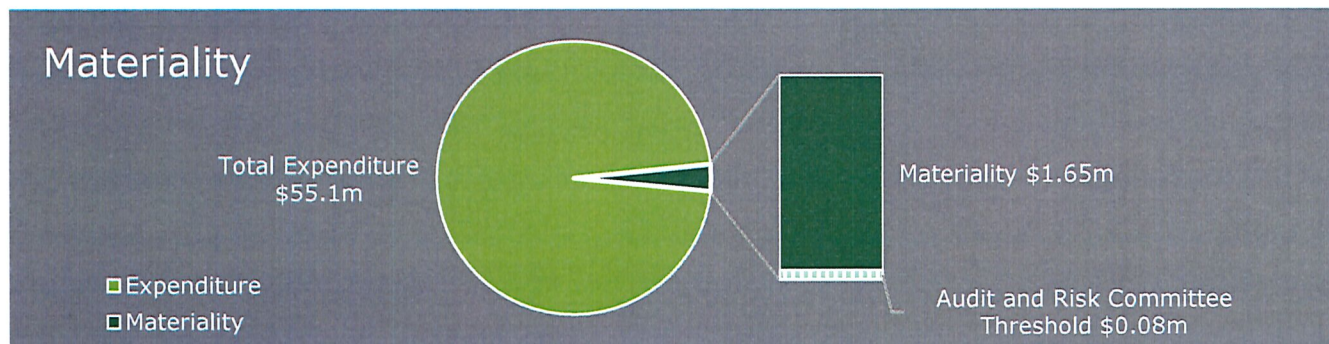
We continually update our risk assessment as we perform our audit procedures, so our areas of audit focus may change. We will report to you on any significant changes to our assessment as part of our final report to the Audit, Risk and Finance Committee.

Determining materiality

We consider materiality primarily in terms of the magnitude of misstatement in the financial statements that in our judgement would make it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced (the 'quantitative' materiality). In addition, we also assess whether other matters that come to our attention during the audit would in our judgement change or influence the decisions of such a person (the 'qualitative' materiality). We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Our quantitative preliminary materiality for the 2020 audit as shown below is based on total expenditure per the 2020 annual plan. This is deemed to be a key driver of business value, is a critical component of the financial statements and is a focus for users of those statements. We will update our preliminary materiality assessment once actual total expenditure for the 2020 year is determined.

The extent of our procedures is not based on materiality alone but also on local considerations of subsidiaries and divisions of Kaipara District Council, the quality of systems and controls in preventing material misstatement in the financial statements, and the level at which known and likely misstatements are tolerated by you in the preparation of the financial statements.



Although materiality is the judgement of the audit partner, the Audit, Risk and Finance Committee must satisfy themselves that the level of materiality chosen is appropriate for the scope of the audit.



D. Areas of audit focus – dashboard

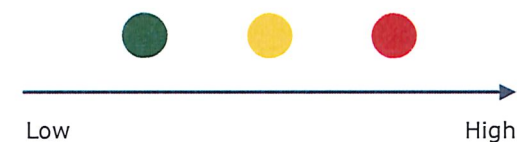
Area of audit focus	Significant risk	Fraud risk	Planned controls testing approach	Level of management judgement required
Management override of controls	✓	✓	D+I	N/A
Revaluation of infrastructure assets	✓	✗	D+I	●
Legislative compliance: rates revenue	✓	✗	D+I OE	●
Development contribution revenue	✓	✓	D+I	●
Impact of Covid-19	✗	✗	N/A	●
Sector wide area of focus	✗	✗	D+I	●

Planned approach to controls

D+I: Testing of the design and implementation of key controls

OE: Testing of the operating effectiveness of key controls

Level of management judgement required



D. Areas of audit focus



Area of audit focus	Our approach
Management override of controls We are required to design and perform audit procedures to respond to the risk of management's override of controls.	<p>We plan to:</p> <ul style="list-style-type: none">• Understand and evaluate the financial reporting process and the controls over journal entries and other adjustments made in the preparation of the financial statements.• Test the appropriateness of a sample of journal entries and adjustments and make enquiries about inappropriate or unusual activities relating to the processing of journal entries and other adjustments.• Review accounting estimates for bias that could result in material misstatement due to fraud, including assessing whether the judgements and decisions made, even if individually reasonable, indicate a possible bias on the part of management.• Perform a retrospective review of management's judgements and assumptions relating to significant estimates reflected in last year's financial statements.• Obtain an understanding of the business rationale of significant transactions that we become aware of that are outside the normal course of business or that otherwise appear to be unusual given our understanding of the entity and its environment.



D. Areas of audit focus



Area of audit focus

Our approach

Revaluation of Infrastructure Assets

The Council accounts for revaluations of infrastructure assets on a class of asset basis. The asset classes include roads, land under roads, water reticulation, wastewater reticulation, stormwater systems and flood protection assets. Land associated with the wastewater system (particularly at Mangawhai) is also treated as a separate class of infrastructure asset.

Management have adopted a rotation plan for revaluing the asset classes so the valuations are not all completed in the one year. Assets that experience significant changes in fair value are revalued outside the rotation plan.

Management has determined that only the roading assets will be revalued in the 2020 year. For assets that are not revalued in the 2020 year, Management plans to perform a desktop exercise to assess the change in asset value. If the movement in asset value is material, a full revaluation will be undertaken.

There is a risk that revaluations are not appropriate because of incorrect assumptions and/or data, and that revaluation movements are not adequately reflected in the financial statements.

The impact of Covid-19 also introduces areas of uncertainty around the valuation of infrastructure assets. We have incorporated Covid related procedures in our work programme. Our work plan is to:

- Obtain the independent valuations of the relevant infrastructure asset classes;
- Obtain representations directly from the independent valuers confirming their valuation methodology;
- Review the key underlying assumptions used by the independent valuers to determine whether these assumptions were reasonable and in line with NZ generally accepted accounting practice (NZ GAAP) and assess whether the methodology is still appropriate with the impact of Covid;
- Hold various discussions with the valuers as appropriate; and
- Determine whether the revaluation transactions are correctly accounted for and disclosed in the financial statements in compliance with NZ GAAP. If there is significant valuation uncertainty noted as a result of Covid, ensure that this has been adequately disclosed in the financial statements;
- Review desktop reports from the valuers to identify any material fluctuations in value of assets not revalued in the current year;
- Obtain representations from management's experts as to impairment indicators and material fluctuations in respect of assets not revalued in the current year; and
- Consider any caveats included in the valuation.



D. Areas of audit focus



Area of audit focus	Our approach
<p>Legislative Compliance: Rates Revenue</p> <p>Over recent years there have been a number of issues within the Local Government sector arising from rates not being set in accordance with the Local Government (Rating) Act 2002 (LGRA). Compliance with the detail of the LGRA is critical: if the rate is not within the range of options and restrictions provided for in that Act, it may not be valid which exposes the Council to legal action and may inhibit the ability to collect rates.</p> <p>Management and Council need to continue to ensure that the requirements of the LGRA are adhered to and that there is consistency between the rates resolution, the Funding Impact Statement for that year, and the Revenue and Financing Policy in the respective LTP or Annual Plan (AP).</p>	<p>As part of our audit we plan to:</p> <ul style="list-style-type: none">• Test the controls around the rates setting process at Council;• Where applicable reviewing relevant legal documentation and correspondence with legal advisors;• Complete a 'rates questionnaire' compiled by the OAG, (similar to that completed in the prior year), to assist us in determining if rates have been set correctly; and• Obtain an update on any outstanding legal matters concerning rates. <p>We note that we are not legal experts and we recommend Council continue to have their legal advisor review the documentation supporting the setting of rates to confirm legislative compliance.</p>
<p>Development Contribution Revenue</p> <p>There is a risk that development contributions may be misstated if they are calculated incorrectly or revenue is recognised incorrectly.</p>	<p>We plan to test a sample of development contributions for accuracy, and to review the recognition policy and practice against relevant accounting standards to ensure revenue is recognised at the correctly.</p>



D. Areas of audit focus



Area of audit focus	Our approach
<p>The coronavirus disease (COVID-19) continues to rapidly evolve, and has already had a significant impact on operations and financial markets. It may also have accounting implications and affect the financial statements of reporting entities.</p> <p>Entities must carefully consider their unique circumstances and risk exposures when analysing how recent events may affect their financial reporting. Specifically, financial reporting and related financial statement disclosures need to convey all material effects of COVID-19.</p>	<p>As this is a continuing event, we have been in touch with the finance team on how COVID-19 is affecting the Council and assisting with challenges that may arise relating to impacts on accounting for various aspects in the financial statements.</p> <p>Some of the areas that may be affected are, but not limited to:</p> <ul style="list-style-type: none"> • Provision for doubtful debts on rates and other receivables such as infringements, building consents, licensing and compliance. More focus needs to be placed on other receivables as unlike rates where the Council can recover its rates via the ratepayer's mortgage, such an avenue is not available to Council; • Breach of loan covenants (including impact on the classification of liabilities as current vs non-current); • Fair value measurements, particular on its infrastructure assets • Liquidity risk management • Insurance recoveries related to business interruptions • Increase to construction cost and the accounting treatment of these costs <p>When Council prepares its annual report, it is particularly important to provide ratepayers with appropriate insight into the risks and uncertainties facing an entity and the judgements that have been made in preparing financial information.</p> <p>We expect management to consider and document the impact of the outbreak on accounting conclusions and disclosures. We have issued a special accounting alert which discusses some of the expected impacts. This can be found at: https://www2.deloitte.com/content/dam/Deloitte/nz/Documents/audit/Accounting-Alert/nz-en-special-edition-accounting-alert-march-2020.pdf</p>



D. Areas of audit focus

Sector wide area of focus

Area of audit focus	Our approach
Performance, waste and probity Ensuring that Parliament's expectations are met with respect to use of rate payer funds is a key feature of any audit in the public sector.	<p>Our audit approach will include a specific programme of work, as in previous years, covering the following aspects:</p> <ul style="list-style-type: none">• Confirming Council has the appropriate policy framework for areas such as delegated authorities, fraud, conflicts of interest, code of conduct etc.• Ensuring we understand any changes made to such policies.• Testing certain areas of sensitive expenditure to ensure spending is appropriate and authorised in accordance with policy and best practice.• Reviewing areas such as credit card expenditure, fuel card expenditure, and mobile phone expenditure.
Managing conflicts of interest and related party transactions Councils are required to ensure that there are appropriate procedures in place to identify and manage conflicts of interest and that related party disclosures in the financial statements are complete.	<p>Our audit procedures on related party disclosures include searching public records for potential related party relationships (such as the Companies Office website). We also ensure any entries in the interests register were individually assessed, and those which met the definition of a related party transaction during the year are disclosed in the Annual Report. This includes remuneration disclosures relating to the Councillors and key management personnel.</p>
Financial prudence Councils are required to include appropriate benchmarking reporting in the Annual Report as required by the Local Government (Financial Reporting and Prudence) Regulations 2014.	<p>Our audit procedures will include review of the disclosures and recomputing key ratios to determine whether Council is in compliance with these regulations.</p>



D. Areas of audit focus

Sector wide area of focus



Area of audit focus

Our approach

Legislative compliance

The Council is subject to significant regulatory and legislative compliance requirements. The Council needs to have adequate systems in place to monitor compliance with legislation along with any changes occurring in the applicable legislation.

The key pieces of legislation that Council needs to be compliant with, as it pertains to the Annual Report include:

- the Local Government Act 2002
- the Local Government (Financial Reporting and Prudence) Regulations 2014
- the Non-Financial Performance Measures Rules 2013
- the Local Government Borrowing Act 2011
- the Local Government (Rating) Act 2002
- the Local Government Official Information and Meetings Act 1987
- the Local Authorities (Members' Interests) Act 1978

Our audit procedures will look at Council's processes for ensuring legislative compliance. Including specifically testing compliance with legislation that materially impacts on the financial statements. This includes the Local Government Act 2002 and the Local Government (Rating) Act 2002. In particular extensive work is completed on the rates setting process, as outlined in the Areas of Focus section above.

Provincial growth fund

The Provincial growth fund represents a \$3billion investment of public money in projects and initiatives which aim to lift productivity potential in New Zealand's regions.

Councils are required to account for the fund in accordance with PBE accounting standards and be transparent with their communities about the funding.

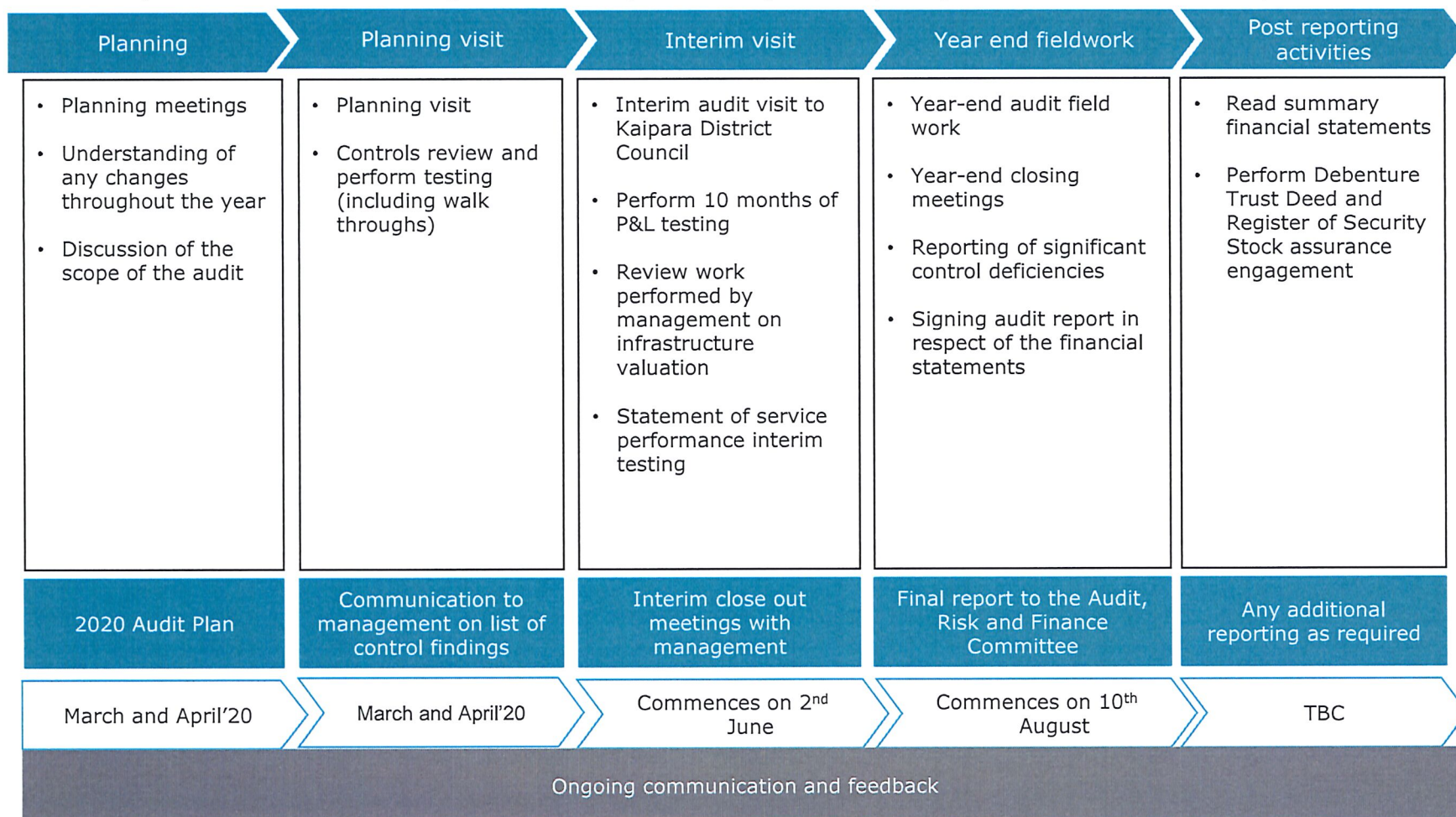
We will perform the following:

- review all provincial growth fund contracts;
- focus on the risk that revenue may not be recoded in the appropriate accounting period due to incorrect recognition or deferral of revenue. This could arise from incorrectly identifying conditions or restrictions associated with revenue transactions or incorrectly applying the contractual terms associated with the timing of when revenue is recognised;
- review disclosures in the annual report.

E. Continuous communication and reporting



As the audit plan is executed throughout the year, the results will be analysed continuously and conclusions (preliminary and otherwise) will be drawn. The following sets out the expected timing of our reporting to and communication with you.



Appendices to the Planning report



Appendix 1: Purpose of report and responsibility statement

Purpose of report

This report has been prepared for Kaipara District Council's Audit, Risk and Finance Committee and is part of our ongoing discussions as auditor in accordance with our engagement letter and master terms of business as required by New Zealand auditing standards.

This plan is intended for the Audit, Risk and Finance Committee (and other Council members) and should not be distributed further. We do not accept any responsibility for reliance that a third party might place on this report should they obtain a copy without our consent.

This report includes only those matters that have come to our attention as a result of performing our audit procedures to date and which we believe are appropriate to communicate to the Audit, Risk and Finance Committee. The ultimate responsibility for the preparation of the financial statements rests with the Council.

Responsibilities

We are responsible for conducting an audit of Kaipara District Council for the year ended 30 June 2020 in accordance with New Zealand auditing standards issued by the NZ Auditing and Assurance Standards Board. Our audit is performed pursuant to the requirements of the Financial Reporting Act 2013, the Local Government Acts 1974 and 2002 the Local Government (Auckland Council) Act 2009 with the objective of forming and expressing an opinion on the financial statements that have been prepared by management with the oversight of the Council. The audit of the financial statements does not relieve management or the Council of their responsibilities.

Our audit is not designed to provide assurance as to the overall effectiveness of Kaipara District Council's controls but we will provide you with any recommendations on controls that we may identify during the course of our audit work.



Appendix 2: Fraud responsibilities and representations



Your responsibilities:

The primary responsibility for the prevention and detection of fraud rests with management and those charged with governance, including designing, implementing and maintaining internal controls over the reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations.



Our responsibilities:

- We are required to obtain representations from those charged with governance regarding internal controls, assessment of risk and any known or suspected fraud or misstatement.
- As auditors, we obtain reasonable, but not absolute, assurance that the financial statements as a whole are free from material misstatement, whether caused by fraud or error.
- As set out in the areas of audit focus section of this document, we have identified the risk of fraud in the accuracy of accrued income, and management override of controls as a significant audit risk for your organisation.
- As required, we will consider any significant related party transactions outside the entity's normal course of business



Fraud characteristics:

- Misstatements in the financial statements can arise from either fraud or error. The distinguishing factor between fraud and error is whether the underlying action that results in the misstatement of the financial statements is intentional or unintentional.
- Two types of intentional misstatements are relevant to us as auditors – misstatements resulting from fraudulent financial reporting and misstatements resulting from misappropriation of assets.

We will make inquiries of management, internal audit and others within the entity as appropriate, regarding their knowledge of any actual, suspected or alleged fraud affecting Kaipara District Council. In addition we are required to discuss the following with the Audit, Risk and Finance Committee:

- Whether the Audit, Risk and Finance Committee has knowledge of any fraud, suspected fraud or allegations of fraud;
- The role that the Audit, Risk and Finance Committee exercises in oversight of Kaipara District Council's assessment of the risks of fraud and the design and implementation of internal control to prevent and detect fraud;
- The Audit, Risk and Finance Committee's assessment of the risk that the financial statement may be materially misstated as a result of fraud.

We will be seeking representations in this area from the Council in due course.



Appendix 3: Independence and fees

Effective 1 April 2020, the updated Code of Ethics (AG PES 1) introduce a change to the Auditor-Generals' independence requirements by placing limitations on "other work" that can be carried out by auditors, over and above the work we carry out on behalf of the Auditor-General. We are in the process of transitioning the non-assurance service that we provide to Kaipara District Council to another service provider.

We summarise below our proposed audit fees as discussed with management including details of any scope changes.

List of Services	CY payable (\$'000)	Contract approval?
Fees for the audit of Kaipara District Council annual report	157	OAG has approved audit services till June 2022.
Other assurance engagements relating to the Debenture Trust Deed and audit of the Register of Security Stock	9	
Total audit related and other assurance fees	166	
Online fraud and Corruption Awareness Training	-	We are working with the management to transition both services to another provider.
"Tip Off's" Whistleblower Service	8	
Other non-assurance fees	8	
OAG overhead	11	
Total fees	185	

* Cyber and security risk advisory services relates to Cloud security services and cyber attack services.



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28 May 2020

Louise Miller
Chief Executive
Kaipara District Council
Private Bag 1001
Dargaville

Copy: Director Auditor Appointments
Office of the Auditor-General
PO Box 3928
Wellington

Dear Ms Miller

Proposal to conduct the audit of Kaipara District Council and subsidiaries on behalf of the Auditor-General for the 2020, 2021 and 2022 financial years

1 Introduction

The Auditor-General proposes to appoint me to carry out the audit of your organisation for the next three years. As required by the Office of the Auditor-General (OAG), I set out below information relating to the audit for the three financial years ending *30 June 2020, 2021 and 2022*. The purpose of this proposal is to provide information on:

- the statutory basis for the audit and how audit fees are set;
- the entities covered by this proposal;
- key members of the audit team;
- the hours we plan to spend on the audit and reasons for any change in hours;
- our proposed fees for the audit for the financial years ending *30 June 2020, 2021 and 2022* and reasons for any change;
- assumptions relating to the proposed audit fees, including what we expect of your organisation;
- what the OAG overhead charge provides;
- certification required by the Auditor-General; and
- our commitment to conduct the audit in accordance with the Auditor-General's Auditing Standards.

2 Statutory basis for the audit and how audit fees are set

The audit of your organisation is carried out under Section 15 of the Public Audit Act 2001, which states that "the Auditor-General must from time to time audit the financial statements, accounts, and other information that a public entity is required to have audited".

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Fees for audits of public entities are set by the Auditor-General under section 42 of the Public Audit Act 2001. However, Council and I have the opportunity to reach agreement first and recommend those fees for approval. The Auditor-General, with assistance from the OAG, will set audit fees directly only if we fail to reach agreement.

Our proposed audit fees are set out in this letter and include an estimate of the reasonable cost of disbursements (including travel and accommodation where necessary).

3 Entities covered by this proposal

This proposal covers the audit of Kaipara District Council.

A separate proposal will be provided for Northland Inc, even though they are part of the group, due to their separate governing body.

4 Key members of the audit team

Appointed Auditor
Quality Control Reviewer
Audit Manager

Bryce Henderson
Brett Tomkins
Vera Chian

5 Estimated audit hours

We estimate that the following hours will be required to carry out the audits (compared to budgeted and actual data from the previous financial year):

Audit team member	2019 budget	2019 actual (*)	2020	2021	2022
Appointed Auditor	60	89	75	75	75
Review Partner	15	10	15	15	15
Audit Manager	115	188	160	160	160
Other CA qualified staff	220	261	240	240	240
Non CA qualified staff	560	655	600	600	600
IT and valuation specialists	10	10	10	10	10
Total audit hours	980	1,213	1,100	1,100	1,100

(*) NOTE - actual hours have been adjusted to eliminate any hours that were due to auditor inefficiencies. The actual hours that remain are the reasonable hours that were attributable to the audit in that year.

5.1 Reasons for changes in audit hours

The major reasons for the changes in hours for your organisation's audit are:

Reasons for increased or decreased audit hours compared to previous period <u>budgeted</u> hours:	2020	2021	2022
Material increases in the fair value of assets each year has resulted in an increase in the frequency of revaluations performed for each class of asset. For example, a full revaluation of roading has been done each year for the last three years vs. 3 year cycle.	70		

Reasons for increased or decreased audit hours compared to previous period <u>budgeted</u> hours:	2020	2021	2022
Given the level of detail that the annual reports are presented at, the history of the number of versions of annual reports and number of different KDC staff involved in preparing the financials, more time is required to review the annual report.	30		
An increase in the amount of time spent on contributions revenue, biological assets and landfill provision due to the complexity in these areas.	20		
Total increase (decrease) in audit hours	120	-	-

6 Proposed audit fees

Our proposed fees for the next three audits (compared to budgeted and actual data from the previous financial year) are:

Structure of audit fees	2019 budget fees \$	2019 actual fees charged (A) \$	2020 \$	2021 \$	2022 \$
Net audit fee (excluding OAG overhead and disbursements)	155,000	200,000	157,325	To be agreed in FY21 (C)	To be agreed in FY21 (C)
OAG overhead charge	10,990	10,990	11,150		
Total audit fee (excluding disbursements)	165,990	210,990	168,475		
Estimated Disbursements	16,600	20,208	18,500		
Total billable audit fees and charges	182,590	231,198	186,975		
GST	27,389	34,680	28,046		
Total (including GST)	209,979	265,878	215,021		

6.1 Reasons for changes in audit fees

In table 5.1 we showed the factors that have resulted in a change of audit hours. The cost impacts of those changes are shown in the table below.

Reasons for increased or decreased audit fees compared to previous period <u>budgeted</u> fees.	2020	2021	2022
Approximate 1.5% inflationary movement (Reflecting wage inflation)	2,325	To be agreed in FY21	To be agreed in FY21 (C.)
Material increases in the fair value of assets each year has resulted in an increase in the frequency of revaluations performed for each class of asset. For example, a full revaluation of roading has been done each year for the last three years vs. 3 year cycle.	B.		

Reasons for increased or decreased audit fees compared to previous period <u>budgeted</u> fees.	2020	2021	2022
Given the level of detail that the annual reports are presented at, the history of the number of versions of annual reports and number of different KDC staff involved in preparing the financials, more time is required to review the annual report.	B.	(C.)	
An increase in the amount of time spent on contributions revenue, biological assets and landfill provision due to the complexity in these areas.	To be agreed in FY21 (C.)		
Total increase (decrease) in audit fees	2,325		

The audit fees allow for the audit team to carry out specific tasks identified in the OAG Sector Brief and for the OAG overhead charge. We have also estimated the reasonable cost of disbursements (including travel and accommodation where necessary). Disbursement costs are indicative only and will be charged on an actual and reasonable basis.

- A. Actual fees charged were approved by OAG in Sept 2019. The additional audit fee relates to additional time spent on the revaluation process, increased substantive testing due to errors and additional review of the annual report.
- B. These are areas that we spend additional time in previous years. We may seek additional fees in these areas when the audit for 2020 has been completed should the reason for the circumstances for overruns arise again.
- C. As a result of Covid-19, audit fees for the 2020 audit are to be held at 1.5% increase of the 2019 audit. Fees for 2021 and 2022 will be renegotiated after the completion of the 2020 audit.

7 Assumptions relating to our audit fee

You are responsible for the production of your financial statements and anything else that must be audited. Our proposed audit fees are based on the assumption that:

- You will provide to us, in accordance with the agreed timetable, the complete information required by us to conduct the audit.
- Your staff will provide us with an appropriate level of assistance.
- Your organisation's annual report and financial statements (including Statements of Service Performance) will be subject to appropriate levels of quality review by you before being submitted to us for audit. In particular, data and information relating to non-financial performance measures will be subject to Council's internal quality review processes before it is audited by us, and the process managed so as to facilitate the timely delivery of relevant information for audit testing.
- Your organisation's financial statements will include all relevant disclosures.
- There are no significant changes to the structure and/or scale of operations of the entities covered by this proposal (other than as already advised to us).
- There are no significant changes to mandatory accounting standards or the financial reporting framework that require additional work (other than as specified in tables 5.1 and 6.1).

- There are no significant changes to mandatory auditing standards that require additional work other than items specifically identified in the tables above.
- There are no significant changes to the agreed audit arrangements (set out in an annual letter we will send you) that change the scope of, timing of, or disbursements related to, this audit.
- The revaluation of infrastructure assets occurs once every three years.

If the scope and/or amount of work changes significantly, we will discuss the issues and any implications for our audit costs and your audit fees with you and the OAG at the time.

8 What the OAG overhead charge provides

Parliament has indicated that it expects the full cost of annual audits under the Public Audit Act (including an OAG overhead charge) to be funded by public entities.

The OAG overhead charge partially funds a range of work that supports auditors and entities, including:

- development and maintenance of auditing standards;
- technical support for auditors on specific accounting and auditing issues;
- ongoing auditor training on specific public sector issues;
- preparation of sector briefs to ensure a consistent approach to annual audits;
- development and maintenance of strategic audit plans; and
- carrying out quality assurance reviews of all auditors, and their audits and staff on a regular (generally, three-year) cycle.

Appointed Auditors are required to return the OAG overhead charge portion of the audit fee, to the OAG.

9 Certifications required by the Auditor-General

We certify that:

- the undertakings, methodology, and quality control procedures that we have declared to the OAG continue to apply;
- our professional indemnity insurance policy covers this engagement; and
- the audit will be conducted in accordance with the terms and conditions of engagement set out in the audit engagement agreement and schedules.

10 Conclusion

As the Appointed Auditor, I am committed to providing you and the Auditor-General with the highest level of professional service. I intend to work with you, the OAG, and the Auditor-General in a partnership environment to resolve any issues that may arise.

If you require any further information, please do not hesitate to contact me.

Please counter-sign this letter (below) to confirm that you, and the governing body of your organisation, agree with its contents. This letter will then form the basis for a recommendation to the Auditor-General on the audit fee that should be set. The schedules of audit hours and fees will also be incorporated into my audit engagement agreement with the Auditor-General to carry out the audit of your organisation as the agent of the Auditor-General.

Yours sincerely



Bryce Henderson
Partner
for Deloitte Limited
On behalf of the Auditor-General

I accept the audit fees for the audit of the 3 financial years as stated above.

Full name: _____ Position: _____

Authorised signature: _____ Date: _____

Entity name: _____

Actions to take when agreement has been reached:

- 1 Make a copy of this signed proposal and keep it for your file.
- 2 Send the original to: Bryce Henderson
Deloitte Limited
Private Bag 115033
Shortland Street
Auckland 1140

Treasury Policy update

Meeting: Audit, Risk & Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Sue Davidson, GM Sustainable Growth and Investment

Purpose/Ngā whāinga

The Treasury Policy is a document that is part of every Long Term Plan (LTP), providing the framework under which council operates all borrowing and investment activities. The time to review it is prior to adopting the LTP and propose any changes to Council.

Executive summary/Whakarāpopototanga

PricewaterhouseCoopers (PWC) has been engaged by Council to review our Treasury Policy. They also provide advice in the management of our debt, as they run a treasury function inhouse and provide advice to many Councils. Key changes are proposed around:

- Borrowing limit definitions as defined by LGFA
- Lending to CCO's or CCTO's now included
- Interest rate risk control limits (fixed and floating) more flexible as could not effectively manage
- Funding risk control limits adjusted as maturity profile too difficult to manage
- Counterparty credit limits.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Recommend to Council to approve the changes to the Treasury Policy, to be included as part of the Long Term Plan 2021-2031.

Context/Horopaki

The Local Government Act 2002 requires local authorities to adopt a liability management policy and an investment policy. The liability management policy must state the council's policies on how it will manage its borrowings and other liabilities, including interest rate exposure, liquidity, credit exposure and debt repayment. The investment policy must set out the council's policies on investments including the mix of investments, acquiring new investments, management and reporting procedures, and risk management. Together these policies make up Kaipara District Council's treasury management policy providing the framework under which council operates all borrowing and investment activities.

Discussion/Ngā kōrerorero

PWC have detailed the rationale for the changes in **Attachment 1**. It should be noted that PWC were not consulted on the previous Treasury Policy review and have advocated for changes to the policy since it was last adopted.

The current Treasury Policy with proposed marked up changes is attached as **Attachment 2**.

Options

Option 1 Recommend the adoption of this Treasury Policy to Council for inclusion in the next Long Term Plan 2021-31

Policy and planning implications

This is a regular review of a policy that has required external expertise to review.

Financial implications

These changes still result in a prudent risk management approach to debt management but provide greater flexibility in medium term management.

Risks and mitigations

The biggest risk to our debt management is not having the best information on the condition of our assets and so forecasting our renewals and new projects may not be correct, and this impacts on our debt forecasts. This makes it difficult for PWC to advise and has been a risk realised over the last 3 years.

Option 2 The Committee don't make any recommendation or want more information

Policy and planning implications

There is still time in the programme for this to occur as this document does not have to be further consulted with, other than as part of the LTP.

Financial implications

No further financial implications other than time to implement a new framework

Risks and mitigations

There are no other risks other than forecasting renewals and new assets and their impact on debt levels. Other risks relating to debt are covered in the policy.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Next steps/E whaiake nei

The proposed Treasury Policy will be presented to Council for adoption as part of the LTP 2021/2031.

Attachments/Ngā tapiritanga

	Title
1	PWC Treasury Policy Review
2	Kaipara District Council Treasury Policy marked up with proposed changes



Kaipara District Council

To: Sue Davidson, Violeta Kayryakova

From: Alex Wondergem, John Hepburn

Date: 30 March 2020

Subject: Treasury Management Policy Review

Background

We have reviewed Kaipara District Council's (Council) Treasury Management Policy (Policy) at the request of Management. The review of the Policy has been performed to satisfy internal requirements for a Policy review every three years and in light of changes currently impacting the local government sector.

The changes have been recommended to better align the Policy with the proposed changes by the Local Government Funding Agency (LGFA) as well as the changes to credit rating methodology by Standard & Poor's (S&P) earlier this year.

Furthermore, we have recommended an update to the current interest rate risk management framework whereby fixed rate minimum requirements are lowered, providing greater flexibility in the medium term management of interest rates whilst continuing to meet a prudent risk management approach.

Significant changes

The following are the key changes recommended to the Policy:

- Borrowing limit definitions have been updated to align with changes the LGFA has proposed in providing greater clarity for Councils (Section 4.1)
- Throughout the Policy, we recommend strengthening the policy framework around on-lending activity to Council Controlled Organisations (CCOs) (including Council Controlled Trading Organisations (CCTOs)). This is to allow for any potential on-lending activity that may be required along with allowing for the possibility of direct lending from the LGFA to these entities.
- Interest rate risk control limits have been reviewed and changes have been recommended that allows for flexibility in interest rate risk management (Section 6.3).
- Changes to the funding risk control limits are recommended to provide more flexibility in Council's funding arrangements (Section 6.4.2).
- Counterparty credit limits - we recommend a single limit is applied rather than having sub-limits for investments and risk management transactions, (Section 6.5) as well as a tiered approach for exposures to counterparties with differing credit ratings.

Section by section Policy update

Limits on Borrowing & Giving of Security (section 4.1)

To ensure consistency with the updates the LGFA is proposing in relation to its borrowing covenant definitions, we recommend amendments to Council's current definitions.

On-lending to Council Controlled Organisations and Council Controlled Trading Organisations (section 4.9 - new section)

We recommend a new Policy section outlining changes to CCO/CCTO lending activity in light of upcoming changes to the LGFA foundation policy which will consider direct lending opportunities. Whilst council does not currently engage in any lending activities in this space, the new Policy section is designed to future proof the Policy.

This new section is included to reflect the mechanics of LGFA borrowing (by Council) where there is an intention to on-lend to CCO/CCTOs and where the CCO/CCTO borrows directly from the LGFA and credit support is needed to be provided by Council.

Changes made to the founding documents of the LGFA were voted on at the end of 2018, however will not likely come into effect until late 2019 or early 2020. This period is being used by the LGFA to consult on the mechanics of the transactions. Early indications are that lending will be provided on a case by case basis, approved by the LGFA Board and will depend on the individual circumstances of the Council and the related entity.

The framework considers various factors briefly outlined below:

- Credit risk profile of the borrowing entity and the ability to timely meet repayments.
- Impact on Council's credit rating, debt cap amount (if any), lending covenants with the LGFA and other lenders and Council's future borrowing capacity.
- The form and quality of security arrangements provided.
- The lending rate and terms.
- Lending arrangements to CCTOs must be documented (through a term sheet) on a commercial arm's length basis.

Approved financial instruments (section 6.2)

We recommend the inclusion of two new instruments which are now on offer by the LGFA. These are stand-by facilities and forward starting debt issuance, both through the LGFA.

Interest Rate Risk Management (Section 6.3)

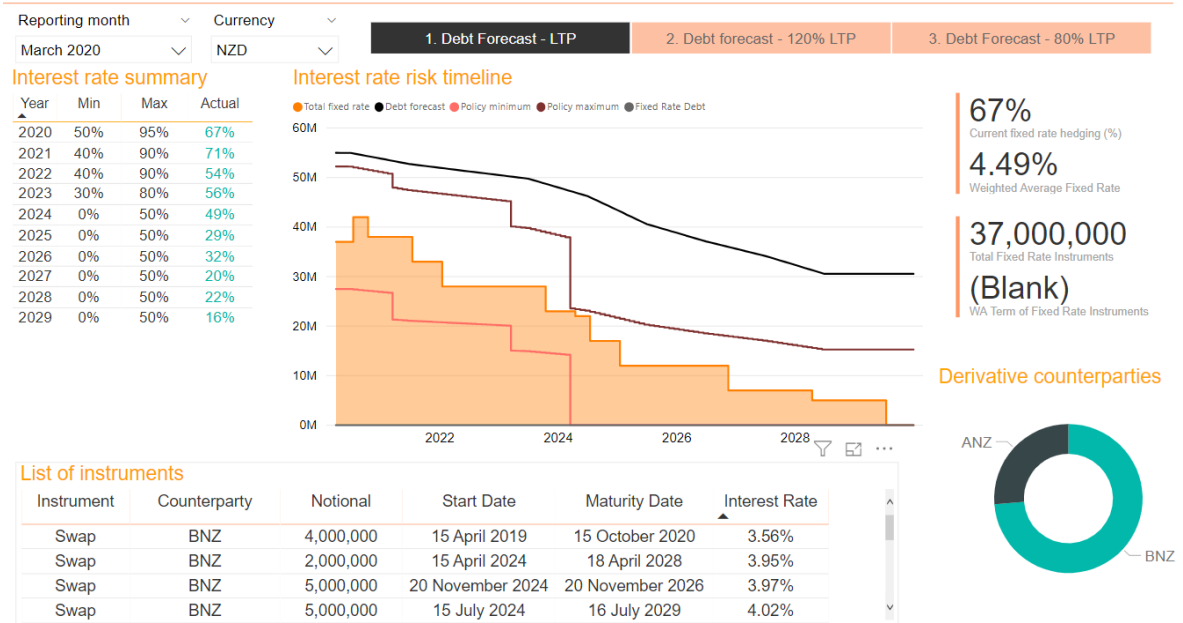
We recommend Council considers an amendment to the interest rate risk control limits whereby the minimum interest rate fixing requirement is adjusted in order to relieve pressure on the policy framework when transacting longer dated interest risk management strategies. The recommendation is made to provide Council with additional flexibility in the management of its interest rate risks through having greater discretion between minimum and maximum fixing requirements and by having one more time frame to allow for a more orderly descent in

the longer dated maturity buckets. Note that the limits are still conservative in supporting prudent financial management and delivery of interest costs to plans and budgets.

Council's current interest rate profile with suggested minimum fixing updates are shown below:

Interest rate risk position

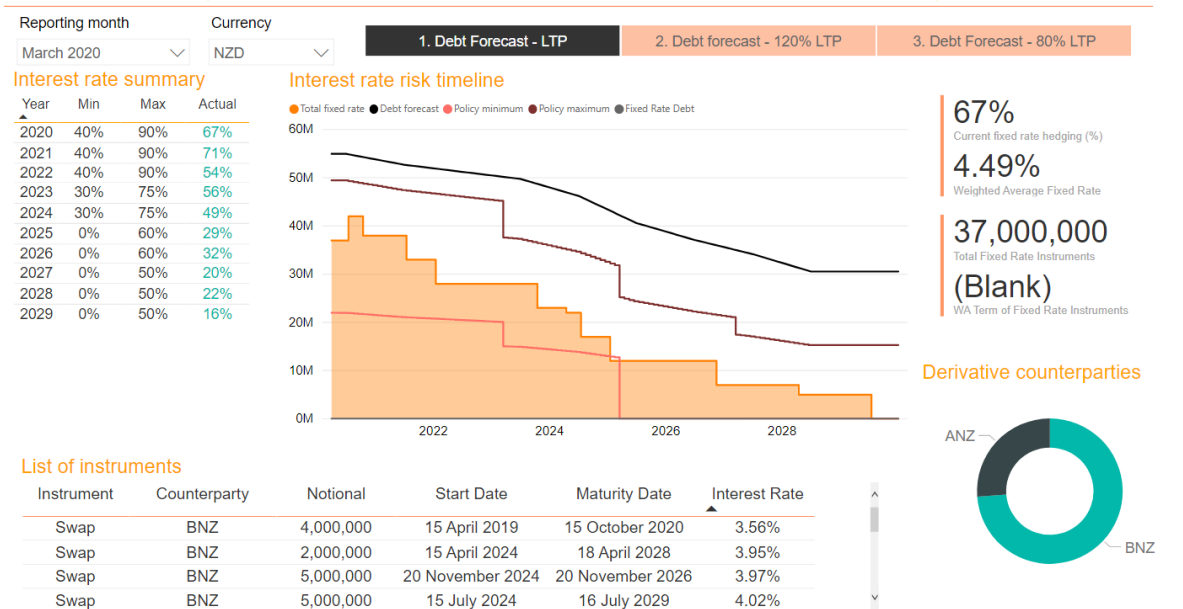
Kaipara District Council



Interest rate profile with recommended control limit amendments:

Interest rate risk position

Kaipara District Council



Funding risk control limits (section 6.4.2)

We recommend an adjustment to the current funding risk maturity bands within the framework to allow for a 3 - 7 and 7 year + time frame. Having a wider time band allows more flexibility to strategically manage long term debt amounts and continues to enforce a spreading and smoothing approach avoiding a concentration of refinancing risk.

Counterparty credit risk (section 6.5)

Under the existing Policy, the overall counterparty credit limit is built up of a set amount (\$15 million) for investments and an additional amount (\$20 million) for the impact of derivative transactions (interest rate, foreign exchange and commodities).

We recommend a single limit of \$30 million is applied for each counterparty and the makeup of that limit is flexible within the approved limit amount, i.e. there aren't set sub-limits for each exposure.

This will provide Council with the flexibility to vary the mix of transactions in order to obtain optimal pricing outcomes from each counterparty while continuing to maintain a spreading of risk. To ensure some spread of investment risk the policy will include a statement that no more than 50% of the investment portfolio will be held with one bank at any point in time.

This approach allows additional investment capacity where required for pre-funding activity, particularly in light of the recent S&P ratings methodology change which will place additional emphasis on this form of early refinancing.

Disclaimer

This memo is subject to the engagement letter dated 6 December 2012 and the following restrictions. It is a memo addressed to you Kaipara District Council . This memo should not be reproduced or supplied to any other party without first obtaining our (PwC New Zealand) written consent. We accept no responsibility for any reliance that may be placed on our memo should it be used for any purpose other than that set out below and in any event we will accept no liability to any party other than you in respect of its contents. In the course of our work we have not verified any of the information provided to us by you, nor have we carried out anything in the nature of an audit. Accordingly, we express no opinion on the reliability, accuracy or completeness of the information provided to us and upon which we have relied. The statements and opinions contained in this memo are based on data obtained from the financial markets and are so contained in good faith and in the belief that such statements, opinions and data are not false or misleading. In preparing this memo, we have relied upon information which we believe to be reliable and accurate. We reserve the right (but will be under no obligation) to review our assessment and if we consider it necessary, to revise our opinion in the light of any information existing at the date of this memo which becomes known to us after that date. This memo must be read in its entirety. Individual sections of this memo could be misleading if considered in isolation from each other.



Kaipara District Council

Treasury Policy

**Incorporating the Liability Management and Investment Policies
as required by sections 104 and 105 of the
Local Government Act 2002**

Council Approved: ~~28 February~~ DD MMMM 202018

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1.0 Introduction

1.1 Policy purpose

The purpose of the Treasury Policy is to outline approved policies and procedures in respect of all treasury activity to be undertaken by Kaipara District Council (“Council”). The formalisation of such policies and procedures will enable treasury risks within Council to be prudently managed.

As circumstances change, the policies and procedures outlined in this policy will be modified to ensure that treasury risks within Council continue to be well-managed. In addition, regular reviews will be conducted to test the existing policy against the following criteria:

- Industry “best practices” for a Council the size and type of Kaipara;
- The risk bearing ability and tolerance levels of the underlying revenue and cost drivers;
- The effectiveness and efficiency of the Treasury Policy and treasury management function to recognise, measure, control, manage and report on Council’s financial exposure to market interest rate risks, funding risk, liquidity, investment risks, counterparty credit risks and other associated risks;
- The operation of a pro-active treasury function in an environment of control and compliance;
- The robustness of the policy’s risk control limits and risk spreading mechanisms against normal and abnormal interest rate market movements and conditions; and
- Assistance to Council in achieving strategic objectives relating to ratepayers.

It is intended that the policy be distributed to all personnel involved in any aspect of Council’s financial management. In this respect, all staff must be completely familiar with their responsibilities under the policy at all times.

2.0 Scope and Objectives

2.1 Scope

This document identifies the policy and procedures of Council in respect of treasury management activities.

The policy has not been prepared to cover other aspects of Council's operations, particularly transactional banking management, systems of internal control and financial management. Other policies and procedures of Council cover these matters.

2.2 Risk Appetite

Council's overriding obligation is to manage its affairs prudently and in the interests of its community and is guided by the obligations imposed by the Local Government Act 2002.

Accordingly Council's philosophy on the conduct of its treasury activities is to ensure that the risks associated are properly identified, quantified and managed to ensure it meets the obligations under the Act and that there is minimal negative impact on the Council arising from such risks. Council is a risk averse entity, and does not wish to seek risk from its treasury activities. Accordingly activity that may be construed as speculative in nature is expressly forbidden.

2.3 Objectives

The objective of this Treasury Policy is to control and manage costs and investment returns that can influence operational budgets and public equity. Specifically:-

Statutory and principal objectives

- All external borrowing, investments and incidental financial arrangements (e.g. use of interest rate hedging financial instruments) will meet requirements of all relevant legislation including but not limited to:
 - Local Government Act 2002, in particular Part 6 including sections 101,102, 104 and105, and incorporate the Liability Management Policy and Investment Policy;
 - Local Government (Financial Reporting and Prudence) Regulations 2014, in particular Schedule 4;
 - Trustee Act [2019](#) ~~1956~~ (effective January 2021). When acting as a trustee or investing money on behalf of others, the Trustee Act highlights that trustees have a duty to invest prudently and that they shall exercise care, diligence and skill that a prudent person of business would exercise in managing the affairs of others. Details of relevant sections can be found in the Trustee Act [2019](#) ~~1956~~ [Part 3 and](#) [Part 4](#) ~~Investments~~.
- All projected external borrowings are to be approved by Council as part of the Annual Plan or the Long Term Planning process (LTP) or resolution of Council before the borrowing is affected;

- All legal documentation in respect to external borrowing and financial instruments will be approved by Council's solicitors prior to the transaction being executed;
- Council will not enter into any borrowings denominated in a foreign currency;
- Council will not transact with any Council Controlled Trading Organisation (CCTO) on terms more favourable than those achievable by Council itself;
- Hire Purchase, Deferred Purchase, Trade Credit - for the purposes of sub-paragraph (c)(ii)(B) of the definition of "borrowing" in section 112 of the LGA 2002, "borrowing" does not include:
 - Debt incurred in connection with hire purchase of goods, the deferred purchase of goods or services, or the giving of credit for the purchase of goods or services, if the goods or services are obtained in the ordinary course of Council's performance of its lawful functions, on terms and conditions available generally to parties of equivalent credit-worthiness, for amounts not exceeding in aggregate \$250,000; or
 - The deferred purchase of goods or services or the giving of credit for the purchase of goods or services through the mechanism of contract retentions held for periods less than 365 days.
- Other - Instruments not specifically referred to in this policy may only be used with specific Council approval; and
- Council routinely defers payment following completion of construction or other large scale engineering contracts in accordance with standard industry practices. Although this practice may mean that these deferred payments fall within the definition of borrowing for the purposes of the Act and this policy, these contractual arrangements create very little risk for Council. There is no interest exposure on these payments; the credit-worthiness of the contracting party is not relevant; and the deferred period is sufficiently long that no impact on liquidity is anticipated, as payments can be programmed in advance through the Annual Plan process or standard cash flow procedures. Therefore, Council will enter into these contracts in accordance with its standard procurement procedures, and deferred payment conditions will not require any additional approval by Council.

General objectives

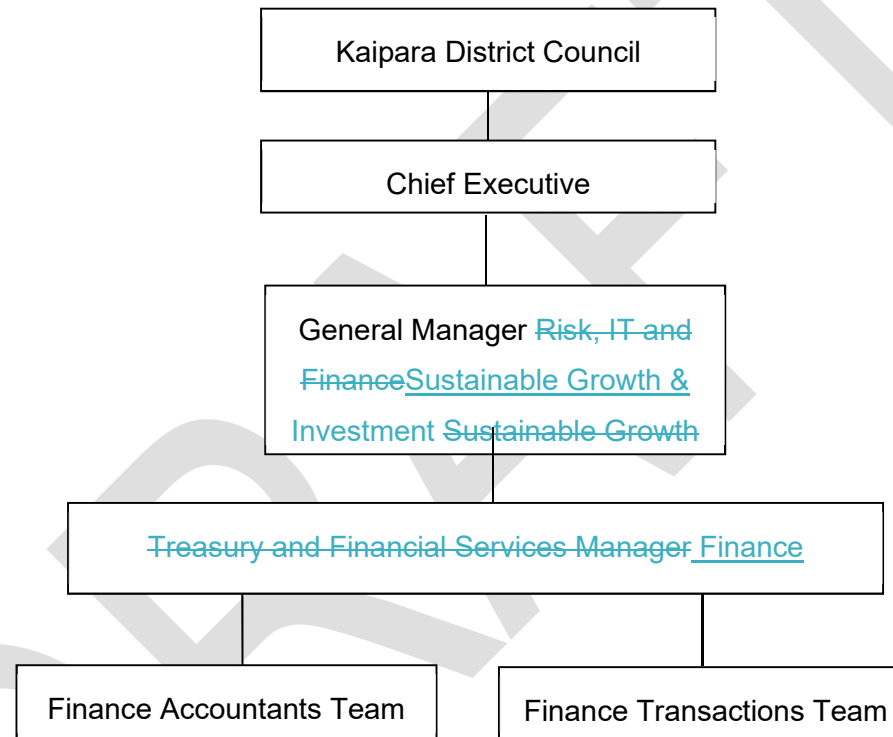
- To manage investments to optimise returns in the long term whilst balancing risk and return considerations;
- Minimise Council's costs and risks in the management of its borrowings;
- Minimise Council's exposure to adverse interest rate movements;
- Monitor, evaluate and report on treasury performance;

- Borrow funds and transact risk management instruments within an environment of control and compliance under the Council approved Treasury Policy so as to protect Council's financial assets and manage costs;
- Arrange and structure external long term funding for Council at a favourable margin and cost from debt lenders. Optimise flexibility and spread of debt maturity terms within the funding risk limits established by this Policy statement;
- Monitor and report on financing/borrowing covenants and ratios under the obligations of Council's lending/security arrangements;
- Comply with financial ratios and limits stated within this policy;
- Monitor Council's return on investments;
- Ensure the Council, management and relevant staff are kept abreast of the latest treasury products, methodologies, and accounting treatments through training and in-house presentations;
- Maintain appropriate liquidity levels and manage cash flows within Council to meet known and reasonable unforeseen funding requirements;
- To minimise exposure to credit risk by dealing with and investing in credit worthy counterparties;
- Ensure that all statutory requirements of a financial nature are adhered to;
- Ensure that financial planning will not impose an unequitable spread of costs/benefits over current and future ratepayers; [and](#)
- To ensure adequate internal controls exist to protect Council's financial assets and to prevent unauthorised transactions; and
- Develop and maintain relationships with financial institutions, investors and investment counterparties.

3.0 Management Responsibilities

3.1 Overview of management structure

The following diagram illustrates those positions or functions that have treasury responsibilities.



3.2 Council

Council has ultimate responsibility for ensuring that there is an effective Policy for the management of its risks. In this respect Council decides the level and nature of risks that are acceptable, given the underlying objectives of Council.

Council is responsible for approving the Treasury Policy. While the Policy can be reviewed and changes recommended by other persons, the authority to make or change Policy cannot be delegated.

In this respect, Council has responsibility for:

- Approving the long term financial position of Council through the 10 year LTP and the adopted Annual Plan;
- Approving new debt through the adoption of the Annual Plan, specific Council resolution and approval of this policy;
- Approving the Treasury Policy incorporating the following:
 - Counterparties and credit limits;
 - Risk management methodologies and benchmarks;
 - Guidelines for the use of financial instruments; and
 - Receive a triennial review report on the policy.
- Evaluating and approving amendments to policy;
- Approving budgets and high level performance reporting;
- Approve opening and closing of bank accounts; and
- Approval for one-off transaction falling outside Policy.

Council should also ensure that:

- It receives regular information from management on risk exposure and financial instrument usage in a form, that is understood, and that enables it to make informed judgements as to the level of risk undertaken;
- Issues raised by auditors (both internal and external) in respect of any significant weaknesses in the treasury function are resolved in a timely manner; and
- Submissions are received from management requesting approval for one-off transactions falling outside policy guidelines.

3.3 Chief Executive (CE)

While Council has final responsibility for the policy governing the management of Council's risks, it delegates overall responsibility for the day-to-day management of such risks to the Chief Executive.

4.0 Liability Management Policy

Council's liabilities comprise borrowings and various other liabilities. Council maintains borrowings in order to:

- Fund working capital requirements and short term funding gaps;
- Raise specific debt associated with projects and capital expenditures; and
- Fund assets whose useful lives extend over several generations of ratepayers.

4.1 Debt ratios and limits

Debt will be managed within the following macro limits.

Ratio	KDC Policy Limits	LGFA Lending Covenants
Net debt as a percentage of total revenue	<170%	<175%
Net interest expense on external debt (debt secured under debenture) as a percentage of total revenue	<15%	<20%
Net interest expense on external debt (debt secured under debenture) as a percentage of total annual rates income (debt secured under debenture)	<20%	<25%
Liquidity (External debt + available portion of committed loan facilities + liquid investments) to existing external debt)	>110%	>110%

- ~~Total Revenue~~ is defined as cash earnings from rates, ~~government~~ grants and subsidies, user charges, interest, dividends, financial and other revenue and excludes non-government capital contributions (e.g. developer contributions and vested assets);
- ~~Net debt~~ is defined as total debt less liquid investments
- [When calculating net debt, the LGFA allows the deduction of:](#)
 - [cash, term deposits and any investments held within investment portfolios \(whether these are ring fenced or not\). Investment portfolios might include listed equities, fixed interest securities, listed property securities or units in managed funds.](#)
 - [LGFA borrower notes can be deducted.](#)
 - [any council lending to a CCO or CCTO can also be deducted but only where the CCO or CCTO is a going concern and not dependent upon council financial support.](#)

- External debt is the aggregate of bank drawdown amounts, issued commercial paper (CP), term debt, capitalised finance leases and financial guarantees provided to third parties.
- Liquid funds are assets defined as:
 - a) Overnight bank cash deposits
 - b) Wholesale/retail bank term deposits no greater than 30-days
 - c) Bank issued RCDs less than 181 days
 - d) Approved fixed interest securities
 - e) Any loans to Council Controlled Organisation (CCO) or Council Controlled Trading Organisation (CCTO) (that are a going concern) that mature within 12 months.
- ~~Liquidity is defined as external term debt plus committed loan facilities plus available liquid investments divided by existing external debt. Liquid investments are assets defined as being:~~
 - ~~e Overnight Bank cash deposits;~~
 - ~~e Wholesale/retail bank term deposits no greater than 30 days;~~
 - ~~e Bank registered certificates of deposit issued less than 181 days; and~~
 - ~~e Wholesale/retail bank term deposits linked to pre funding of maturing term debt exposures.~~
- Net Interest is defined as the amount equal to all interest and financing costs less interest income for the relevant period.
 - a) Gross interest is calculated by adding together the value of all Council's financing costs including interest costs on debt, costs of derivatives (but not any unrealised mark to market movements) and any costs on committed bank facilities. The finance component of a lease payment may also be part of a council's interest cost (to be confirmed with LGFA).
 - a)b) Interest Council earned on cash, term deposits and fixed interest is deducted to provide the net interest amount. Council cannot deduct any foreign exchange gains or unrealised gains on investments.
- ~~Net Interest is defined as the amount equal to all interest and financing costs less interest income for the relevant period;~~
- Annual Rates Income is defined as the amount equal to the total revenue from any funding mechanism authorised by the Local Government (Rating) Act 2002 together with any revenue received from other local authorities for services provided (and for which the other local authorities rate). Council can add on any revenue received from income for which Council rates (e.g. volumetric water charges).
~~Annual Rates Income is defined as the amount equal to the total revenue from any funding mechanism authorised by the Local Government (Rating) Act 2002 together with any revenue received from other local authorities for services provided (and for which the other local authorities rate).~~

-
- Debt will be repaid as it falls due in accordance with the applicable loan agreement. Subject to the debt limits, a loan may be rolled over or re-negotiated as and when appropriate.
- Disaster recovery requirements are to be met through the liquidity ratio.
- To minimise concentration risk the Local Government Funding Agency Limited (LGFA) will require that requires that no more than the greater of NZD 100 million or 33% of Council's borrowings from the Local Government Funding Agency Limited will mature in any 12-month period.

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4.2 Asset Management Plans

In approving new debt Council considers the impact on its borrowing limits as well as the economic life of the asset that is being funded and its overall consistency with Council's LTP.

4.3 Borrowing mechanisms

Council is able to borrow through a variety of market mechanisms including issuing stock/bonds, commercial paper (CP) and debentures, direct bank borrowing, accessing the short and long term wholesale and retail capital markets directly or internal borrowing of reserve and special funds. In evaluating strategies for new borrowing (in relation to source, term, size and pricing) the following is taken into account:

- a) Available terms from banks, LGFA, debt capital markets and loan stock issuance;
- b) Council's overall debt maturity profile, to ensure concentration of debt is avoided at reissue/rollover time;
- c) Prevailing interest rates and margins relative to term for loan stock issuance, LGFA, debt capital markets and bank borrowing;
- d) The market's outlook on future credit margin and interest rate movements as well as its own;
- e) Legal documentation and financial covenants together with security and credit rating considerations;
- f) For internally funded projects, to ensure that finance terms for those projects are at similar terms to those from external borrowing; and
- g) Alternative funding mechanisms such as leasing should be evaluated with financial analysis in conjunction with traditional on-balance sheet funding. The evaluation should take into consideration, ownership, redemption value and effective cost of funds.

Council's ability to readily attract cost-effective borrowing is largely driven by its ability to rate, maintain a strong financial standing and manage its relationships with its investors, LGFA and financial institutions/brokers.

Council has the ability to pre-fund up to 18 months of forecast debt requirements including re-financings.

4.4 Security

Council's external borrowings and interest rate management instruments are secured by way of a charge over rates and rates revenue offered through a Debenture Trust Deed. Under a Debenture Trust Deed, Council's borrowing is secured by a floating charge over all Council rates levied under the Local Government (Rating) Act 2002. The security offered by Council ranks equally or pari passu with other lenders.

If Council considers that security should be given by mortgaging or otherwise charging a physical asset instead of rates, it may do so (with the exception of Council's water assets, per Section 130(3)(a) of the Local Government Act). Independent advice will be sought if considered necessary.

Where security is considered to be offered over specific assets, prior Council approval as well as the following are required:

- a) A direct relationship between the debt and the purchase or construction of the asset, which it funds (e.g. project finance).
- b) Council considers a charge over physical assets to be appropriate.
- c) Any pledging of physical assets must comply with the terms and conditions contained within the security arrangement.
- d) Any lending to a CCO/CCTO will be on a secured basis and be approved by Council.

~~Council's borrowings and interest rate risk management instruments will generally be secured by way of a charge over rates and rates revenue offered through a Debenture Trust Deed.~~

~~Under the Debenture Trust Deed, Council's borrowing is secured by a floating charge over all Council rates levied under the Local Government Rating Act. The security offered by Council ranks equally or 'Pari Passu' with other lenders.~~

~~Council offers deemed rates as security for general borrowing programmes. From time to time, with prior Council approval, security may be offered by providing a charge over one or more of Council's assets.~~

~~Physical assets will be charged only where:~~

- ~~h) There is a direct relationship between the debt and the purchase or construction of the asset, which it funds (e.g. an operating lease, or project finance);~~
- ~~h) Council considers a charge over physical assets to be appropriate; and~~
- ~~h) Any pledging of physical assets must comply with the terms and conditions contained within the Debenture Deed.~~

4.5 Debt repayment

The funds from all asset sales, operating surpluses, grants and subsidies will be applied to the reduction of debt and/or a reduction in borrowing requirements once any direct debt obligations are repaid, unless Council specifically directs that the funds will be put to another use.

Debt will be repaid as it falls due in accordance with the applicable loan agreement. Subject to the appropriate approval and debt limits, a loan may be rolled over or re-negotiated as and when appropriate.

Council will manage debt on a net portfolio basis and will only externally borrow when it is commercially prudent to do so.

4.6 Guarantees/contingent liabilities and other financial arrangements

The Council may from time to time provide financial guarantees to third parties. Management must ensure that the business plan of the guaranteed party furthers the strategic objectives of the Council and that financial statements are received on a regular basis. Should the guarantee be called up, the Council must take immediate action

to recover the money.

Any such amounts guaranteed if material are to be included in the definition of 'External Debt' for the purpose of determining compliance with the Borrowing Limits set out above.

For any guarantee for indebtedness provided, Council will approve the guarantee arrangement. Any guarantee provided to community organisations or clubs for loans or incidental arrangements, the purpose of the arrangement must be consistent with Council's strategic objectives.

For any outstanding guarantees, Council ensures that sufficient financial capacity exists relative to Local Government Funding Agency lending covenants. Unless approved by Council, guarantees or financial arrangements given will not exceed any amount agreed by Council.

~~Council may act as guarantor to financial institutions on loans or enter into incidental arrangements for organisations, clubs, Trusts, local communities or Business Units, when the purposes of the loan are in line with Council's strategic objectives. Before entering into a guarantee Council officers shall conduct due diligence and be satisfied of the ability of the organisation to service the loan.~~

As set out in Section 62 of the Local Government Act, Council does not give any guarantee, indemnity or security in respect of the performance of any obligation by a Council Community Trading Organisation (CCTO).

~~Council is not allowed to guarantee loans to Council-controlled trading organisations under Section 62 of the Local Government Act.~~

Financial arrangements include:

- Advances to community organisations.

Council will ensure that sufficient funds or lines of credit exist to meet amounts guaranteed. Guarantees given will not exceed NZ\$1 million in aggregate or attached to a property.

4.7 Internal borrowing of special and general reserve funds

Given that Council may require funding for capital expenditure over the remaining life of the existing special and general reserve funds, where such funds are deemed necessary they should be used for internal borrowing purposes when external borrowing is required. Accordingly Council maintains its funds in short term maturities emphasising counterparty credit worthiness and liquidity. The interest rate yield achieved on the funds therefore is a secondary objective.

Liquid assets will not be required to be held against special funds or reserve funds unless such funds are held within a trust requiring such, instead, Council will manage these funds using available borrowing facilities.

No interest is payable unless Council so directs or there is an agreement in place.

4.7.1 New Zealand Local Government Funding Agency Limited investment

Despite anything earlier in this Policy, Council may borrow from the New Zealand Local Government Funding Agency Limited (LGFA) and, in connection with that borrowing, may enter into the following related transactions to the extent it considers necessary or desirable:-

- a) Contribute a portion of its borrowing back to the LGFA as an equity contribution to the LGFA. For example, Borrower Notes;
- b) Provide guarantees of the indebtedness of other local authorities to the LGFA and of the indebtedness of the LGFA itself;
- c) Commit to contributing additional equity (or subordinated debt) to the LGFA if required;
- d) Secure its borrowing from the LGFA and the performance of other obligations to the LGFA or its creditors with a charge over Council's rates and rates revenue; and
- e) Subscribe for shares and uncalled capital in the LGFA.

4.8 On-lending to Council Controlled Organisations

To better achieve its strategic and commercial objectives, Council may provide financial support in the form of debt funding directly or indirectly to CCO/CCTOs.

Guarantees of financial indebtedness to CCTOs are prohibited, but financial support may be provided by subscribing for shares as called or uncalled capital.

Any lending arrangements (direct or indirect) to a CCO or CCTO must be approved by Council. In recommending an arrangement for approval the CFO considers the following:

- Credit risk profile of the borrowing entity, and the ability to repay interest and principal amounts outstanding on due date.
- Impact on Council's credit standing, credit rating, debt burden (particularly in relation to S&P credit assessment), lending covenants with the LGFA and other lenders and Council's future borrowing capacity.
- The form and quality of security arrangements provided.
- The lending rate given factors such as; CCO or CCTO credit profile, external Council borrowing rates, borrower note and liquidity buffer requirements, term etc.
- Lending arrangements to the CCO or CCTO must be documented on a commercial arm's length basis. A term sheet, including matters such as borrowing costs, interest payment dates, principal payment dates, security and expiry date is agreed between the parties.
- Accounting and taxation impact of on-lending arrangement.

All lending arrangements must be executed under legal documentation (e.g. loan, guarantee) reviewed by Council's independent legal counsel and approved by Council.

5.0 Investment Policy and Limits

5.1 General policy

Council is currently a net borrower and is likely to remain so for the foreseeable future. Council should internally borrow from special reserve funds in the first instance to meet future capital expenditure requirements, unless there is a compelling reason for establishing external debt. Investments are maintained to meet specified business reasons. However, it should be noted that Council does not currently have any investment funds corresponding to special funds and has a policy of borrowing net of special funds that are likely to remain unspent at the year end.

Such reasons can be:

- For strategic purposes consistent with Council's LTP;
- To reduce the current ratepayer burden;
- The retention of vested land;
- Holding short term investments for working capital and liquidity requirements;
- Holding investments that are necessary to carry out Council operations consistent with Annual Plans, to implement strategic initiatives or to support inter-generational allocations;
- Holding assets (such as property) for commercial returns;
- Provide ready cash in the event of a natural disaster. The use of which is intended to bridge the gap between the disaster and the reinstatement of normal income streams and assets; and
- Invest amounts allocated to accumulated surplus, Council created restricted reserves and general reserves.

Council recognises that as a responsible public authority all investments held, should be low risk. Council also recognises that low risk investments generally mean lower returns.

5.2 Investment mix

Council may maintain investments in the following assets from time to time:-

- Equity investments, including investments held in CCO/CCTO and other shareholdings;
- Property investments incorporating land, buildings, a portfolio of ground leases and land held for development;

- Forestry investments; and
- Financial investments.

5.2.1 Equity investments

Equity investments, including investments held in CCO/CCTO and other shareholdings. Council maintains equity investments and other minor shareholdings.

Council's equity investments fulfil various strategic, economic development and financial objectives as outlined in the LTP. Equity investment may be held where Council considers there to be strategic community value.

Council seeks to achieve an acceptable rate of return on all its equity investments consistent with the nature of the investment and their stated philosophy on investments.

Any purchase or disposition of equity investments requires Council approval. Council may also acquire shares that are gifted or are a result of restructuring. Any purchase or disposition of equity investments will be reported to the next meeting of Council.

Council recognises that there are risks associated with holding equity investments and to minimise these risks Council, through the relevant sub-committee as applicable, monitors the performance of its equity investments on a twice yearly basis to ensure that the stated objectives are being achieved. Council seeks professional advice regarding its equity investments when it considers this appropriate.

5.2.2 Property investments

Council's overall objective is to only own property that is necessary to achieve its strategic objectives. As a general rule, Council will not maintain a property investment where it is not essential to the delivery of relevant services, and property is only retained where it relates to a primary output of Council. Council reviews property ownership through assessing the benefits of continued ownership in comparison to other arrangements which could deliver the same results. This assessment is based on the most financially viable method of achieving the delivery of Council services. Council generally follows similar assessment criteria in relation to new property investments.

Council reviews the performance of its property investments on a regular basis.

5.2.3 Financial investments

Financial investment objectives

- Council's primary objectives when investing is the protection of its investment capital. Accordingly, Council may only invest in approved creditworthy counterparties. Creditworthy counterparties and investment restrictions are covered in section 6.5. Council may invest in approved financial instruments as set out in section 6.2. These investments are aligned with Council's objective of investing in high credit quality and highly liquid assets.

Council's investment portfolio will be arranged to provide sufficient funds for planned expenditures and allow for the payment of obligations as they fall due.

- Council's net investment interest rate profile will be managed within the parameters outlined in section 6.0.

Special funds, ~~sinking funds~~, reserve and endowment funds

Liquid assets are not required to be held against special funds and reserve funds. Instead Council will internally borrow or utilise these funds wherever possible.

~~Sinking Funds will no longer be maintained by Council.~~

No interest is payable on internal borrowing to/from reserves, unless otherwise directed by Council or in accordance with the fund agreements.

Trust funds

Where Council holds funds as a trustee or manages funds for a Trust then such funds must be invested on the terms provided within the Trust. If the Trust's investment policy is not specified then this policy should apply.

5.3 New Zealand Local Government Funding Agency Limited investment

Despite anything earlier in this Policy, Council may invest in shares and other financial instruments of the New Zealand Local Government Funding Agency Limited (LGFA), and may borrow to fund that investment.

Council's objective in making any such investment will be to:

- Obtain a return on the investment; and
- Ensure that the LGFA has sufficient capital to become and remain viable, meaning that it continues as a source of debt funding for the Council.

Because of these dual objectives, Council may invest in LGFA shares in circumstances in which the return on that investment is potentially lower than the return it could achieve with alternative investments. Notwithstanding the Counterparty Credit Risk Limits (set out in Section 6.3 of this policy), Council may invest in financial instruments issued by the LGFA up to a maximum of \$5 million (i.e. borrower notes). If required in connection with the investment, Council may also subscribe for uncalled capital in the LGFA and be a Guarantor.

6.0 Risk Management

The definition and recognition of interest rate, liquidity, funding, investment, counterparty credit, market, operational and legal risk of Council will be as detailed below and applies to both the Liability Management policy and Investment policy.

6.1 Risk recognition

Interest rate risk is the risk that investment returns or funding costs (due to adverse movements in market interest rates) will materially exceed or fall short of projections included in the LTP and Annual Plan so as to adversely impact revenue projections, cost control and capital investment decisions/returns/and feasibilities.

The primary objective of interest rate risk management is to reduce uncertainty relating to interest rate movements through fixing of investment returns or funding costs. Certainty around funding costs is to be achieved through the active management of underlying interest rate exposures.

6.2 Approved financial instruments

Dealing in interest rate products must be limited to financial instruments approved by Council.

Approved financial instruments are as follows:

Category	Instrument
Cash management and borrowing	Bank overdraft Committed cash advance and bank accepted bill facilities (short term and long term loan facilities) Committed standby facilities -from the LGFA Uncommitted money market facilities Retail and Wholesale Bond, both Fixed Rate (MTN) and Floating Rate Note (FRN) issuance (including forward start from the LGFA) Loan stock/bond issuance <ul style="list-style-type: none">• Floating Rate Note (FRN)• Fixed Rate Note (MTN) Commercial paper (CP) /Bills / Promissory notes Finance Leases
Investments	Term deposits (including those linked to prefunding strategies)

Category	Instrument
	<p>Call and Short term bank deposits</p> <p>Bank registered certificates of deposit (RCDs)</p> <p>NZ Government, LGFA, Local Authority stock or State Owned Enterprise (SOE) bonds and FRNs (senior)</p> <p>Corporate bonds (senior)</p> <p>Corporate Floating Rate Notes (senior)</p> <p>Promissory notes/Commercial paper (senior)</p> <p>Corporate/SOE/Other Local Authority Bonds</p> <p>NZLGFA Borrower Notes</p> <p>Bank term deposits linked to pre funding maturing debt</p>
Interest rate risk management	<p>Forward rate agreements (“FRAs”) on:</p> <ul style="list-style-type: none"> • Bank bills • Government bonds <p>Interest rate swaps including:</p> <ul style="list-style-type: none"> • Forward start swaps and collars (start date <2436 months, unless linked to existing maturing swaps and collars) • Amortising swaps (whereby notional principal amount reduces) • Swap extensions and shortenings <p>Interest rate options on:</p> <ul style="list-style-type: none"> • Bank bills (purchased caps and one for one collars) • Government bonds • Interest rate swaptions (purchased swaptions and one for one collars only)

Any other financial instrument must be specifically approved by Council on a case-by-case basis and only be applied to the one singular transaction being approved.

All investment securities must be senior in ranking. The following types of investment instruments are expressly excluded:

- Structured debt where issuing entities are not a primary borrower/ issuer; and
- Subordinated debt, junior debt, perpetual notes and hybrid notes such as convertibles.

6.3 Interest rate risk control limits

Net debt/borrowings

Council debt/borrowings should be within the following fixed/floating interest rate risk control limit:

Debt Interest Rate Policy Parameters (calculated on a rolling monthly basis):		
Debt Period Ending	Minimum Fixed	Maximum Fixed
Less than 12 months	50%	90%
12 – 36 months	40%	90%
37 – 60 months	30%	80 75%
60 – 84 months	0%	60%
Greater than 84 60 months	40 0%	50%

“Fixed Rate” is defined as all known interest rate obligations on forecast gross external debt, including where debt is borrowed on a fixed interest rate basis and where hedging instruments have fixed movements in the applicable reset rate.

~~“Fixed Rate” is defined as an interest rate repricing date beyond 12 months forward on a continuous rolling basis.~~

“Floating Rate” is defined as any interest rate obligation subject to movements in the applicable reset rate.

Forecast gross external debt is the amount of total external debt for a given period (12 month). This allows for pre-hedging in advance of projected physical drawdown of new debt. When approved forecasts are changed (signed off by the CFO), the amount of interest rate fixing in place may have to be adjusted to ensure compliance with the Policy minimum and maximum limits.

~~“Floating Rate” is defined as any interest rate obligation subject to movements in the applicable reset rate.~~

~~Forecast gross external debt is the amount of total external debt for a given period (12 month). This allows for pre-hedging in advance of projected physical drawdown of new debt. When approved forecasts are changed (signed off by the CFO), the amount of interest rate fixing in place may have to be adjusted to ensure compliance with the Policy minimum and maximum limits.~~

~~“Floating Rate” is defined as an interest rate repricing within 12 months.~~

Fixed interest rate percentages are calculated monthly by the Business Services Finance Manager based on the average amount of fixed interest rate obligations relative to the average forecast gross external debt amounts for the given period (as defined in the table above).

Forecast gross external debt is to be reviewed by the TMG as part of the ongoing strategic risk management process, and the specific levels of core debt deemed to be that which is not seasonal or working capital related.

~~The percentages are calculated on the rolling projected net debt level calculated by management (signed off by the CE or equivalent). Net debt is the amount of total debt net of liquid short term financial assets/investments. This allows for pre-hedging in advance of projected physical drawdown of new debt. When approved forecasts are changed, the amount of fixed rate cover in place may have to be adjusted to ensure compliance with the policy minimums and maximums.~~

- A fixed rate maturity profile that is outside the above limits, but self corrects within 90-days is not in breach of this Policy. However, maintaining a maturity profile beyond 90-days requires specific approval by Council;
- The above interest rate risk control limits apply when external debt exceeds \$25 million;
- Floating rate debt may be spread over any maturity out to 12 months. Bank advances may be for a maximum term of 12 months;

~~Any interest rate fixing with a maturity beyond 15 years must be approved by Council. The exception to this will be if Council raises LGFA funding as fixed rate or an interest rate swap is linked to floating rate LGFA debt and this is maturing beyond 15 years;~~

- Interest rate swap maturities beyond the maximum LGFA bond maturity must be approved by Council through a specific approval.
- ~~• Any interest rate derivatives or interest rate fixing with a maturity beyond 16 years must be approved by Council. The exception to this will be if Council raises LGFA funding as fixed rate and this maturity is beyond 16 years;~~
- Interest rate options must not be sold outright. However, 1:1 collar option structures are allowable, whereby the sold option is matched precisely by amount and maturity to the simultaneously purchased option. During the term of the option, only the sold side of the collar can be closed out (i.e. repurchased) otherwise, both sides must be closed simultaneously. The sold option leg of the collar structure must not have a strike rate "in-the-money";
- Purchased borrower swaptions mature within 12 months;
- Interest rate options with a maturity date beyond 12 months that have a strike rate (exercise rate) higher than 2.00% above the appropriate swap rate, cannot be counted as part of the fixed rate cover percentage calculation; and
- Forward start period on swaps and collar strategies to be no more than 3624 months, unless it extends the maturity of existing interest rate fixing (via either derivatives or fixed rate borrowing).

Sinking funds, special and general reserve funds

~~Given that Council may require funding for capital expenditure cash shortfalls over the remaining life of the existing special and general reserve funds, where such funds are deemed necessary they should be used for internal borrowing purposes when external borrowing is required. Accordingly, Council maintains its funds in short term maturities emphasising counterparty credit worthiness and liquidity. The interest rate yield achieved on the funds therefore is a secondary objective.~~

~~This will negate counterparty credit risk and any interest rate repricing risk that occurs when Council borrows at a higher rate compared to the investment rate achieved by Special/Reserve Funds.~~

~~Liquid assets will not be required to be held against special funds or reserve funds unless such funds are held within a trust requiring such, instead, Council will manage these funds using internal borrowing facilities.~~

Foreign currency

Council has minor foreign exchange exposure through the occasional purchase of foreign exchange denominated services, plant and equipment.

Generally, all significant commitments for foreign exchange are hedged using foreign exchange contracts, once expenditure is approved. Both spot and forward foreign exchange contracts can be used by Council.

Council shall not borrow or enter into incidental arrangements, within or outside New Zealand, in currency other than New Zealand currency.

Council does not hold investments denominated in foreign currency.

All foreign currency hedging must be approved by the GMF.

6.4 Liquidity risk/funding risk

6.4.1 Risk recognition

Cash flow deficits in various future periods based on long term financial forecasts are reliant on the maturity structure of cash, financial investments, loans and bank facilities. Liquidity risk management focuses on the ability to access committed funding at that future time to fund the gaps. Funding risk management centres on the ability to re-finance or raise new debt at a future time at the same or more favourable pricing (fees and borrowing margins) and maturity terms of existing loans and facilities.

The management of Council's funding risks is important as several risk factors can arise to cause an adverse movement in borrowing margins, term availability and general flexibility including:

- Local government risk is priced to a higher fee and margin level;
- Council's own credit standing or financial strength as a borrower deteriorates due to financial, regulatory or other reasons;
- A large individual lender to Council experiences financial/exposure difficulties resulting in Council not being able to manage their debt portfolio as optimally as desired;
- New Zealand investment community experiences a substantial "over supply" of Council investment assets; and
- Financial market shocks from domestic or global events.

A key factor of funding risk management is to spread and control the risk to reduce the concentration of risk at one point in time so that if any of the above events occur, the overall borrowing cost is not unnecessarily increased and desired maturity profile compromised due to market conditions.

6.4.2 Liquidity/funding risk control limits

- Alternative funding mechanisms such as leasing should be evaluated with financial analysis in conjunction with traditional on-balance sheet funding. The evaluation should take into consideration, ownership, redemption value and effective cost of funds;
- External term loans and [available portion of](#) committed debt facilities together with available unencumbered liquid investments must be maintained at an amount exceeding 110% of existing total external debt;
- Council has the ability to pre-fund up to 18 months forecast debt requirements including re-financings. Debt re-financings that have been pre-funded, will remain included within the funding maturity profile until their maturity date;
- The CE has the discretionary authority to re-finance existing debt on more favourable terms. Such action is to be reported and ratified by the Council at the earliest opportunity;

- The maturity profile of the total committed funding in respect to all loans and committed facilities, is to be controlled by the following system and apply when external debt exceeds \$25 million:

Period	Minimum Cover	Maximum Cover
0 to 3 years	15%	60%
3 to 7 5 years	4 25%	60 85%
5 7 years plus	4 0%	60%

- A funding maturity profile that is outside the above limits, but self corrects within 90-days is not in breach of this Policy. A maturity schedule outside these limits for a period greater than 90 days requires specific the Council approval ~~A funding maturity profile that is outside the above limits, but self corrects within 90-days is not in breach of this Policy. However, maintaining a maturity profile beyond 90-days requires specific approval by Council; and~~
- With regard to calculating the funding maturity profile, total committed bank facility amounts are recognised as maturing at the facility's legal expiry date.
- ~~To minimise concentration risk the LGFA require that no more than the greater of NZD 100 million or 33% of a Council's borrowings from the LGFA will mature in any 12 month period.~~

6.5 Counterparty credit risk

Counterparty credit risk is the risk of losses (realised or unrealised) arising from a counterparty defaulting on a financial instrument where Council is a party. The credit risk to Council in a default event will be weighted differently depending on the type of instrument entered into.

Credit risk will be regularly reviewed by Council. Treasury related transactions would only be entered into with organisations specifically approved by Council.

Counterparties and limits can only be approved on the basis of long term credit ratings (Standard & Poor's, Fitch or Moody's) being A and above or short term rating of A-1 or above.

Limits should be spread amongst a number of counterparties to avoid concentrations of credit exposure.

The following matrix guide will determine limits.

Counterparty/Issuer	Minimum long term / short term credit rating – stated and possible	Investments maximum per counterparty (\$m)	Interest rate risk management instrument maximum per counterparty (\$m)	Total maximum per counterparty (\$m)
NZ Government	N/A	Unlimited	none	Unlimited
Local Government Funding Agency	N/A	Unlimited	none	Unlimited
NZD Registered Supranationals	AAA	10.0	none	10.0
State Owned Enterprises	A+ / A-1	5.0	none	5.0
NZ Registered Bank	A / A-1	15.0	20.0	30.0
Corporate Bonds / CP	A+ / A-1	2.0	none	2.0
Local Government Stock / Bonds / FRN / CP	A+ / A-1 (if rated)	10.0	none	10.0
This summary list will be expanded on a counterparty named basis which will be authorised by the CE.				

In determining the usage of the above gross limits, the following product weightings will be used:

- Investments (e.g. Bank Deposits) – Transaction Notional × Weighting 100%. (Unless a legal right of set-off over corresponding borrowings exist whereupon a 0% weighting may apply);
- Interest Rate Risk Management (e.g. swaps, FRAs) – Transaction Notional × Maturity (years) × 3%; and
- Foreign Exchange – Transactional principal amount x the square root of the Maturity (years) x 15%.

No more than 50% of the investment portfolio will be held with one bank at any one time.

Investments are normally held to maturity date. Where investments are liquidated before legal maturity date, approval is obtained from the CE, who also approves guidelines for a minimum acceptable sale price. The General ~~Manager Risk, IT and Finance~~ Manager Sustainable Growth and Investment (GM SGI) evaluates quotes based on these instructions and proceeds with the transaction.

Local Government Funding Agency

Borrower Notes. On occasion when Council borrows from the LGFA it will be required to contribute part of that borrowing back as equity in the form of “Borrower Notes”. A

Borrower Note is a written, unconditional declaration by a borrower (in this instance the LGFA) to pay a sum of money to a specific party (in this instance Council) at a future date (in this instance upon the maturity of the loan). A return is paid on the Borrower Notes and can take the form of a dividend if the Borrower Notes are converted to redeemable preference shares.

Risk management

To avoid undue concentration of exposures, financial instruments should be used with as wide a range of approved counterparties as possible. Maturities should be well spread. The approval process must take into account the liquidity of the market the instrument is traded in and re-priced from.

6.6 Operational risk

Operational risk is the risk of loss as a result of human error (or fraud), system failures and inadequate procedures and controls.

Operational risk is very relevant when dealing with financial instruments given that:

- Financial instruments may not be fully understood;
- Too much reliance is often placed on the specialised skills of one or two people;
- Most treasury instruments are executed over the telephone; and
- Operational risk is minimised through the adoption of all requirements of this policy.

6.6.1 Dealing authorities and limits

Transactions will only be executed by those persons and within limits approved by Council.

6.6.2 Segregation of duties

As there are a small number of people involved in borrowing and investment activity, adequate segregation of duties among the core borrowing and investment functions of deal execution, confirmation, settling and accounting/reporting is not strictly achievable. The risk will be minimised by the following process:-

- The GMF reports directly to the CE;
- There is a documented approval process for borrowing, interest rate and investment activity;
- Any execution activities undertaken by the GMF will be checked by the Treasury and Financial Services Manager (FSM) and the FSM will report any irregularities direct to the CE. Any execution activities undertaken by the FSM and the Finance Accountants Team (FSM and Assistant Accountant (AA)) will be checked by the Finance Transactions Team (Finance Officer and Finance Administrator) and any irregularities reported to the GMF and CE; and

- In the absence of the FSM, the FSM's deal execution delegated authority moves to the Revenue Manager.

DRAFT

6.6.3 Procedures

All treasury instruments should be recorded and diarised within a treasury spreadsheet, with appropriate controls and checks over journal entries into the general ledger. Deal capture and reporting must be done immediately following execution/confirmation. Details of procedures including templates of deal tickets should be compiled in a treasury procedures manual separate to this policy.

Procedures should include:

- Regular management reporting;
- Regular risk assessment, including review of procedures and controls as directed by Council or appropriate sub-committee of Council; and
- Organisational, systems, procedural and reconciliation controls to ensure:
 - All borrowing, interest rate and investment activity is bona fide and properly authorised;
 - Checks are in place to ensure Council accounts and records are updated promptly, accurately and completely; and
 - All outstanding transactions are revalued regularly and independently of the execution function to ensure accurate reporting and accounting of outstanding exposures and hedging activity.

Organisational controls

- The GMF or equivalent has responsibility for establishing appropriate structures, procedures and controls to support borrowing, interest rate and investment activity; and
- All borrowing, investment, cash management and interest rate risk management activity is undertaken in accordance with approved delegations authorised by Council.

~~Cheque/e~~Electronic banking signatories

- Positions approved by the CE as per register;
- Dual signatures are required for all ~~cheques and~~ electronic transfers; ~~and~~
- ~~Cheques must be in the name of the counterparty crossed "Not Negotiable, Account Payee Only", via Council's bank account.~~

Authorised personnel

- All counterparties are provided with a list of personnel approved to undertake transactions, standard settlement instructions and details of personnel able to receive confirmations.

Recording of deals

- All deals are recorded on properly formatted deal tickets by the Finance Accountants Team and approved as required by the FSM, GMF or CE. Deal summary records for borrowing, investments, interest rate risk management and cash management transactions (on spreadsheets) are maintained and updated promptly following completion of transaction.

Confirmations

- All inward letter confirmations including registry confirmations are received and checked by the Finance Transactions Team against completed deal tickets and the treasury spread sheet records to ensure accuracy;
- All deliverable securities are held in Council's safe;
- Deals, once confirmed, are filed (deal ticket and attached confirmation) by the Finance Transactions Team in deal date/number order; and
- Any discrepancies arising during deal confirmation checks which require amendment to Council records are signed off by the FSM, GMF or CE.

Settlement

- The majority of borrowing, interest rate and investment payments are settled by direct debit authority; and
- For electronic payments, batches are set up electronically. These batches are checked by the FSM to ensure settlement details are correct. Payment details are authorised by two approved signatories as per Council registers.

Reconciliations

- Bank reconciliations are performed monthly by the Finance Transactions Team and checked and approved by the FSM. Any unresolved un-reconciled items arising during bank statement reconciliation which require amendment to Council's records are signed off by the GMF;
- A monthly reconciliation of the treasury spread sheet to the general ledger is carried out by the FSM and reviewed by the GMF; and
- Interest income from the treasury spreadsheet is reconciled to bank statements.

6.7 Legal risk

Legal and regulatory risks relate to the unenforceability of a transaction due to an organisation not having the legal capacity or power to enter into the transaction usually because of prohibitions contained in legislation. While legal risks are more relevant for banks, Council may be exposed to such risks with Council unable to enforce its rights due to deficient or inaccurate documentation.

Council will seek to minimise this risk by adopting policy regarding:-

- The use of standing dealing and settlement instructions (including bank accounts, authorised persons, standard deal confirmations, contacts for disputed transactions) to be sent to counterparties;
- The matching of third party confirmations and the immediate follow-up of anomalies; and
- The use of expert advice.

6.8 Agreements

Financial instruments can only be entered into with banks that have in place an executed ISDA Master Agreement with Council.

Council's internal/appointed legal counsel must sign off on all documentation for new loan borrowings, re-financings and investment structures.

6.9 Financial covenants and other obligations

Council must not enter into any transactions where it would cause a breach of financial covenants under existing contractual arrangements.

Council must comply with all obligations and reporting requirements under existing funding facilities and legislative requirements.

6.10 Specific Council Approval

Any activity outside the limits set in section 6 will require specific Council approval.

7.0 Cash Management

The Finance Accountants Team has the responsibility to carry out the day-to-day cash and short term debt management activities. All cash inflows and outflows pass through bank accounts controlled by the finance function.

- The Finance Accountants Team will calculate and maintain comprehensive cash flow projections on a daily (two weeks forward), weekly (four weeks forward) and monthly (12 months forward) basis. The Long Term Planning process completed every three years looks forward for 10 years. These cash flow forecasts determine Council's borrowing requirements and surpluses for investment;
- On a daily basis, electronically download all Council bank account information;
- Co-ordinate Council's operating units to determine daily cash inflows and outflows with the objective of managing the cash position within approved parameters;
- Undertake short term borrowing functions as required, minimising overdraft costs;
- Ensuring efficient cash management through improvement to accurate forecasting using spreadsheet modelling;
- Minimise fees and bank/Government charges by optimising bank account/facility structures;
- Match future cash flows to smooth overall timeline;
- Provide reports detailing actual cash flows during the month compared with those budgeted;
- Maximise the return from available funds by ensuring significant payments are made within the vendor's payment terms, but no earlier than required, unless there is a financial benefit from doing so; and
- Cash is invested for a term of no more than three months and in approved instruments and counterparties.

8.0 Measuring Treasury Performance

In order to determine the success of Council's treasury management function, the following benchmarks and performance measures have been prescribed.

Those performance measures that provide a direct measure of the performance of treasury staff (operational performance and management of debt and interest rate risk) are to be reported to Council or an appropriate sub-committee of Council on a quarterly basis.

8.1 Operational performance

All treasury limits must be complied with including (but not limited to) counterparty credit limits, dealing limits and exposure limits.

All treasury deadlines are to be met, including reporting deadlines.

8.2 Management of debt and interest rate risk

The actual funding cost for Council (taking into consideration costs of entering into interest rate risk management transactions) should be below the budgeted interest cost.

~~Since senior management is granted discretion by Council to manage debt and interest rate risk within specified limits, the actual funding rate achieved must be compared against an appropriate external benchmark interest rate that assumes a risk neutral position within existing policy. Note: in this respect, a risk neutral position is one that is always precisely at the mid-point of the minimum and maximum percentage limits specified within the policy.~~

~~Given current fixed/floating risk control limits and fixed rate maturity profile limits as defined in Section 6.3 of the Treasury Policy, the market benchmark (composite) indicator rate will be calculated as follows:~~

- ~~• The wholesale interest rate is the mid-point policy benchmark rate. Council's policy mid-point represents an average term of seven years. The market benchmark rate will be calculated every month and represent the seven-year swap rate monthly rolling average over a seven-year period.~~

~~The micro-benchmark rate used to measure performance is the aggregate of the composite benchmark indicator rate calculated above and the margin that applies to existing funding facilities.~~

~~Accordingly, the actual weighted average interest rate for the financial year to date (that incorporates all issuance margins and derivative settlements) must be compared against the micro-benchmark rate on a monthly basis, with historical comparison reported graphically over the previous 12 months.~~

9.0 Reporting

When budgeting forecast interest costs/returns, the actual physical position of existing loans, investments and interest rate instruments must be taken into account.

9.1 Treasury reporting

The following reports are produced:

Report Name	Frequency	Prepared By	Recipient
Daily Cash Position Treasury Spreadsheet	Daily	AA/FA	FSM
Treasury Exceptions Report	As required	FSM	GMF
Treasury Report <ul style="list-style-type: none"> • Policy limit compliance • Borrowing limits • Funding and Interest Position • Funding facility • New treasury transactions • Cost of funds vs budget • Cash flow forecast report • Liquidity risk position • Counterparty credit • Treasury performance Debt maturity profile • Treasury investments 	Monthly (ELT)/ Quarterly (Council)	AA/FA	ELT/Council
Quarterly Treasury Strategy Paper	Quarterly	GMF	Council
Statement of Public Debt	Monthly	FSM	Council
Revaluation of financial instruments	At least Annually	FSM	Council

Report Name	Frequency	Prepared By	Recipient
LGFA covenant reporting	At least annually		LGFA

9.2 Accounting treatment of financial instruments

Council uses financial market instruments for the primary purpose of reducing its exposure to fluctuations in interest rates. The purpose of this section is to articulate Council's accounting treatment of derivatives in a broad sense.

Under NZ IPSAS accounting standards changes in the fair value of derivatives go through the Income Statement unless derivatives are designated in an effective hedge relationship.

Council's principal objective is to actively manage Council's interest rate risks within approved limits and chooses not to hedge account. Council accepts that the mark-to-market gains and losses on the revaluation of derivatives can create potential volatility in Council's annual accounts.

The FSM is responsible for advising the GMF and CE of any changes to relevant NZ IPSAS which may result in a change to the accounting treatment of any financial derivative product.

All treasury financial instruments must be revalued (mark-to-market) at least once annually for risk management purposes. Banks can confirm valuation of financial instruments at least six monthly and during periods of significant change quarterly.

9.3 Valuation of treasury instruments

All treasury financial instruments must be revalued (mark-to-market) at least annually. This includes those instruments that are used only for hedging purposes.

Underlying rates to be used to value treasury instruments are as follows:-

- Official daily settlement prices for established markets;
- Official daily market rates for short term treasury instruments (e.g. FRA settlement rates calculated by Reuters from price maker quotations as displayed on the BKBM page);
- Relevant market mid-rates provided by the company's bankers at the end of the business day (5.00pm) for other over-the-counter treasury instruments; and
- For markets that are illiquid, or where market prices are not readily available, rates calculated in accordance with procedures approved by the GMF.

10.0 Policy Review

This Treasury Policy is to be formally reviewed on a triennial basis.

The CE has the responsibility to prepare a review report that is presented to Council or Council sub-committee. The report will include:

- Recommendation as to changes, deletions and additions to the policy;
- Overview of the treasury management function in achieving the stated treasury objectives, including performance trends in actual interest cost against budget (multi-year comparisons);
- Summary of breaches of policy and one-off approvals outside policy to highlight areas of policy tension;
- Analysis of bank and lender service provision, share of financial instrument transactions etcetera;
- Comments and recommendations from Council's external auditors on the treasury function, particularly internal controls, accounting treatment and reporting;
- An annual audit of the treasury spreadsheets and procedures should be undertaken; and
- Total net debt servicing costs and debt should not exceed limits specified in the covenants of lenders to Council.

Council receives the report, approves policy changes and/or reject recommendations for policy changes.

Treasury management report

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Violeta Kayryakova, Financial Services Manager

Purpose/Ngā whāinga

To provide the Audit, Risk and Finance Committee (the Committee) with detailed treasury management information and to provide an opportunity to discuss strategic directions.

Executive summary/Whakarāpopototanga

Council undertakes treasury management activities in accordance with its Treasury Management Policy and Treasury Operations Schedule. Council is working closely with PwC treasury advisors.

Council management provides the Committee with detailed operational treasury reporting

Attachments A—C.

Tools and techniques that are used to manage debt and funding are:

- Daily cash flow forecasting, undertaken in-house
- A treasury model, managed jointly by Council and PwC to monitor Council's funding and interest rate risk management position at a given point
- PwC treasury advisors provide in-depth advice on a monthly basis.

Council primarily borrows from the Local Government Funding Agency (LGFA) who provides the cheapest debt financing and longest maturity terms for debt financing available. Since 2016 Council has progressively refinanced and repaid debt.

Council borrowed two tranches of \$15 million and \$10 million with maturity date 15 May 2021, this existing funding maturity is now due within the period of 0 to 3 years, breaching Council's funding and liquidity position. Council is working together with PwC to refinance the borrowings ahead of 15 May 2021, **Attachment D**.

At 30 April 2020 a total of \$44 million was drawn.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes the treasury management report for April 2020.

Context/Horopaki

Council's current Treasury Management Policy was adopted in February 2018. Council's specialist Treasury advisors are PwC, since 2011.

Discussion/Ngā kōrerorero

Council management conducts treasury operations in conjunction with Council's advisors, PwC.

Tools and techniques that are used to manage debt are:

- Daily cash flow forecasting - projecting timing of cash movements over the course of the year
- A treasury model - managed jointly by Council and PwC to monitor Council's debt management position at a given point. This tool records loans and swaps that have been entered into and monitors the position against policy limits. It reflects on the current positions and projects future positions.

Council's funding and liquidity risk position (note that this position assumes existing funding maturities are repaid as they fall due).

Council's maturity profile showing its funding and liquidity risk position:

	Minimum cover to Maximum cover	Actual %	Compliance
0 to 3 years	15% to 60%	83.0%	No
3 to 5 years	15% to 60%	9.0%	No
5 years plus	10% to 60%	7.0%	No

The liquidity risk position is outside of the policy and once it does not comply with policy for 90 days then Council has to officially accept that there will be a breach. This will continue to be breached in the future with a large amount of debt (\$25 million) coming due at 15 May 2021, **Attachment D**.

Current position (30 April 2020): Indicates whether or not Council is within Treasury Policy parameters and its current funding and liquidity risk position, **Attachment A**:

- Actual liquidity ratio is 128%.

Council's borrowing should be within the following fixed/floating interest rate risk control limit.

Period	Minimum to Maximum Fixed	Actual %	Compliance
Less than 12 months	50% to 95%	76% Fixed	Yes
12-36 months	40% to 90%	54% Fixed	Yes
37 to 60 months	30% to 80%	47% Fixed	Yes
Greater than 60 months	Nil to 50%	29% Fixed	Yes

There is no breach of the policy parameters.

Projected positions: Indicates whether or not Council is within Treasury Policy parameters and its interest rate risk position, **Attachment B**:

- 72% of the portfolio is fixed (based on a debt forecast level of \$53.08 million).

Debt Interest rate policy parameters: **Attachment C**.

Debt ratios and limits:

Ratio	KDC Policy	LGFA Covenants	KDC as at 30 April 2020	Compliance
Net debt as a percentage of total revenue	<170%	<175%	89%	Yes
Net interest as a percentage of total revenue	<15%	<20%	4%	Yes
Net interest as a percentage of annual rates income	<20%	<25%	6%	Yes
Liquidity	>110%	>110%	128%	Yes

Council is well within its policy limits as at 30 April 2020.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Next steps/E whaiake nei

This report is for information only and does not trigger legal or delegation implications.

Attachments/Ngā tapiritanga

A	Funding and liquidity risk position at 30 April 2020
B	Interest rate risk position at 30 April 2020
C	Debt Interest rate policy parameters at 30 April 2020
D	LGFA – Refinancing Alternatives for Councils with May 2021 loans

30-Apr-20

Kaipara District Council

Funding & Liquidity Risk Position

Committed Loans/Stock/Facilities/Investments \$53.3m

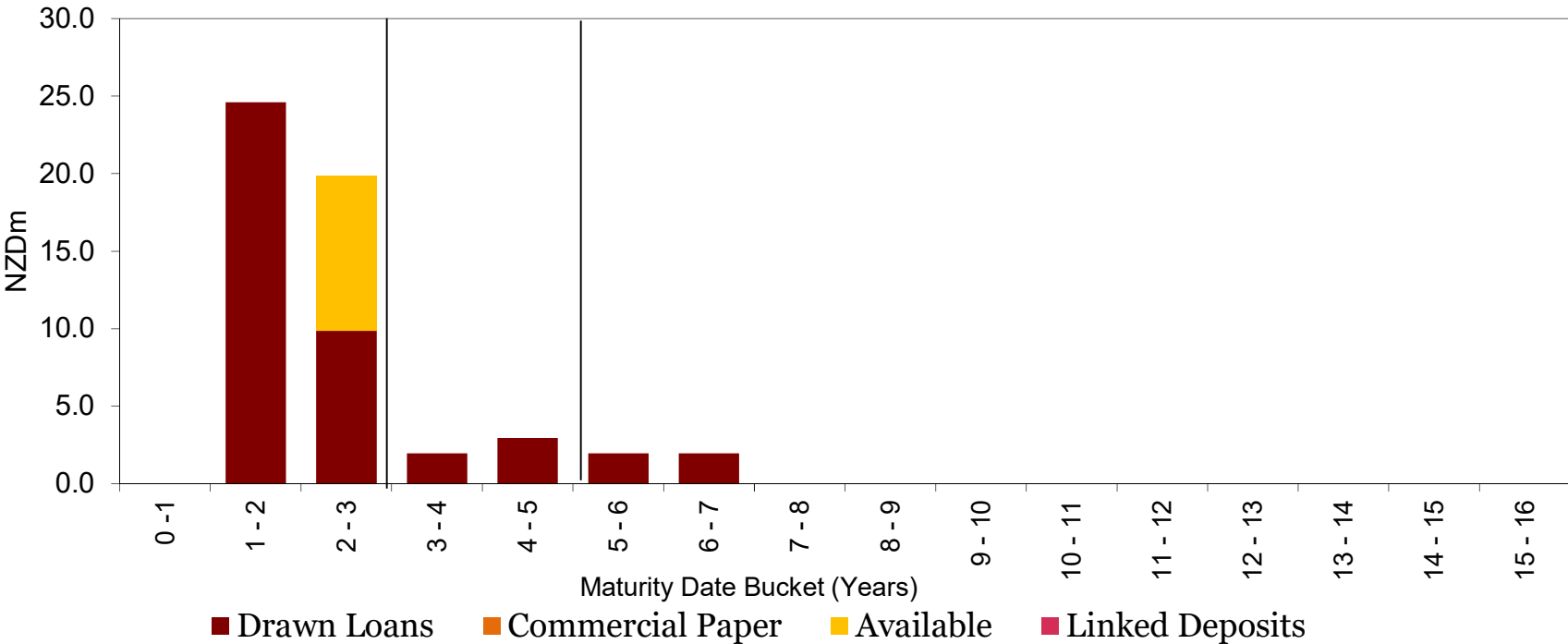
Current External Debt \$43.3m

Current Net Debt \$43.3m

Policy Liquidity Ratio $\geq 110\%$

Actual Liquidity Ratio 123%

	0 - 3 years	3 - 5 years	5 years plus
Policy Target Band	15%-60%	15%-60%	10%-60%
Actual	83%	9%	7%
Actual (NZDm)	44.44	4.92	3.94



30-Apr-20

Kaipara District Council**Interest Rate Risk Position**

based on projected debt of \$53.08m 30 April 2021

Overall Fixed

Policy Min 60%

Policy Max 90%

Actual 72%**38m**

Actual Floating

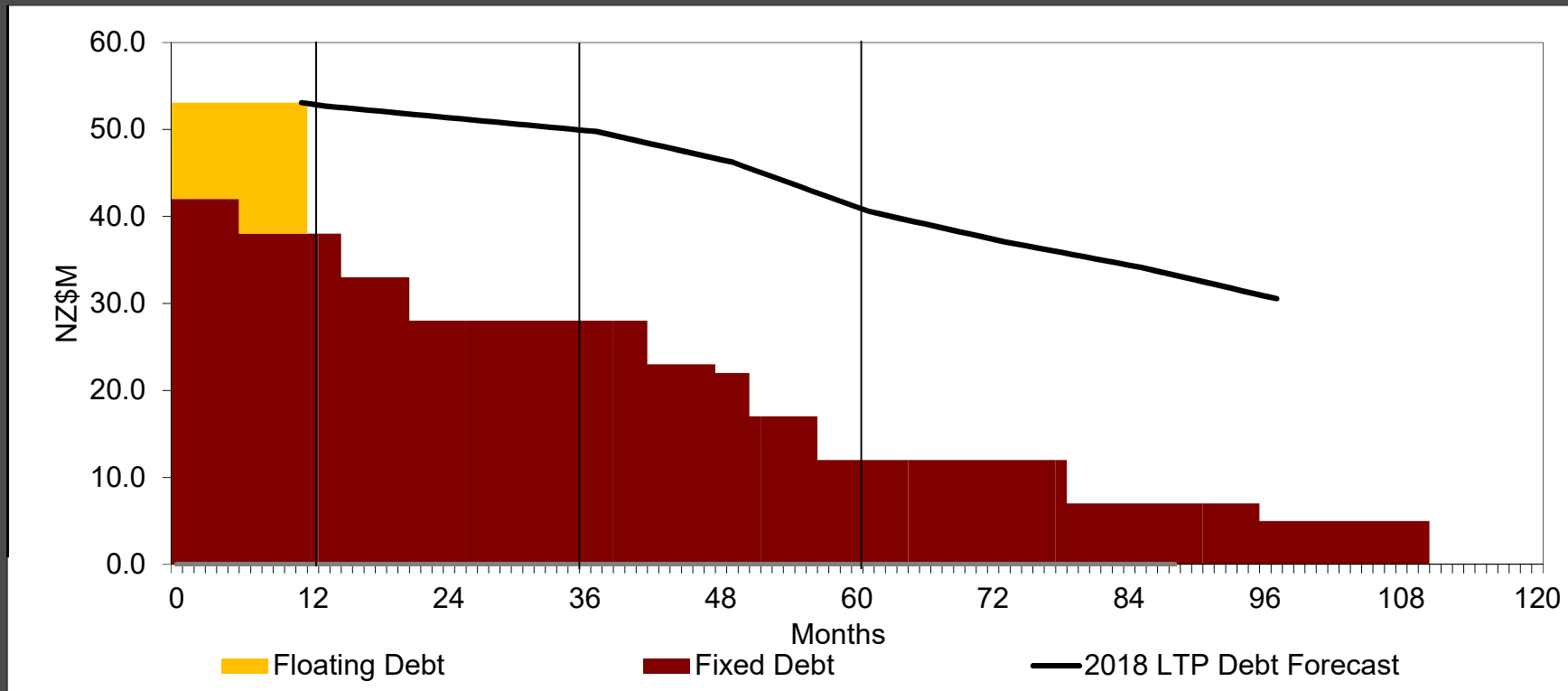
28%

15.1m

Policy Target band

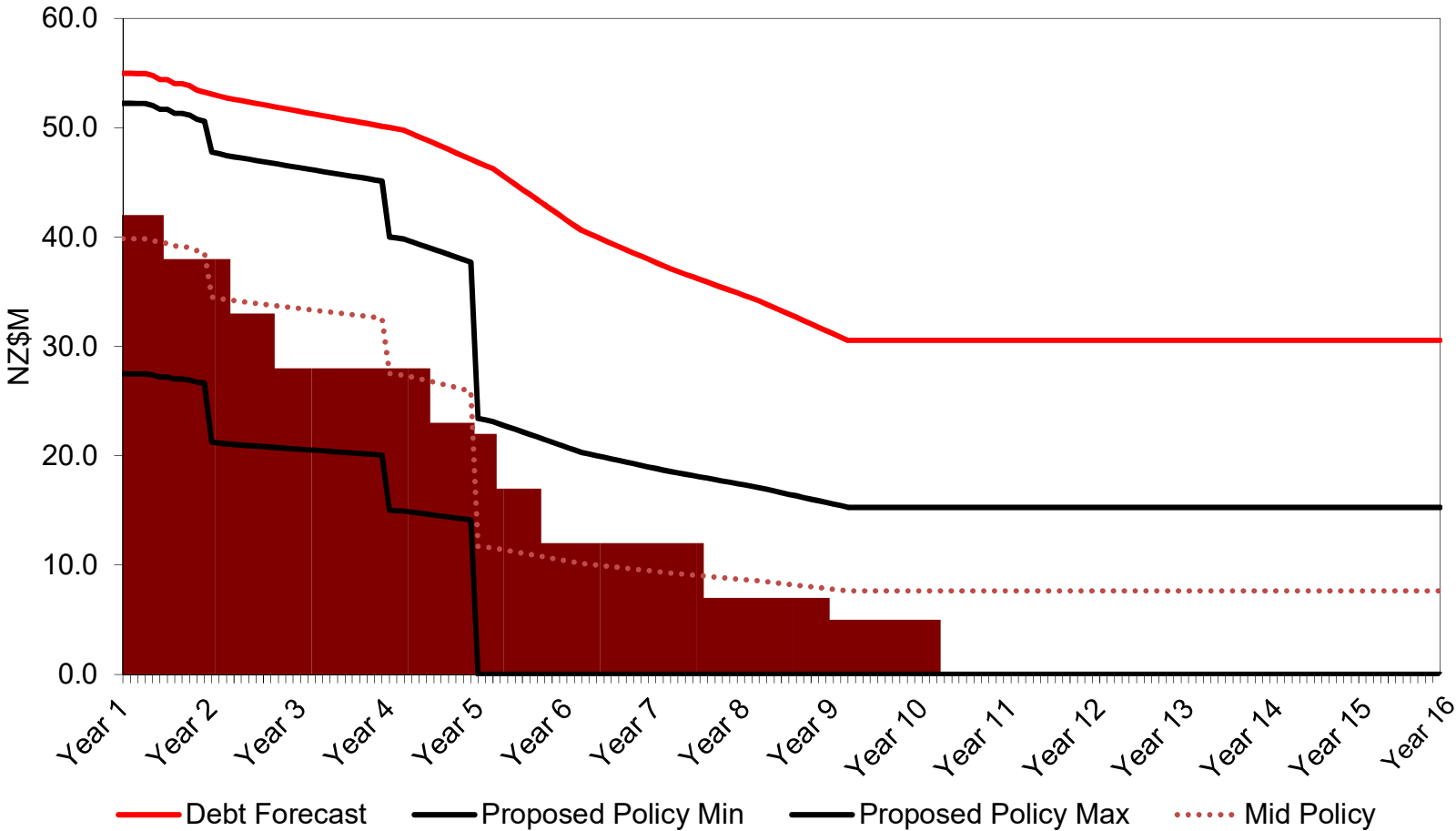
Actual

Actual (NZDm)

1 - 3 years**15%-60%****26%****9.88****3 - 5 years****15%-60%****42%****15.96****5 years plus****0%-60%****32%****12.16**

30-Apr-20

Kaipara District Council
Debt Interest Rate Policy Parameters
(calculated on rolling monthly basis)



21 May 2020

Refinancing Alternatives for Councils with May 2021 loans

Background:

After a volatile February-March period we have seen stability return to New Zealand debt markets with a significant fall in yields tightening in LGFA borrowing spreads. Both outright yields and borrowing spreads are either at or very close to historic lows as a result of the Reserve Bank of New Zealand buying LGFA bonds as part of its Large-Scale Asset Purchase programme (“LSAP”)¹. Under the LSAP the Reserve Bank can buy up to 30% of outstanding LGFA bonds on issue.

We are a year away from the maturity of the May 2021 LGFA bond and associated council on-lending. Forty-six councils have borrowed \$1.351 billion from LGFA into the 15th May 2021 maturity date and LGFA has issued \$1.45 billion of bonds to finance this on-lending. In addition, LGFA also has an additional \$337 million of longer-term lending to councils which is due to mature between now and the 15th May 2021.

The May 2021 month will be a busy period for New Zealand capital markets with a number of government and corporate bond maturities. The government’s May 2021 maturity is \$11.3 billion. There will be significant domestic capital markets activity by both issuers and investors during the June 2021 quarter.

We expect that most councils will look to either partially or totally refinance their borrowings ahead of 15th May 2021 as:

- Most councils don’t have surplus funds to repay the borrowing.
- Some councils have Treasury Policy restrictions such as the need to have liquidity cover in place for a certain period of time ahead of an upcoming maturity.
- Our experience with the March 2019 and April 2020 maturities was that all but a few of the smaller councils refinanced ahead of the final maturity date.

LGFA will manage its refinancing risk by:

- Holding nine bond tenders between now and May 2021. Councils can undertake borrowing from LGFA at any time during the year or can borrow on the tender dates.
- Issuing longer dated LGFA bonds in order to increase the size of LGFA’s liquid asset portfolio. This will enable LGFA to repay investors \$1.45 billion on the 15th May 2021.

¹ Charts of yield and spread movements are in the Appendix

Refinancing Alternatives for Councils:

There are several alternatives for councils to consider as they approach the 15th May 2021 maturity date of their loans

1. Fully or partially repay your loans. ("Repayment at Maturity") Given that councils are borrowing against long dated assets this is an unlikely scenario. Furthermore, LGFA provides the cheapest source of short and long term borrowing to council members so we would suggest that councils are not likely to refinance using more expensive financing alternatives.
2. Do nothing and refinance your existing May 2021 loans via the May 2021 LGFA bond tender. ("Refinance at Maturity") The advantage of this is that you don't have to do anything until maturity date and there is no impact on your cash flows, financial statements or gross debt levels. The disadvantage is the lack of certainty over the refinancing cost. As we have seen this year, financial markets can be volatile which can create some uncertainty regarding the ability to borrow and the cost of debt. Councils might have to hold liquid assets or standby facilities to meet Treasury Policy requirements.
3. Borrow into a new longer maturity date ahead of 15th May 2021 and repay your existing May 2021 loans. ("Borrow and Repay") We can provide indicative new borrowing margins at any time and margins are also published on a weekly basis each Wednesday. We can also calculate the cost to repay your May 2021 loans at any time. We would expect there to be a small cost to repay the loans as borrowing margins have narrowed and yields have declined over recent years since the loans were first taken out. However, the lower margins and lower yields will mean that it is cheaper to borrow / refinance for longer terms. The advantage of this approach is that it has no impact on your gross debt levels and it extends the duration of your debt portfolio. It provides certainty over your borrowing margin and refinancing. You may not have to hold liquid assets or standby facilities to meet Treasury Policy requirements. The disadvantage is that there will be an upfront cost to repaying your existing May 2021 loan that will be taken into the current year financial statements.
4. Borrow into a new longer maturity date ahead of 15 May 2021 and repay existing May 2021 loans. Blend any loss into the new loan margin on the longer loan maturity. ("Blend and Extend") LGFA will allow councils to blend any marked to market loss on the May 2021 loan into the margin on the new borrowing. This will mean a slightly higher borrowing margin for the new longer dated maturity. The amount of additional margin will be a function of the margin on the existing 2021 borrowings and the term of new borrowing. LGFA does not charge any additional cost for this type of transaction. On the blend and extend transactions that we have undertaken so far, the additional margin has been between 2 bps and 10 bps. The advantage of this approach is that it has no impact on your gross debt levels and it extends the duration of your debt portfolio. It provides certainty over your borrowing margin and

refinancing. You may not have to hold liquid assets or standby facilities to meet Treasury Policy requirements. The disadvantage is that there will be a slightly higher borrowing margin over the term of the new loan.

5. Borrow into a new longer maturity date and place the funds on deposit with a bank. (“Borrow and Invest”) Councils can borrow either in between tenders or via one of the LGFA bond tenders to be held in the 2020/21 calendar year. The proceeds are placed on a term deposit with a bank to mature 15th May 2021. There could be a positive financial outcome for the council borrower as term deposit rates are above the council floating rate borrowing margins from LGFA. Approximate deposit rates from the major banks are currently:

Term	Deposit Rate	Approximate Margin to BKBM
3 months	0.95%	+0.75%
6 months	1.45%	+1.20%
9 months	1.45%	+1.20%
12 months	1.45%	+1.20%

The above term deposit rates are for interest paid at maturity so a direct comparison is not perfect and there will be some cash flow mismatches to manage as a council is making interest payments on a quarterly basis. The advantage of this approach is that it is likely to have a positive financial impact from the net interest margin earned as the cost of borrowing from LGFA may be lower than the return from your Term Deposit². This alternative also extends the duration of your debt portfolio and provides certainty over your borrowing margin and refinancing. You may not have to hold liquid assets or standby facilities to meet Treasury Policy requirements as the Term Deposits would be treated as assets. The disadvantage is that your gross debt level will increase until 15th May 2021 and you will incur credit risk on the bank (or banks) with your term deposit investments. Your net debt levels will however be unchanged.

6. Borrow into a new longer maturity date via a tender (or on an intra tender basis) prior to May 2021 but with settlement on the 15th May 2021. (“Forward Start Refinancing”) Under this alternative you can borrow at any of the LGFA tenders held in the 2020/21 financial year (or intra tender) but delay the settlement of the loan until 15th May 2021. You will lock in the borrowing margin and this will also provide certainty as to your refinancing. LGFA does not charge any additional cost for doing this over and above its cost of hedging. We estimate the additional cost to be 2 bps to 5 bps depending upon the term of borrowing and how close the chosen tender is to 15th May 2021. The advantage of this approach is that it extends the duration of your debt portfolio and provides certainty over your borrowing margin and refinancing. There is no financial impact. You may not have to hold liquid assets or standby facilities to meet Treasury Policy requirements as you have refinancing in place. The

² See the appendix for current LGFA lending rates and margins to BKBM for terms out to 2033

disadvantage is that you may have to disclose in your financial statements the commitment to borrow on 15th May 2021.

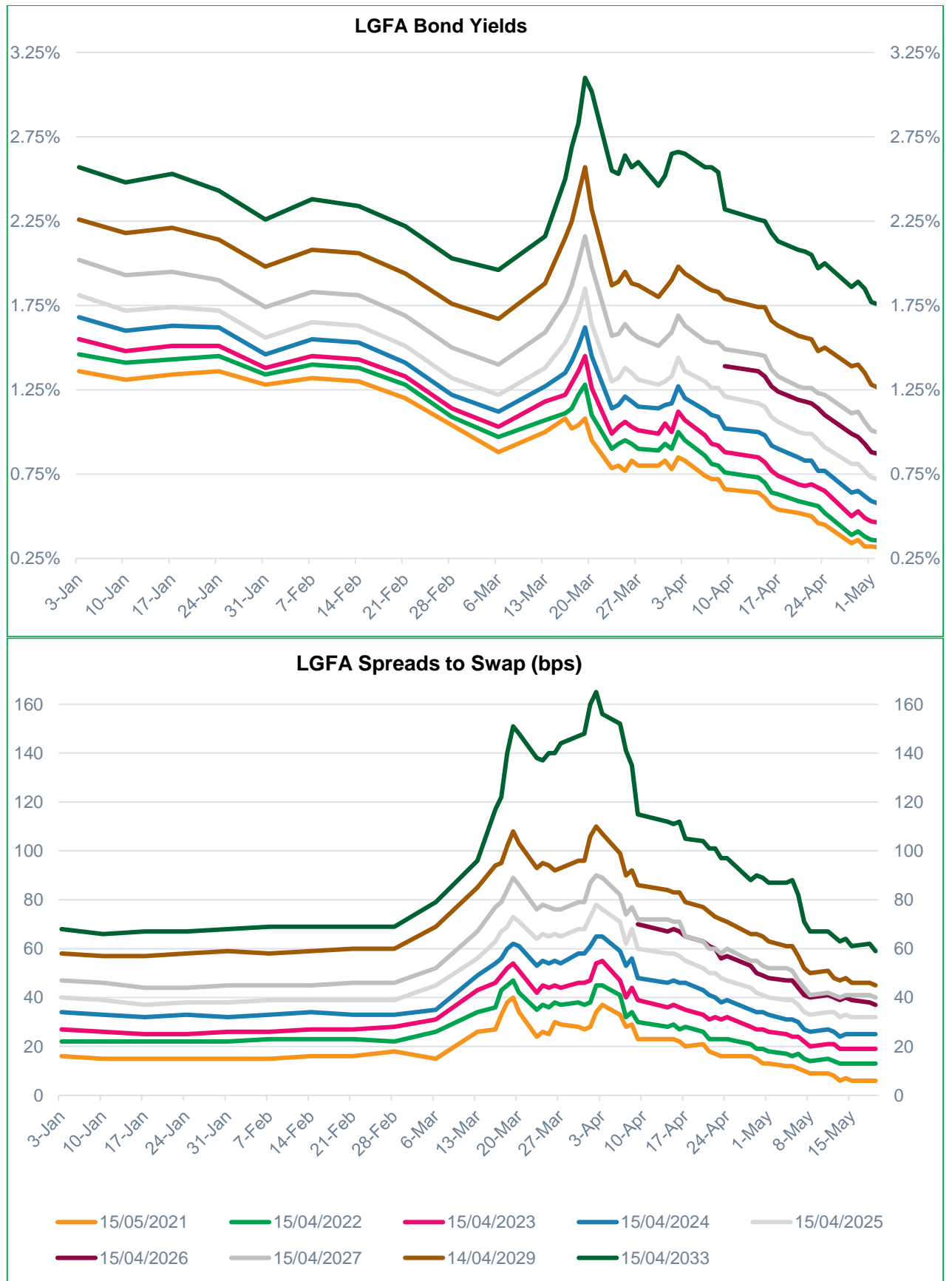
7. Repay the 15th May 2021 loan when due by borrowing short term (less than twelve months). Refinance the short-term loan with longer dated funding later in 2021. ("Short Term Refinancing") Under this alternative you can borrow for a term out to 12 months. You can then refinance the short-term loan with a longer-term loan in 2021 or partially repay from cash flow. The advantage of this approach is that you can defer your long-term borrowing decision until 2021 or 2022 so it does provide some flexibility. This alternative could be cheaper as short term borrowing margins are lower than long term borrowing. The disadvantages are that you don't have the certainty of the long-term borrowing cost and you are not extending the duration of your debt portfolio. You may also have to hold additional standby facilities to meet Treasury Policy requirements.

Conclusion:

LGFA believes that councils should not leave their refinancing decision until the maturity of their loans on 15th May 2021. There are several refinancing alternatives that can be considered and depending upon individual council circumstances some will be more suitable than others. We suggest that you consult your treasury advisor as to which alternative is best for your council.

LGFA is happy to assist with discussing in more detail and providing pricing for these alternatives so please contact either Andrew Michl or Mark Butcher.

Appendix LGFA Bond Yields and LGFA Bond Spread to Swap



Appendix LGFA Fixed Rate Lending Yields and Floating Rate Lending Spreads for Councils as at 20 May 2020

Fixed Rate Long Term Borrowing	Base Yield	Borrowing Yield AA rated Councils	Borrowing Yield AA- rated Councils	Borrowing Yield A+ rated Councils	Borrowing Yield Unrated Guarantors	Borrowing Yield Non Guarantors
May-21	0.30%	0.50%	0.55%	0.60%	0.70%	0.80%
Apr-22	0.31%	0.51%	0.56%	0.61%	0.71%	0.81%
Apr-23	0.38%	0.58%	0.63%	0.68%	0.78%	0.88%
Apr-24	0.46%	0.66%	0.71%	0.76%	0.86%	0.96%
Apr-25	0.59%	0.79%	0.84%	0.89%	0.99%	1.09%
Apr-26	0.72%	0.92%	0.97%	1.02%	1.12%	1.22%
Apr-27	0.82%	1.02%	1.07%	1.12%	1.22%	1.32%
Apr-29	1.03%	1.23%	1.28%	1.33%	1.43%	1.53%
Apr-33	1.43%	1.63%	1.68%	1.73%	1.83%	1.93%

Floating Rate Long Term Borrowing	Base Margin	Borrowing Margin AA rated Councils	Borrowing Margin AA- rated Councils	Borrowing Margin A+ rated Councils	Borrowing Margin Unrated Guarantors	Borrowing Margin Non Guarantors
May-21	12 bps	32 bps	37 bps	42 bps	52 bps	62 bps
Apr-22	17 bps	37 bps	42 bps	47 bps	57 bps	67 bps
Apr-23	28 bps	48 bps	53 bps	58 bps	68 bps	78 bps
Apr-24	31 bps	51 bps	56 bps	61 bps	71 bps	81 bps
Apr-25	40 bps	60 bps	65 bps	70 bps	80 bps	90 bps
Apr-26	43 bps	63 bps	68 bps	73 bps	83 bps	93 bps
Apr-27	53 bps	73 bps	78 bps	83 bps	93 bps	103 bps
Apr-29	55 bps	75 bps	80 bps	85 bps	95 bps	105 bps
Apr-33	81 bps	101 bps	106 bps	111 bps	121 bps	131 bps

LGFA Quarterly Report

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Sue Davidson, GM Sustainable Growth & Investment

Purpose/Ngā whāinga

This report is for information only. Council is a member of Local Government Funding Agency (LGFA) and a guarantor. Reports are provided regularly by LGFA and it is appropriate that the Audit, Risk and Finance Committee understand the benefit and risks of our membership and receive a report twice a year.

Executive summary/Whakarāpopototanga

The report from LGFA details the key performance indicators and how the Local Government Funding Agency has performed. The report is positive although not all the key performance Indicators were met.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee

- a) Notes the Quarterly Report from LGFA ending 31 March 2020.

Context/Horopaki

Council is a member of LGFA and a guaranteeing Council. All Council's borrowings are made through LGFA and total \$44,000,000 as at 30 June 2019. The interest rate is slightly cheaper than that charged by other lenders.

In February/March 2020, LGFA passed an amendment to allow LGFA to lend to CCOs and CCTOs, to enable them to have access to a cheaper rate of interest. These organisations (CCO and CCTO) can be the most risky businesses, however LGFA has secured any borrowings by the parent Council's guarantee so there would not be any cost to other shareholders or guarantors.

Discussion/Ngā kōrerorero

In the LGFA report (**Attachment 1**), Page 6, describes how LGFA performed against KPIs and meeting most, and page 8 of the report shows how they performed in comparison to the requirements of the Statement of Intent for the LGFA. Committee members will be interested to see that they are providing a lower rate of interest than the general market.

LGFA have just announced they will relax the requirements for net debt to total revenue ratio due to COVID-19 (**Attachment 2**). The proposed change is to provide greater financial flexibility and borrowing capacity for such Local Authorities as a result of the short-term impacts of COVID-19 and the medium-term structural changes to infrastructure requirements.

Policy and planning implications

The Treasury Policy allows the Council to borrow from a number of banks or other agencies. LGFA remains the cheapest.

Financial implications

Council receives on average a cheaper interest rate of at least 10 basis points.

Risks and mitigations

That a member council finds itself with larger debt than it can afford to repay, and calls are made on member councils. This is mitigated by having to adhere to certain treasury ratios enforced by LGFA and reported on 6 monthly to LGFA.

Significance and engagement/Hirahira me ngā whakapapa

The decisions or matters of this report do not trigger the significance criteria outlined in council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Attachments/Ngā tapiritanga

	Title
1	LGFA Quarterly Report
2	LGFA Changes to Foundation Policies

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



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4. Being the debt funder of choice for New Zealand local government	14
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Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



A. March quarter issuance and highlights summary

Quarter	Total	Bespoke Maturity	April 2020	May 2021	April 2022	April 2023	April 2024	April 2025	April 2027	April 2029	April 2033
Bonds issued \$m	400	N/A	-	-	155	50	73	-	-	122	-
Term Loans to councils \$m	800.3	239.8	-	-	56.5	-	83.0	276.0	40.0	105.0	-
Term Loans to councils #.	50	23	-	-	3	-	7	10	5	2	-

Year to date	Total	Bespoke Maturity	April 2020	May 2021	April 2022	April 2023	April 2024	April 2025	April 2027	April 2029	April 2033
Bonds issued \$m	1,505.0	N/A	-	-	345	50	238	30	-	632	210
Term Loans to councils \$m	1,532.4	717.9	-	-	67.0	16.0	156.0	276.0	86.0	189.0	24.5
Term Loans to councils #.	133	74	-	-	5	4	18	10	10	10	2

Key points and highlights for the March quarter:

- The LGFA bond curve steepened for the second consecutive quarter with front end yields falling (2023 yields down 0.23%) and back end yields rising (2033 yields up 0.17%). The RBNZ easing of monetary policy by cutting the OCR by 0.75% (to 0.25%) and implementing quantitative easing through the purchase of NZGBs dragged short dated yields lower while the outlook for a substantial increase in NZGB issuance to pay for the Central Government COVID-19 response placed upward pressure on long dated yields.
- LGFA issued \$400 million of retail bonds across four maturities during the quarter via two tenders. LGFA also issued \$130 million of a 2.5-year wholesale Floating Rate Note via a private placement. The average term of issuance during the quarter of 4.79 years was much shorter than the previous quarter at 7.56 years although year to date issuance average term of 7.35 years is longer than the average term of 6.62 years for the 2018-19 year.
- LGFA margins to swap widened between 15 bps (2022s) and an astonishing 81 bps (2033s) over the quarter. The increased NZGB issuance led to swap spreads going negative to NZGB (swap yields below NZGB yields) and this pushed our spreads wider. LGFA spreads to NZGB widened between 10 (2025s) bps and 42 bps (2033s) from a flight to quality and increasing dislocation in credit markets.
- Long dated lending to council borrowers during the quarter was a record \$800.3 million. The average term of lending during the quarter at 5 years was shorter than the 2019-20 financial year to date average of 5.9 years.
- LGFA has estimated market share of 83% of total council borrowing for the rolling twelve-month period to March 2020 (compared to a historical average since 2012 of 74%). We provided 80% of council borrowing during the March 2020 quarter.
- Short-term lending remains strongly supported by councils with loans outstanding of \$461.5 million as at 31 March 2020. This was a decrease of \$64 million over the quarter as councils extended their borrowing into longer tenors while the number of councils using this product reduced by two to twenty-nine.
- LGFA Net Operating Gain (unaudited) for the nine-month period to 31 March 2020 was \$8.538 million or \$113k below budget with Net Interest Income \$429k below budget and expenses \$316k below budget.

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



- One new council joined LGFA over the quarter (Carterton District Council), increasing the number of councils to sixty-seven councils. There are fifty-three council guarantors as at 31 March 2020. We are expecting a further four councils to join over the next twelve months.

B. LGFA bond tenders during quarter

LGFA held two bond tenders during the quarter.

Tender 69: 5 February 2020

\$200 million

Tender 69- 05 February 2020	14-Apr-22	15-Apr-24	20-Apr-29
Total Amount Offered (\$million)	75	50	75
Total Amount Allocated (\$million)	75	50	75
Total Number of Bids Received	11	12	18
Total Amount of Bids Received (\$million)	122.5	86	138
Total Number of Successful Bids	8	5	10
Highest Yield Accepted (%)	1.395	1.520	2.070
Lowest Yield Accepted (%)	1.365	1.505	2.040
Highest Yield Rejected (%)	1.415	1.555	2.180
Lowest Yield Rejected (%)	1.395	1.520	2.070
Weighted Average Accepted Yield (%)	1.381	1.513	2.058
Weighted Average Rejected Yield (%)	1.401	1.513	2.102
Amount Allotted at Highest Accepted Yield as Percentage of Amount Bid at that Yield*	21.4	75	38.5
Coverage Ratio	1.63	1.72	1.84
NZGB Spread at Issue (bps)	36.00	44.00	73.00
Swap Spread at Issue (bps)	25.00	35.00	61.50
Swap Spread: AA council (bps)	37	46.5	71.5
Swap Spread: AA- council (bps)	42	51.5	76.5
Swap Spread: A+ council (bps)	47	56.5	81.5
Swap Spread: Unrated council (bps)	57	66.5	91.5
Coverage Ratio	1.63	1.72	1.84

The tender result was a good result given the recent market volatility and investor concerns regarding the Housing NZ issuance programme. While bidding strength wasn't large in terms of volumes, the weighted average yields were 1 bps to 2 bps above prevailing mid rates. The tender size of \$200 million was the largest since November 2018 and above the historic average tender size (\$166 million). Council borrowing demand was large at \$258.5 million as councils refinanced their April 2020 loans and undertook new borrowing. Council loans at the previous two tenders averaged only \$57 million. Bidding volume was softish with the overall bid coverage ratio of 1.73x slightly below the 1.83x in the last tender and less than

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



the average of 2.4x for the past twelve months. The average maturity of the LGFA bonds issued was 5.3 years so the tender was larger in terms of volume and shorter in terms of duration.

Tender 70: 11 March 2020

\$200 million

Tender 70- 11 March 2020	14-Apr-22	15-Apr-23	15-Apr-24	20-Apr-29
Total Amount Offered (\$million)	60	50	50	40
Total Amount Allocated (\$million)	80	50	23	47
Total Number of Bids Received	10	11	8	18
Total Amount of Bids Received (\$million)	87	78.5	28	70
Total Number of Successful Bids	8	6	7	13
Highest Yield Accepted (%)	1.200	1.275	1.380	1.960
Lowest Yield Accepted (%)	1.150	1.200	1.310	1.855
Highest Yield Rejected (%)	1.230	1.320	1.420	2.055
Lowest Yield Rejected (%)	1.210	1.275	1.420	1.960
Weighted Average Accepted Yield (%)	1.187	1.258	1.342	1.930
Weighted Average Rejected Yield (%)	1.224	1.289	1.420	2.019
Amount Allotted at Highest Accepted Yield as Percentage of Amount Bid at that Yield*	100	46	100	80
Coverage Ratio	1.45	1.57	0.56	1.75
NZGB Spread at Issue (bps)	45.00	56.00	60.00	90.00
Swap Spread at Issue (bps)	39.50	45.40	51.75	88.25
Swap Spread: AA council (bps)	52.25	61	64.75	98.25
Swap Spread: AA- council (bps)	57.25	66	69.75	103.25
Swap Spread: A+ council (bps)	62.25	71	74.75	108.25
Swap Spread: Unrated council (bps)	72.25	81	84.75	118.25
Coverage Ratio	1.45	1.57	0.56	1.75

The bond tender outcome was very challenging but was expected given the conditions in global financial markets with the resulting historic lows in yields set, lowest bid coverage ratio, widest successful bid ranges and widest gap between average issuance yield and prevailing market yields at time of bidding. The tender result was the worst result in the 70 tenders we have conducted but understandable given the market volatility and lack of depth in global capital markets. Both bidding volumes and price tension was poor, and we had to under accept the 2024 (we only received \$28 million of bids for \$50 million of bonds offered) and over accept the 2022s and 2029s to ensure we issued \$200 million of bonds. Council borrowing demand was strong at \$199 million from eleven councils who refinanced their April 2020 loans as well as additional new borrowing. Average term of lending at 8.25 years was long by historical standards.

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Quarter 3: 2019 - 2020
Period ended: 31 March 2020

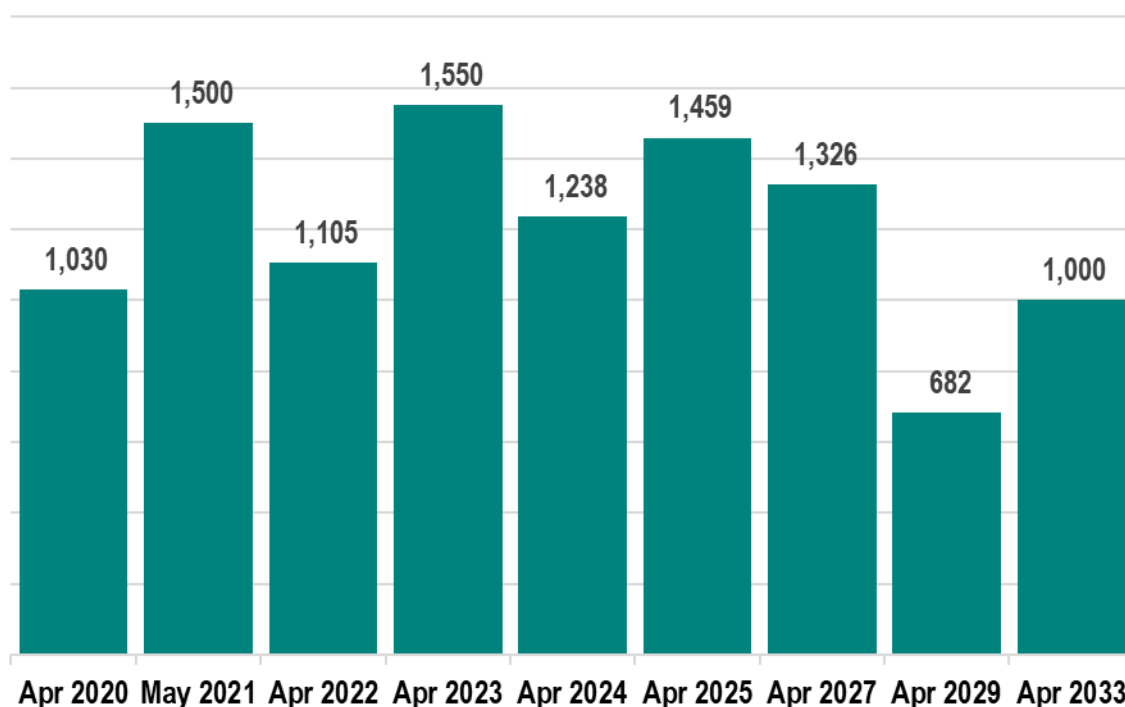


We tendered four tranches in order to capture as much demand as possible but kept the maturities shorter dated given the market fragility. We reopened the 2023 bond maturity following the board decision to increase the self-imposed cap to \$1.75 billion. The average maturity of the LGFA bonds issued was a very short 4.25 years compared to the average for the current 2019/20 financial year of 7.35 years, so the tender was again larger in terms of volume and shorter in terms of duration.

LGFA retail bonds on issue (NZ\$ million)

As at 31 March 2020: NZ\$10,890 million

Includes NZ\$450 million treasury stock



In addition to the retail bonds listed on the NZDX, LGFA has NZ\$130 million of Wholesale Floating Rate Notes on issue

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Quarter 3: 2019 - 2020
Period ended: 31 March 2020



C. Key performance indicators (Section 5 of SOI)

Section 5 of the SOI sets out the ten key performance targets

We have met (or on track to meet) eight out of our ten performance targets. We are currently behind on the Net Interest Income target (but could still meet this by year end) while we won't achieve the council visit target given the current COVID-19 operating environment.

Measure		Prior full year to June 2019	Q1 30 Sept 2019	Q2 31 Dec 2019	Q3 31 Mar 2020	Q4 30 June 2020
LGFA net interest income for the period to June 2020 will be greater than \$17.88 million	Target (\$)		\$4.79 m (YTD as at Q1)	\$9.38 m (YTD as at Q2)	\$14.57 m (YTD as at Q3)	\$17.88 m (FULL YEAR)
	Actual (\$)	\$18.76 m	\$4.08 m 	\$9.81 m 	\$14.14m 	
Annual issuance and operating expenses (excluding AIL) will be less than \$6.30 million	Target (\$)		\$1.45 m (YTD as at Q1)	\$3.08 m (YTD as at Q2)	\$4.70 m (YTD as at Q3)	\$6.30 m (FULL YEAR)
	Actual (\$)	\$5.85 m	\$1.47 m 	\$3.05 	4.50m 	
Total lending (short and long term) to participating councils to be at least \$9.79 billion	Target (\$)		\$9.63 b (YTD as at Q1)	\$9.90 b (YTD as at Q2)	\$10.04 b (YTD as at Q3)	\$9.79 b (FULL YEAR)
	Actual (\$)	\$9.26 b	\$9.737 b 	\$10.106 b 	\$10.658b 	
Conduct an annual survey of councils and achieve 80% satisfaction score as to the value added by LGFA to council borrowing activities	Target (\$)		Annual Survey in July each year			
	Actual (%)	80%	July 2019 survey outcome of 100% 			
Meet all lending requests from PLAs	Target (%)		100%	100%	100%	100%
	Actual (%)	100%	100% 	100% 	100% 	
Achieve 75% market share of all council borrowing in New Zealand	Target (%) Rolling annual average		>75%	>75%	>75%	>75%
	Actual (%)	87.3%	87.1% 	87.7% 	83.0% 	
Review each PLA financial position, its headroom under LGFA policies and arrange to	Target (number)		Council visits to total 65 over one year Financial Position + Headroom Review Undertaken in December Quarter			

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Period ended: 31 March 2020



meet each PLA at least annually	Actual		2 council visits but on track to achieve annual target In progress	29 council visits year to date and on track to achieve annual target In progress	53 council visits year over past 12 months. In progress	Will not be achieved due to COVID-19 restrictions ×
No breaches of Treasury Policy, any regulatory or legislative requirements including H&S	Target (zero breaches)		nil	nil	nil	nil
	Actual	One	Nil ✓	Nil ✓	Nil ✓	
Successfully refinance of existing loans to councils and LGFA bond maturities as they fall due	Target (%)		100%	100%	100%	100%
	Actual (%)	100%	100% ✓	100% ✓	100% ✓	
Maintain a credit rating equal to the New Zealand Government rating where both entities are rated by the same credit rating entity	Target (equivalence)		AA+/AA+			
	Actual	AA+/AA+	AA+/AA+ ✓	AA+/AA+ ✓	AA+/AA+ ✓	

D. Summary financial information (provisional and unaudited)

Financial Year (\$m)	YTD as at Q1	YTD as at Q2	YTD as at Q3	YTD as at Q4
Comprehensive income	30-Sep-19	31-Dec-19	31-Mar-20	30-June-20
Interest income	90.86	185.07	278.46	
Interest expense	86.78	175.26	264.75	
Net interest revenue	4.08	9.81	13.71	
Issuance and On-lending costs	0.61	1.20	1.79	
Approved issuer levy	Nil	0.65	0.67	
Operating expenses	0.86	1.86	2.71	
Issuance and operating expenses	1.47	3.70	5.17	
Net Profit	2.61	6.11	8.54	

Financial position (\$m)	30-Sep-19	31-Dec-19	31-Mar-20	30-Jun-20
Retained earnings + comprehensive income	50.61	54.10	56.53	
Total assets (nominal)	10,310.80	10,705.14	11,592.31	
Total LG loans (nominal)	9,737.23	10,110.90	10,653.28	
Total LGFA bills (nominal)	463.00	403.50	635.50	
Total LGFA bonds (nominal)	9,555.00	10,040.00	10,440.00	
Total borrower notes (nominal)	148.81	153.31	163.07	
Total equity	75.61	79.10	81.53	

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Quarter 3: 2019 - 2020
Period ended: 31 March 2020



E. Performance against SOI objectives and performance targets

Primary objectives (Section 3 of SOI)

1. Providing savings in annual interest costs for all Participating Local Authorities on a relative basis to other sources of financing

LGFA lending base margins are 20 bps for all borrowing terms between April 2020 and April 2033 following an increase of 10 bps in March 2020. We had previously reduced margins in June 2018 but the LGFA Board decided at its March 2020 Strategy Day to increase capital following its biennial Capital Structure Review. The base margin charge covers our operating costs and provides for our capital to grow in line with the growth in our balance sheet to maintain a capital buffer. There is an additional credit margin added to the base margin depending upon whether a council has a credit rating or is a guarantor or not a guarantor.

Our estimated annual savings to councils that are based upon the secondary market levels at 31 March 2020 of LGFA bonds compared to bonds issued by Auckland and Dunedin councils are between 3 bps and 16 bps depending upon the term of borrowing. The amount of savings has improved over what was a very volatile quarter. Borrowing margins of all issuers have moved wider over the past quarter but LGFA borrowing margins moved less than other borrowers. LGFA bonds are generally priced over New Zealand Government Bonds (NZGB) and it has been unhelpful that the spread between swap and NZGB has turned negative (swap yields below NZGB yields).

31-Mar-20	Savings to AA rated councils (bps)			
	Dunedin 2020	Dunedin 2021	Auckland 2022	Auckland 2025
AA rated councils' margin to swap (bps)	46	64	70	91
Less LGFA margin to swap (bps)	-20	-28	-38	-68
LGFA gross funding advantage (bps)	26	36	32	23
Less LGFA base margin (bps)	-20	-20	-20	-20
Total savings (bps) *	6	16	12	3

Note that from 30 June 2017 we removed the implied "LGFA effect" of 10 bps of additional savings in borrowing costs from the above analysis. The LGFA effect was the assessment of immediate savings to councils when LGFA first commenced lending to councils in February 2012.

LGFA continues to borrow at very competitive spreads compared to the AAA rated SSA issuers who borrow in the New Zealand debt capital markets and to the domestic banks.

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Period ended: 31 March 2020



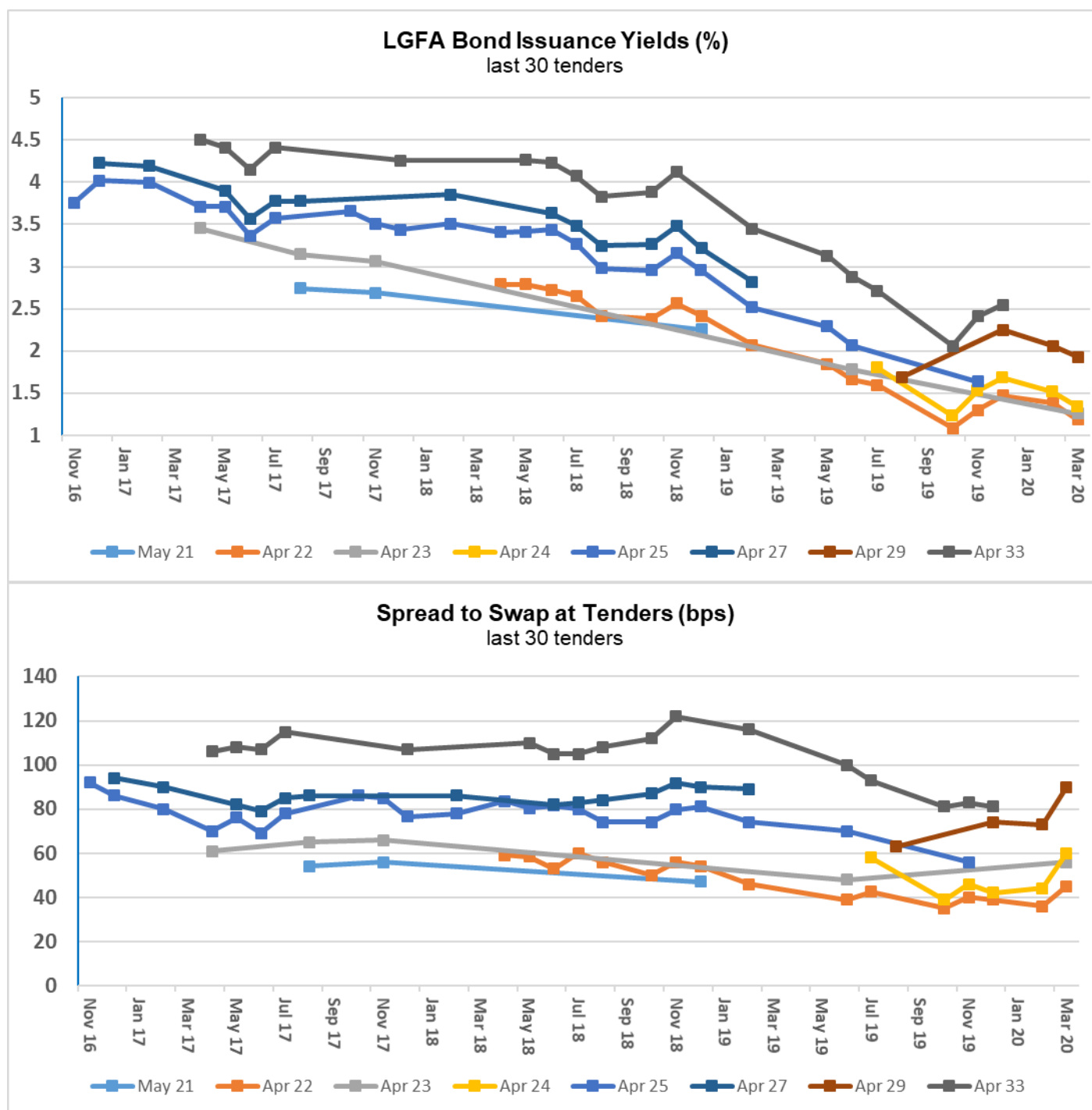
As at 31 March 2020	Comparison to other borrowers - Secondary Market Spread to Swap (bps)									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
LGFA (AA+)	18	28	38	47	57	68		79		97
Asian Development Bank (AAA)		38		43	50		63			
Inter-American Development Bank (AAA)		38		45	54				92	
International Finance Corp (AAA)	28	36		49	53			73		
KBN (AAA)		46		59	62	71				
Rentenbank (AAA)	26	44	49	51	57					
World Bank (AAA)		33	42	44	50	54				
Nordic Investment Bank (AAA)		34		46		66				
ANZ (AA-)	86	115		155	160					
BNZ (AA-)	71			143		161				
Westpac Bank (AA-)			135	145	160	168				

The LGFA bond curve steepened for the second consecutive quarter with front end yields falling (2023 yields down 0.23%) and back end yields rising (2033 yields up 0.17%). The RBNZ easing of monetary policy by cutting the OCR by 0.75% (to 0.25%) and implementing quantitative easing through the purchase of NZGBs dragged short dated yields lower while the outlook for a substantial increase in NZGB issuance to pay for the Central Government COVID-19 response placed upward pressure on long dated yields. LGFA bond yields are at historic lows and are between 0.83% lower (2023s) and 0.22% lower (2033s) compared to March 2019.

We closely monitor the Kauri market for ongoing supply and price action as this other high-grade issuance by “AAA” rated Supranational issuers such as the International Finance Corporation (IFC), Inter-American Development Bank (IADB) and the Asian Development Bank (ADB) influences LGFA demand and pricing. These borrowers are our peer issuers in the NZD market and have the most influence on our pricing. The March quarter was another quiet period for Kauri bond issuance with issuance of \$900 million compared to \$1.65 billion in the same quarter a year ago. Reduced offshore investor demand for NZD product as well as more attractive borrowing spreads for issuers in the US and European markets has led to the fall in issuance activity.

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020

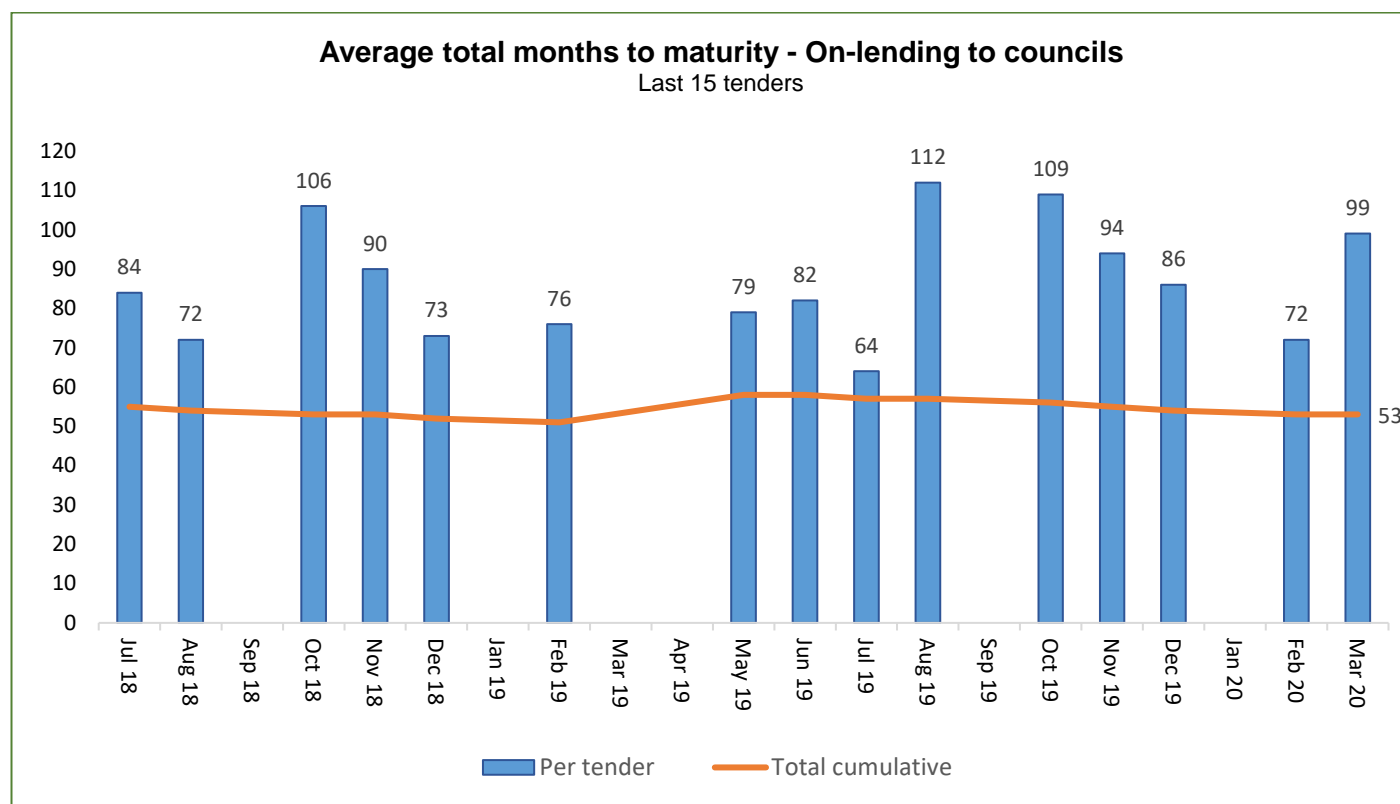


2. Offering short and long-term borrowings with flexible lending terms

The average borrowing term (excluding short dated borrowing) for the March 2020 quarter by council members was 5.0 years and this was shorter than the 5.9-year average term for the year to date period and 6.0 years average term for the previous 2018-19 year.

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



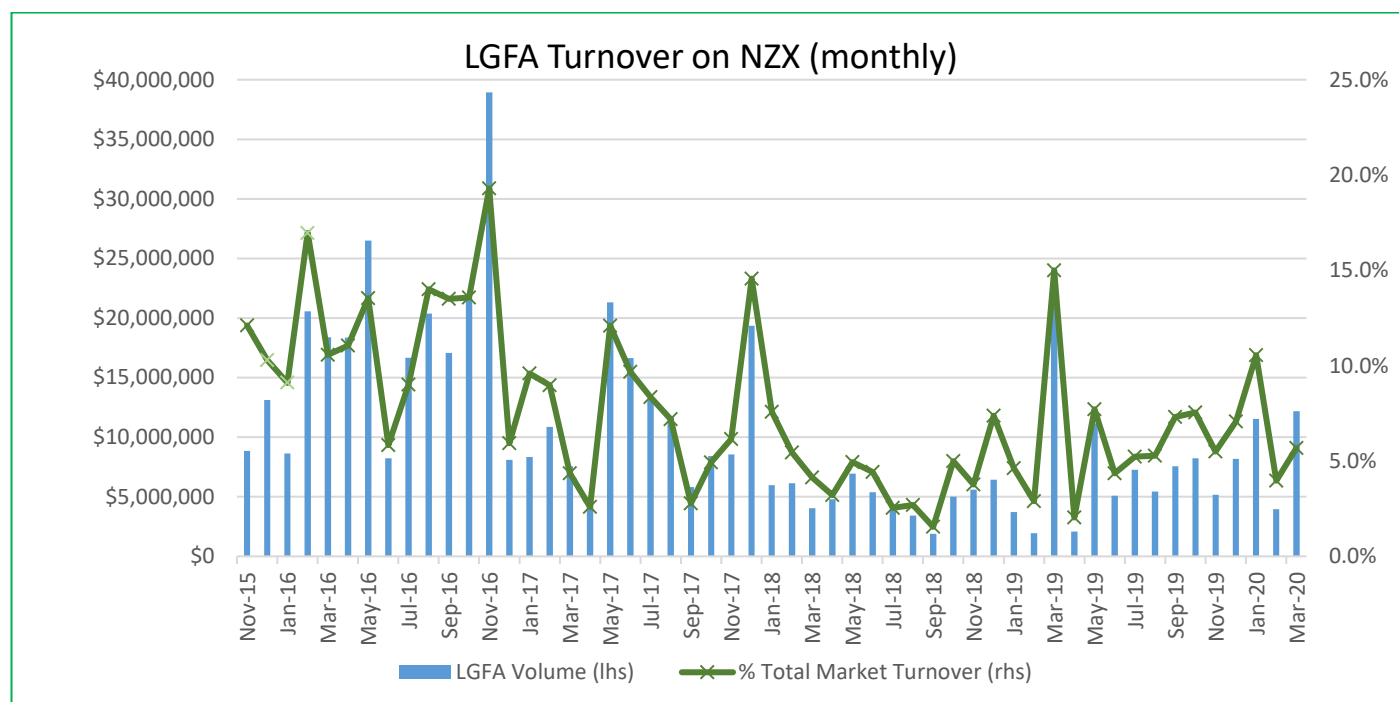
Short term borrowing by councils has been well received with loan terms to date of between one month and 12 months of \$461.5 million outstanding as at 31 March 2020 to twenty-nine councils. The small decline in the number of councils using this product (by two) and fall in total amount (\$64 million) over the quarter is due to councils extending their term of borrowing beyond one year and the seasonality of council borrowing.

3. Enhancing the certainty of access to debt markets for Participating Local Authorities, subject always to operating in accordance with sound business practice

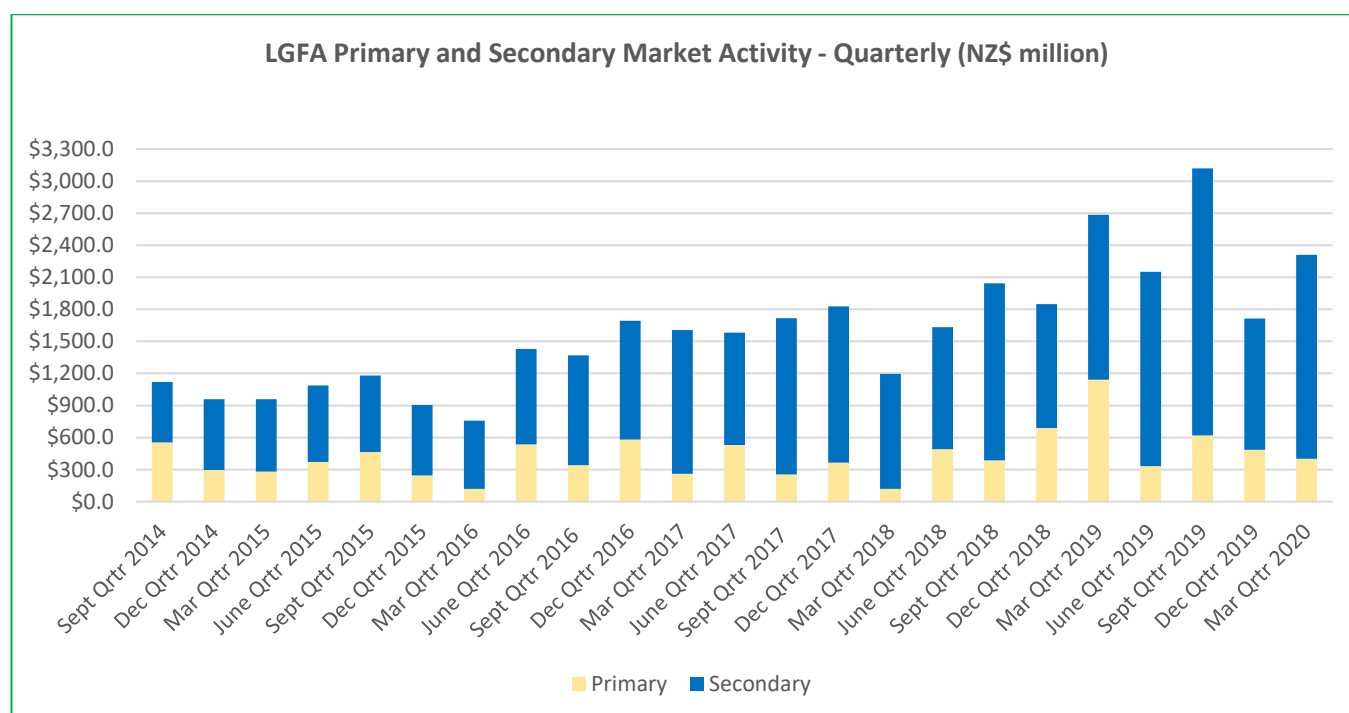
LGFA bonds were listed on the NZX Debt Market in November 2015 and average turnover on the NZX Debt market has been \$10.5 million per month or 7.8% of the total turnover of the NZX Debt Market. Turnover on the NZX remains light as retail investors are more attracted to high term deposit rates and higher yielding bond issues by lower credit quality borrowers.

Quarterly Report

Quarter 3: 2019 - 2020
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Activity in LGFA bonds in both the primary market (tender or syndicated issuance) and secondary market (between banks and investors) during the quarter was strong with combined activity the third highest on record. There was \$400 million of primary issuance and we estimate there was \$1.91 billion of secondary market activity in LGFA bonds during the quarter.



Quarterly Report

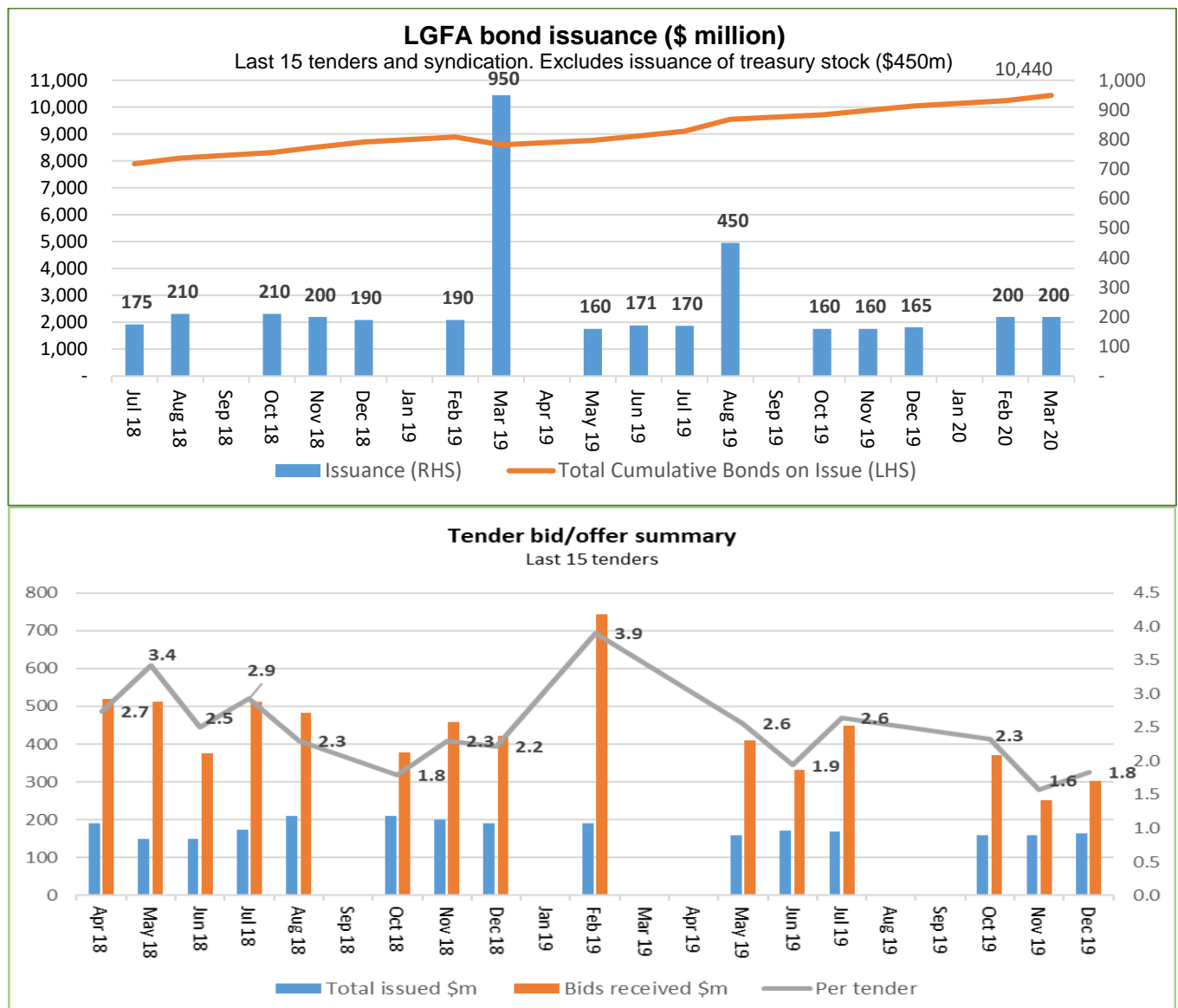
Quarter 3: 2019 - 2020
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LGFA started issuing LGFA Bills and short dated (less than 1 year) lending to councils in late 2015. As at 31 March 2020 there were LGFA Bills of \$635.5 million on issue and short-term council loans of \$461.5 million.

LGFA documented an Australian Medium-Term Notes Programme in November 2017 and we have refreshed the programme documents during the quarter. We have no immediate intention to use this programme, but it provides flexibility if there is a significant market disrupting event in the future.

We held two LGFA bond tenders during the quarter and market support was poor with lower bid coverage ratios and wider bid ranges than in previous quarters. The poor sentiment was from the crowding out of domestic capital markets by the NZ Government with its substantial increase to its borrowing programme and sharp falls in equity markets. After the quarter end, market conditions deteriorated further in the first week of April before recovering strongly over the rest of the month.



Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



4. Being the debt funder of choice for New Zealand local government

We use the Local Government Debt Report compiled by PwC as our source of market share. Our estimated market share of council borrowing for the March 2020 quarter was 80% and for the rolling twelve-month period to 31 March 2020 was 83%. This compares to a historical average since 2012 of 73%.

We survey our council members each year and the latest stakeholder survey result in July 2019 was a 100% result to the question “How would you rate LGFA in adding value to your borrowing requirements?”. We also received a 99% result to the question “How satisfied are you with the pricing that LGFA has provided to your Council?”

5. LGFA will monitor the quality of the asset book so that it remains of a high standard by ensuring it understands each Participating Local Authority's financial position and the general issues confronting the Local Government sector. This includes

- (i) LGFA will review each Participating Local Authority's financial position, its financial headroom under LGFA policies and endeavour to visit each Participating Local Authority on an annual basis
- (ii) Implement the changes to the Foundation Policies that were approved at the November 2018 AGM to allow for lending to CCOs. Changes to operational policies and practices need to ensure that no additional risk is borne by lenders, guarantors or the Crown and
- (iii) LGFA will analyse finances at the Council group level where appropriate and report to the Shareholder Council and shareholders as to which Participating Local Authorities are measured on a group basis.

LGFA had meetings with seven councils during the March quarter (and seventy visits to fifty-three different councils for the twelve-month period to March 2020) to discuss their financial performance and any developments with the underlying council operations. LGFA reviews council agendas and management reports on an ongoing basis for those councils on the LGFA borrower watch-list. Meetings going forward will be less given the travel and meeting restrictions imposed by the Central Government response to COVID-19.

At the November 2019 AGM, shareholders approved the changes to the Shareholder Agreement, Notes Subscription Agreement (“NSA”), Multi Issuer Deed (“MID”) and Guarantee and Indemnity Deed (“GID”) and Foundation Policies to allow for lending to CCOs and to offer standby facilities. The NSA, MID and GID are currently with our sixty-seven council members for signing (where relevant) which is required before we can rollout these products.

No council has yet to request to LGFA that they be measured on a group basis.

Quarterly Report

Quarter 3: 2019 - 2020
Period ended: 31 March 2020



6. LGFA will take a proactive role to enhance the financial strength and depth of local government debt market and work with key central government and local government stakeholders on sector and individual council issues

During the quarter, LGFA management met representatives from Treasury, investment banks and advisers to discuss both the local government sector in general and how LGFA can play a role in providing solutions to off balance sheet financing. We are providing technical input into the Cameron Partners Ratepayer Financing Scheme (RFS).

LGFA has been a member of the Department of Internal Affairs led workstream on assessing the impact of COVID-19 on council finances.

Post the end of the quarter there were two important developments. The Minister of Finance on 1st April announced that the NZ Government will extend the Crown liquidity facility due to expire in December 2021 and the Reserve Bank of New Zealand ("RBNZ") announced on 7th April that they will purchase up to \$3 billion of LGFA bonds as part of their Large Scale Asset Purchase Programme ("LSAP").

Additional objectives (Section 3 of SOI)

7. Operate with a view to making a profit sufficient to pay a dividend in accordance with its stated Dividend Policy

LGFA's Net Operating Gain on an unaudited management account basis of \$8.65 million for the first nine months of the financial year implies that we will be close to achieving the full year SOI financial forecast of \$10.016 million. The average cost of funds for the first nine months of the current 2019-20 financial year is 1.71% and this will reduce further as we undertake more issuance in the June 2020 quarter. This is lower than the 2.78% for the prior 2018-19 financial year due to the lower outright level of interest rates. The LGFA Board has the sole discretion to set the dividend.

8. Provide at least 75% of aggregate long-term debt funding for Participating Local Authorities

As noted previously, we use the Local Government Debt Report compiled by PwC as our source of market share. Our estimated market share of council borrowing for the rolling twelve-month period to 30 March 2020 was 83%. This compares to a historical average since 2012 of 73% and our market share remains strong compared to our global peers.

As at 31 March 2020, there are sixty-seven participating local authority members of LGFA. This was an increase of one over the quarter (Carterton District Council) and we estimate a further four councils could become members in the next twelve months.

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Quarter 3: 2019 - 2020
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9. Achieve the financial forecasts (excluding the impact of AIL) set out in Section 4

As at the end of the third quarter, Net Interest Income ("NII") was estimated by management on an unaudited basis to be \$429k below budget while expenses are \$316k below budget. Net Operating Gain of \$8.65 million was \$113k below budget. Included in the NII is the unrealised mark to market movement in fixed rate swaps that are not designated effective for hedge accounting purposes. We have used these swaps to reduce exposure to fixed rate loans made outside of the normal tender process and to reduce mismatches between time buckets in our balance sheet. The unrealised loss increases as interest rates fall and the year to date revaluation is a loss of \$1 million.

10. Ensure its products and services are delivered at a cost that does not exceed the forecast for issuance and operating expenses

Expenses for the six-month period on an unaudited, management basis were \$5.169 million which is \$316k below budget. This variance is the consequence of:

- Issuance and on-lending costs (excluding AIL) at \$1.795 million were \$59k below budget. Lower fees than budgeted relating to the NZDMO facility were offset by higher NZX costs and legal costs. A larger amount of bond issuance and short-term lending increased these costs relative to budget.
- Operating costs at \$2.706 million were \$140k below budget due to lower IT, personnel and general overhead costs offset by slightly higher legal costs relative to budget.
- Approved Issuer Levy (AIL) payments of \$668k were \$117k below SOI forecast. We pay AIL on behalf of offshore investors at the time of semi-annual coupon payment. During the nine-month period, offshore investor holdings of LGFA bonds were less than forecast.

11. Take appropriate steps to ensure compliance with the Health and Safety at Work Act 2015

LGFA has a Health and Safety staff committee and reporting on Health and Safety issues are made to the LGFA board on a regular basis by the Risk and Compliance Manager. There were no Health and Safety incidents during the quarter. LGFA staff transitioned seamlessly to a work from home environment as the country moved beyond Level 2 in the COVID-19 response.

12. Maintain LGFA's credit rating equal to the New Zealand Government sovereign rating where both entities are rated by the same Rating Agency

LGFA has an annual review process regarding our credit ratings from Standard and Poor's ("S&P") and Fitch Ratings ("Fitch") and meets with both agencies at least annually. Meetings were last held in November 2019 with S&P and in September 2019 with Fitch.

Quarterly Report

Quarter 3: 2019 - 2020
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On 28 February 2020, S&P affirmed our long-term local currency credit rating as AA+ and our long-term foreign currency credit rating of AA. Both ratings remained on positive outlook. Both credit ratings and outlook are the same as the New Zealand Government

On 18 November 2019, Fitch reaffirmed our long-term local currency credit rating as AA+ and classified LGFA as a corporate mission, government related entity (GRE) under its GRE rating criteria. Fitch equalises our ratings with those of the New Zealand Government. On 28 January 2020 Fitch placed our foreign currency credit rating of AA on positive outlook. Fitch left the local currency credit rating unchanged at AA+ with a stable outlook.

13. Introduce CCO lending by December 2019 and report quarterly, the volume of lending to CCOs to both the Shareholder Council and shareholders

We now expect to commence lending to CCOs once the NSA, MID and GID documents have been signed by councils. This has been delayed due to COVID-19 disruptions, but we expect to launch in the 2020-21 year.

14. Comply with its Treasury Policy as approved by the Board

There were no compliance breaches at any time during the three-month period ending 31 March 2020.

Policy	Limit	Policy page ref	Continuous Compliance
One-month Liquidity Monitor	>120%	S1-1.1	Yes
Three Month Liquidity Monitor	>110%	S1-1.2	Yes
Twelve Month Liquidity Monitor	>110%	S1-1.3	Yes
Council Exposure (any 12-month period)	<10% of Balance Sheet	S1-1.5	Yes
Liquidity Buffer	>110%	S1-1.4	Yes
Partial Differential Hedge (PDH Interest Rate Gap Report)	\$40,000	S3-4.1	Yes
Value at Risk (VaR)	\$250,000	S3-4.2	Yes
Council Maturity (any 12-month period)	\$100m or 33% of LGFA borrowing	S1-1.6	Yes
Funding Largest Council Exposure	>100%	S1-1.7	Yes
Foreign Exchange Exposure	Nil	S7-3.1	Yes
NZDMO Facility Utilisation	Report monthly	S8-8.5	Yes
Counterparty Credit Limits	80% of Portfolio \$125m Counterparty (category 3)	S4	Yes
Auckland Council Exposure (proportion of total Council exposure)	<40%	S1-1.8	Yes
Balance Sheet Maturity Mismatch	<15% of Balance Sheet	S2-2.1	Yes
Financial Covenants	Various (as set out on p13)	S9	Yes
Authorising Treasury transactions	Two approvers, one signature	S8-8.4	Yes

Quarterly Report

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Period ended: 31 March 2020

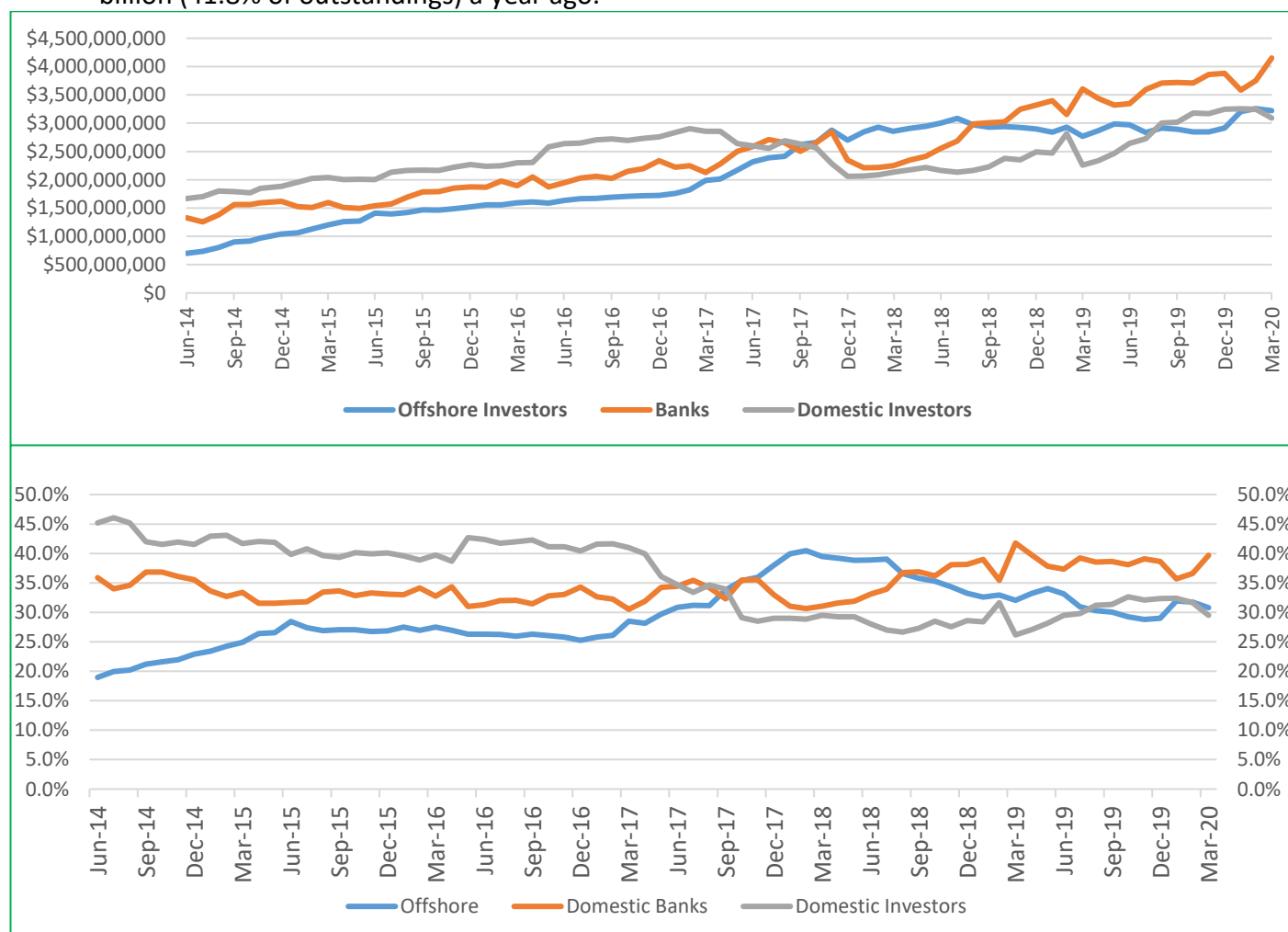


F. Investor relations / outlook

Managing relations with our investor base is very important as the amount of LGFA bonds on issue has yet to peak and we require investors and banks to support our tender issuance.

Domestic banks and offshore investors increased their holdings over the March 2020 quarter as LGFA bonds remain attractive on a spread to underlying NZGBs and investors chasing yield in the current low interest rate environment. By our estimates

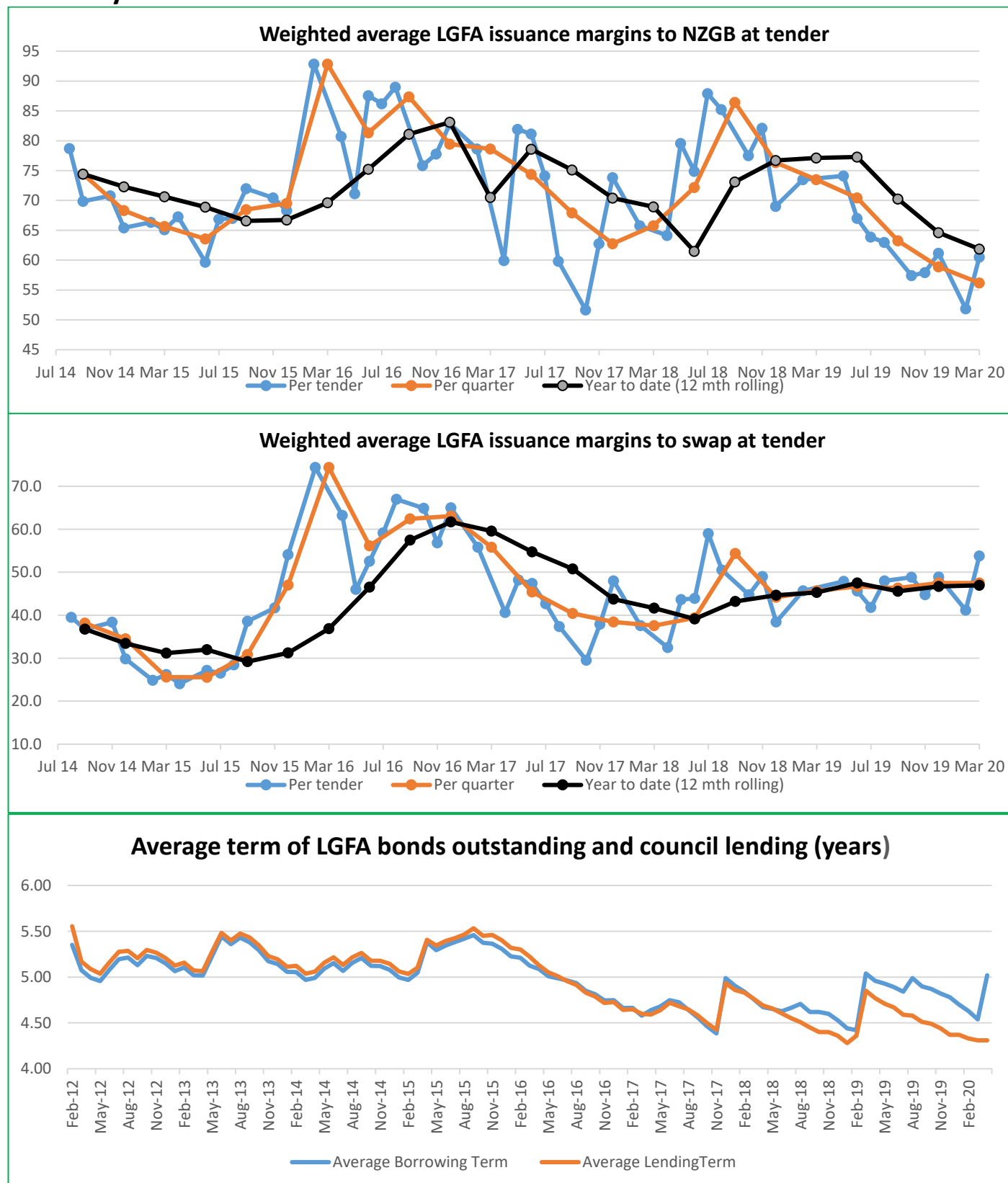
- Offshore investors increased their holdings of LGFA bonds by \$307 million over the quarter (and increased by \$454 million over the past twelve months). Offshore investors are estimated to hold \$3.22 billion (30.8% of outstandings) compared to \$2.77 billion (32.1% of outstandings) a year ago.
- Domestic institutional and retail investors reduced their holdings by \$187 million over the quarter and were estimated to hold \$3.09 billion (29.5% of outstandings) compared to \$2.25 billion (26.1% of outstandings) a year ago.
- Domestic banks holdings have increased by \$300.2 million over the quarter. Bank holdings of \$4.15 billion (39.7% of outstandings) are at a record high in dollar terms and compare favourably to \$3.61 billion (41.8% of outstandings) a year ago.



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G. Key trends



EXPLANATORY NOTE

CHANGES TO FOUNDATION POLICIES

This resolution seeks shareholders' approval for amendments to the Foundation Policies of the Company.

The Foundation Policies of the Company are set out in schedule 1 to the SHA. In summary, as relevant for the proposed resolution, clause 5.1(c) of the SHA provides that neither the Board nor any shareholder shall take or permit any action to cause any alteration to any of the Foundation Policies unless it is approved by Ordinary Resolution of the Company's shareholders.

The proposed changes to the Foundation Policies requiring shareholder approval by Ordinary Resolution relate to a change to the Net Debt / Total Revenue foundation policy financial covenant.

Proposed Change

The proposed change is to increase the Net Debt / Total Revenue foundation policy financial covenant from the current 250% to 280%, which applies to Local Authorities with a long-term credit rating of 'A' equivalent or higher.

However, such Local Authorities will not be required to comply with the revised Net Debt / Total Revenue foundation policy financial covenant until the financial year ending 30 June 2026. Until that date, such Local Authorities must comply with the Net Debt / Total Revenue foundation policy financial covenants set out in the table below:

Alternative Net Debt / Total Revenue Covenant	
Financial Year ending	Net Debt / Total Revenue
30 June 2020	<250%
30 June 2021	<300%
30 June 2022	<300%
30 June 2023	<295%
30 June 2024	<290%
30 June 2025	<285%

Then from the Financial Year ending 30 June 2026 the Net Debt/Total Revenue foundation policy financial covenant will be 280% for such Local Authorities with a long-term credit rating of 'A' equivalent or higher.

The proposed change is to provide greater financial flexibility and borrowing capacity for such Local Authorities as a result of the short-term impacts of COVID-19 and the medium-term structural changes to the local government sector to meet additional demand for infrastructure investment.

Local Authorities are faced with short-term revenue uncertainties as a result of the impact of COVID-19 on the New Zealand economy. This will impact both rates revenue and non-rates revenue for many Local Authorities and a recent Department of Internal Affairs Report projects revenue shortfalls of between 2.3% and 11% in the 2020-21 financial year.¹

The foundation policy and lending policy financial covenants were incorporated into the Foundation Policies in 2011 and have not subsequently been amended. Since 2011, Local Authorities have faced increased borrowing requirements to finance additional infrastructure to meet population growth, climate change and water quality issues. Central Government has also called upon Local Authorities to assist with additional infrastructure investment in the near term as part of the economic relief package post COVID-19.

The proposed changes only apply to Local Authorities with a long-term credit rating of 'A' equivalent or higher. As at 12 May 2020 thirty Local Authorities were required to meet the foundation policy financial

covenants. The other thirty-seven Local Authorities are required to meet the more restrictive lending policy financial covenants.

LGFA has undertaken scenario testing to determine the potential additional borrowing as a result of the proposed change to the foundation policy financial covenants and has concluded that the proposed changes do not incur significant additional risk for shareholders or guarantors of LGFA. This is because the probability of a default by a Local Authority remains low and if a default did occur then the probability of recovery of loans owing to LGFA remains high.

LGFA has discussed the proposed changes with both S&P Global Ratings Australia Pty Limited and Fitch Australia Pty Limited who provide a credit rating on LGFA. Both agencies were supportive verbally of the proposed change and S&P Global Ratings Australia Pty Limited provided their support in writing.²

² S&P Global Ratings Bulletin "New Zealand Local Government Funding Agency Ltd Ratings Can Tolerate Higher Council Leverage Limits. 5 May 2020

Legal compliance update

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Sue Davidson, GM Sustainable Growth & Investment

Purpose/Ngā whāinga

This report summarises our legal compliance with Council's statutory obligations. It provides oversight to the approach to risk and complying with regulatory and statutory requirements.

Executive summary/Whakarāpopototanga

This report details instances of non-compliance and progress with addressing the instances of actual or potential non-compliance.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes the legal compliance update.

Context/Horopaki

The Audit, Risk and Finance Committee (the Committee) is responsible for identifying and monitoring risks associated with legislative compliance. This report provides details where council is not complying and how this is looking to be remedied.

Discussion/Ngā kōrerorero

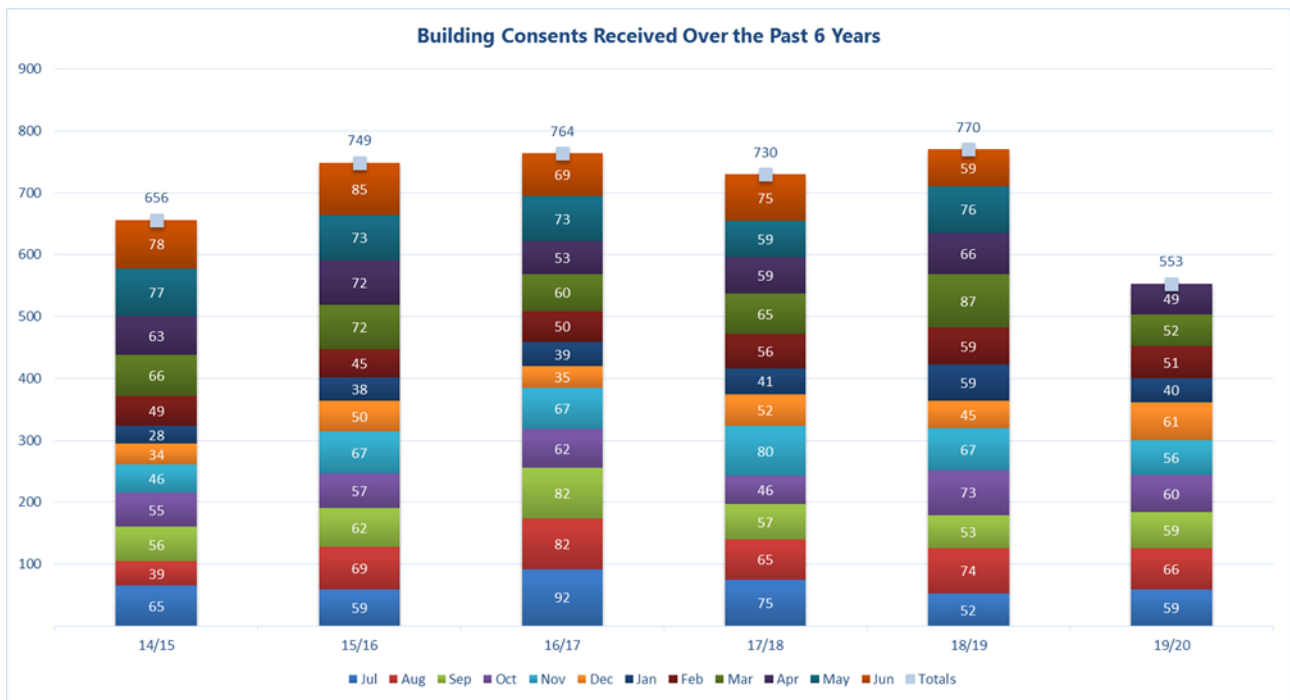
Council provides the following information:

Building consents

The aim is to have 100% of building consents processed within the statutory timeframe.

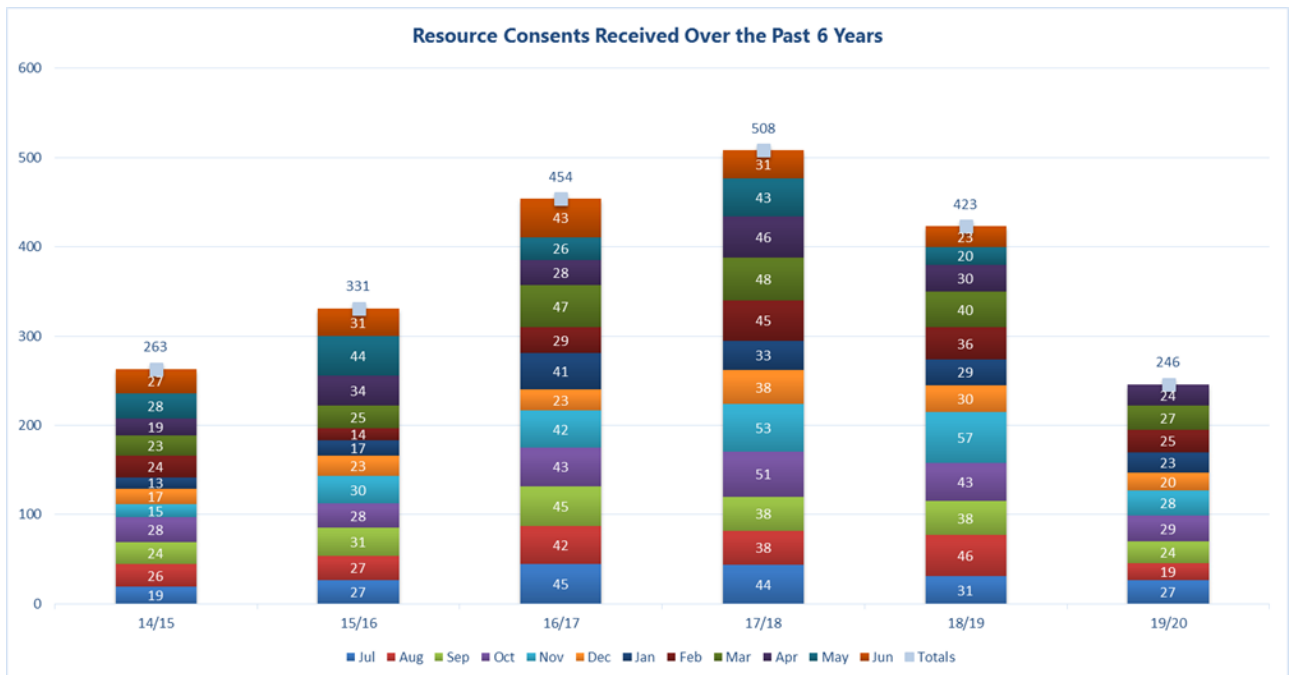
Percentage of building consents processed within statutory timeframes					
2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	YTD
99%	99%	98%	97%	93%	98%

For six months out of the past 10 months, 100% has been the statutory compliance rate.



Resource consents

The aim is to have all non-notified land use and subdivision consents processed within the statutory timeframe.



Percentage of resource consents processed within statutory timeframes					
2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	YTD
100%	99%	99%	87%	71%	75%

For the last two months resource consents have been processed 100% within the 20-day timeframe. The fees Council has had to return have totalled \$86,590.

Environmental health

There are currently nine Kaihu properties connected to a raw water supply that Council has been supplying bottled water to. Our contractor helping us to get these properties onto roof supply, has had to get the original quotes reconfirmed so is working with the electricians and plumbers to do this.

Council has a wastewater bylaw and is proactively monitoring a percentage of the district housing with onsite domestic wastewater systems. The monitoring being undertaken has resulted in several areas being identified where there could be an issue. Council have been made aware of the facts of Spring Street, Dargaville at a Council meeting.

Infrastructure

Waters:

The discharges of treated effluent from the Kaiwaka and Te Kopuru wastewater treatment plants (WWTPs) have been consistently outside of the discharge limits set by Northland Regional Council (NRC).

Investigations have been undertaken to identify what is causing these issues and what we can do to rectify them.

- **Kaiwaka**
The Kaiwaka Wastewater treatment plant has been constructed and awaits electrical connection before commissioning. This is one project that was affected by COVID-19 shut down, and the electrical installation has resumed. Commissioning will follow thereafter. This will improve the treated water quality from Kaiwaka to the standard that meets the Resource Consent conditions.
- **Te Kopuru**
The recommendation from experts for Te Kopuru is to increase aeration and we are searching for an affordable suitably sized aerator for the wastewater ponds.
- **Dargaville Wastewater & Maungaturoto Water**
Now completed. We have built two backwash discharge diversion system to wastewater for Dargaville and Maungaturoto Water Treatment Plants as the backwash occasionally comes high on aluminum. These projects have been commissioned and are now discharging to wastewater.

Solid Waste:

- **Kaiwaka closed landfill** – high copper concentration 69mg/kg consent allows for 65 mg/kg (this will be tested again by NRC mid this year) they have not requested any action to be taken.
- **Ruawai closed landfill** – high copper concentration – no action requested by NRC and will be tested again this year.
- **Pahi closed landfill** – high Zinc concentration – no action requested by NRC and will be tested again this year.
- **Glinks Gully closed landfill** – In the past there has been issues with high concentration of lead and copper at this site, consent levels are set lower than usual due to the close proximity of the Glinks Gully secondary water supply, however this supply has been decommissioned for several years.

Significance and Engagement/hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Next steps/E whaiake nei

Continue to monitor and work towards compliance.

Revised Water Safety Plans

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Donnicks Mugutso, Waters and Waste Manager

Purpose/Ngā whāinga

To update the Audit, Risk and Finance Committee on the progress of the renewal of Kaipara District Council's Water Safety Plans, and to seek the Council's commitment to ongoing involvement and support for the effective management of drinking water quality.

Executive summary/Whakarāpopototanga

Kaipara District Council, as a drinking water supplier, is required under the Health Act to have and implement a Water Safety Plan for each of its five drinking water supplies namely Dargaville, Maungaturoto, Ruawai, Mangawhai and Glinks Gully. Four Water Safety Plans are due for renewal now with Mangawhai not due till 2023.

In December 2018 the government introduced a new New Zealand Drinking-water Safety Plan Framework and the Handbook for Preparing Water Safety Plans in May 2019. By December 2021, all Drinking Water Suppliers in New Zealand are required to be compliant with the new Framework.

Under the new requirements, a Water Supplier's leadership is to provide support and long-term commitment for providing safe and secure drinking water. Leadership must understand and commit to legislative requirements to ensure Kaipara District Council's policies, strategy and actions support the effective management of drinking-water quality.

In 2019, Council staff submitted the four Water Safety Plans to the Northland District Health Board for review. To meet all the requirements of the new Framework, leadership's participation and commitment, including Elected Members', to the provision of safe and secure drinking-water is required. The report is a step towards ongoing involvement of the Elected Members in the water safety planning.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes that staff have developed new Water Safety Plans for Dargaville, Maungaturoto, Ruawai and Glinks Gully and the risks identified (Attachments A-D).
- b) Recommends to Kaipara District Council to commit to drinking water quality management by adopting water safety planning and other tools.

Context/Horopaki

Background

The Havelock North Inquiry investigated the widespread outbreak of gastroenteritis in Havelock North in August 2016, during which more than 5,000 people were estimated to have fallen ill, with up to four deaths associated with the outbreak. It should be noted that the water supply in question, although not treated, was compliant with the then Drinking Water Standards for New Zealand 2005 (Revised 2008) (DWNZ (2008)). It was later to be determined that the mere reliance on drinking-water standards compliance is not enough for the provision of safe and secure water for communities. A robust management of the catchment, ongoing processes and procedures was critical in ensuring the continuous supply of safe drinking water. This can be achieved through water safety planning among other tools. The Government, through the Ministry of Health set out,

among other actions, to review the compliance standards and management of the drinking water industry through the following actions:

1. Revised and published the Drinking Water Standards for New Zealand 2005 (Revised 2018) (DWSNZ (2018))
2. In December 2018, published the New Zealand Drinking-water Safety Plan Framework (Framework)
3. In May 2019, published the Handbook for Preparing a Water Safety Plan (Handbook).

There are 10 components to the Framework, which are summarised below:

Components	Sub-components
1. Commitment to drinking-water quality management	Relationship of WSP to organisational policy and strategy Engaging stakeholders Engaging community
2. Assessment of the drinking-water supply system	Water supply system description and analysis Assessment of water quality data Hazard and hazardous event identification and risk assessment
3. Existing preventive measures for drinking-water quality management	Assessment of existing preventive measures and multiple barriers Identification of additional preventive measures
4. Operational procedures	Operational procedures Operational monitoring and inspection Critical control points Corrective actions
5. Verification monitoring programme	Drinking-water quality monitoring Consumer satisfaction Short-term evaluation of results
6. Improvement plan	Drinking-water quality management improvement plan
7. Management of incidents and emergencies	Incident and emergency response plans
8. Documentation and reporting	Management of documentation and records Reporting
9. Investigations	Investigative studies Validation of equipment, processes and practices
10. Oversight, review and continual improvement	Long-term evaluation of results Audit of drinking-water quality management Review by senior leadership

Water Safety Planning in Kaipara's Policy and Strategy

This report forms part of the fulfilment of component 1, where commitment is sought from Council to drinking water quality management. Kaipara District Council is legally accountable for providing safe drinking water. The provision of safe and secure drinking should be visible in the organisational policy and strategy.

Kaipara District Council's vision of "Striving Communities Working Together" captures "Maintaining and improving infrastructure" as one of its Community Outcomes. The Infrastructure Strategy (IS) 2018-2048 highlights the purpose of the water supply service as "to help to protect public health,

by providing readily accessible potable water to communities". The IS 2018-2048 also had the target (when it was written in 2018) of achieving compliance with the Drinking Water Standards 2005 (Revised 2018) within 1 year and this has since been achieved. All Kaipara District Council's Water Supply schemes are compliant. The Asset Management Plan (AMP) provides budgets for renewals to the Water Supply schemes thereby showing commitment to maintaining the assets that bring potable water to our communities. The AMP also highlights the one responsibility of Council as "the duty under the Health Act 1956 to improve, promote, and protect public health within the districts".

While there is some degree of visibility for the provision of secure and safe drinking-water within the Council documents, water safety planning is not expressly identified in the organisational strategy and plans as required in the Framework. This poses a risk in that DWNZ compliance only has historically been a target (as highlighted in the Havelock North contamination case) whereas excellence in Water Safety Planning should be at the core of Kaipara District Council's business of provision of safe and secure water supply.

One way of achieving the visibility of Council's commitment to the provision of safe and secure water supply is to include within the Water Safety Plan:

1. A statement regarding the organisation's commitment to the provision of safe and secure drinking-water.
2. An explanation of how the organisation is putting this commitment into practice through policy, strategic plans, the adoption of water safety planning, budgets and relationships.

Kaipara's Water Safety Plan Journey under the new Framework

While our four Water Safety Plans have been submitted for review by the Drinking Water Assessors (DWAs) from the Ministry of Health (MoH), it should be noted that prior to expiry of the Water Safety Plans, Kaipara sought to extend the validity of the old Water Safety Plans while waiting to incorporate the new Framework and Handbook on preparation of Water Safety Plans. The MoH through the DWAs accepted the request noting that Kaipara continued to execute water safety planning. The Council was advised to submit the revised plans by December 2019 and the DWAs decided that these would be reviewed under the "old" framework as more work on commitment from the Leadership and engagement with stakeholder and the community was still required. It should be noted that we were among the first 12 nationwide submitters at the time and none had met the criteria. However, there is now a new deadline for all Water Safety Plans to be reviewed under the new Framework by December 2021, so for Kaipara, with the addition of Component 1 to our Water Safety Plans we target to achieve compliance under the new Framework by December 2021.

Leadership and Elected Member involvement

In developing a policy or statement on drinking water quality, it is an important step in formalising the level of service to which we are committed and provides visibility and focus on water quality management throughout Kaipara.

The following six fundamental principles of drinking-water safety in New Zealand (Government Inquiry into Havelock North Drinking Water 2017) should be incorporated in developing the policy or statement:

- Principle 1: A high standard of care must be embraced
- Principle 2: Protection of source water is of paramount importance
- Principle 3: Maintain multiple barriers against contamination
- Principle 4: Change (including changes to processes and hazardous events) precedes contamination
- Principle 5: Suppliers must own the safety of drinking-water
- Principle 6: Apply a preventive risk management approach.

An example of a statement or policy is the following:

Kaipara District Council is committed to managing its water supply effectively to provide safe, high-quality drinking-water that consistently meets the expectations of the *New Zealand Drinking-water Safety Plan Framework* the requirements of the Health (Drinking Water) Amendment Act 2007 and *Drinking-water Standards for New Zealand*, and consumer and other regulatory requirements.

To achieve this, in partnerships with stakeholders and relevant agencies, **Kaipara District Council** will:

- 1 embrace a high standard of care to manage water quality at all points along the delivery chain from source water to the consumer to provide a continuous supply of safe drinking-water
- 2 maintain a personal sense of responsibility and dedication to providing consumers with safe drinking-water
- 3 integrate the needs and expectations of our consumers, stakeholders, regulators and employees into our planning
- 4 use a preventive risk-based approach in which potential threats to water quality and quantity are identified and managed
- 5 acknowledge that protection of source water is of paramount importance in protecting consumers against drinking-water contamination and illness
- 6 maintain robust multiple barriers against contamination appropriate to the level of potential contamination and harm
- 7 acknowledge that contamination is almost always preceded by some kind of change (including changes to processes and hazardous events), and will monitor and always respond to change
- 8 develop appropriate contingency planning and incident response capability
- 9 establish regular monitoring of the quality of drinking-water and effective reporting mechanisms to provide relevant and timely information, and promote confidence in the water supply and its management
- 10 participate in appropriate investigative activities to ensure continued understanding of drinking-water quality issues and performance
- 11 continually improve our practices by assessing performance against corporate commitments, stakeholder expectations and regulatory requirements.

All managers and employees involved in the supply of drinking-water are responsible for understanding, implementing, maintaining and continually improving the drinking-water quality management system.

Dated

Signed by responsible officer

The statement above is only a guide and can be changed and adjusted as the leadership see fit.

Discussion/Ngā kōrerorero

Policy and planning implications

None.

Financial implications

None.

Risks and mitigations

The proof of involvement of Council, other stakeholders and the community will form part of the requirements of Water Safety Plans under the new Framework. If this is not demonstrated, there is a risk that the Water Safety Plans may not be approved under the new Framework by December 2021. The submission of this report to the Audit, Risk and Finance Committee is a step in getting Elected Members' involvement in the water safety planning process.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Our community will be engaged, and feedback will be sought to highlight to them the Council's commitment to the supply of safe and secure water supply.

Next steps/E whaiake nei

Council staff to develop stakeholder and community engagement plans.

Attachments/Ngā tapiritanga

	Title
A	Dargaville Water Safety Plan risk table
B	Maungaturoto Water safety Plan risk table
C	Ruawai Water Safety Plan risk table
D	Glinks Gully Water Safety Plan risk table

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
1. Catchment	Raw water quality too poor to treat	1.01	Unmanaged harvesting in catchment allows for erosion and elevated turbidity	Possible	Catastrophic	High	High NTU levels	Alarm levels set on the raw water turbidity Treated storage available Implementation of Resource Management Planning Rules Rural Land Use Policy addresses adverse effects of intensive farming/forestry on rural land. Treatment barriers effective against dirty water	Revert to secondary intake Invoke emergency water use restrictions for the town under the Water Bylaw. Refer to Contingency Plans	Turbidity is continuously monitored entering the water treatment plant. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Reliable	Work with Northland Forest Management to mitigate water quality issues during harvesting operations.	WWM PDE
	Microbiological contamination	1.02	Kaihu River @ Rotu: Surface contamination from farmland/agri lifestyles in the adjacent area	Almost Certain	Catastrophic	Extreme	High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Secondary intake. Implementation of Resource Management Planning Rules ie Regional Policy Statement, NES for Sources of Human Drinking-water. Land use consents. Subsequent treatment barriers effective against microbiological contamination	Revert to primary intake. Abstraction can be turned off and rely on treated water storage. Boil water notice can be issued. Incident response plan	Visual assessment of lake, raw water turbidity, effective disinfection barriers, source water monitoring results	Yes	Unlikely	Minor	Low	Y	Reliable	Consider five yearly protozoal catchment risk survey in line with DWSNZ 2008	WWM PDE
	Microbiological contamination	1.03	Kaihu River @ Rotu: Discharges from onsite wastewater systems, dairy effluent irrigation, farmed animals or septic tank systems, unconsented overflow	Likely	Catastrophic	Extreme	High raw water E. coli results, Turbidity in raw water, Illness in community, Regional Council SoE reporting	Secondary intake. Implementation of Resource Management Planning Rules i.e. Regional Policy Statement, NES for Sources of Human Drinking-water. Treatment barriers effective against microbiological contamination. Regional Water Plan and Clean Streams Accord encourage farmers to minimise contamination of water ways. Treatment barriers effective against microbiological contamination	Revert to primary intake. Abstraction can be turned off and rely on treated water storage. Boil water notice can be issued. District plan or Building Act abatement notices can be served	Compliance with consent conditions. Weekly applications received from NRC for consents Operator visual checks on raw water turbidity trends during plant visits two times a week	Yes	Unlikely	Minor	Low	Y	Reliable	Targeted catchment assessment	WWM PDE
	Chemical Contamination	1.04	Kaihu River @ Rotu: Surface runoff containing chemical contaminants from agricultural activities.	Possible	Major	High	Taste and or odour, information provided by Regional pollution hotline or public. Source water chemical screen indicates chemicals. Active weed control programme. Regional Council SoE reporting	Implementation of Resource Management Planning Rules ie Regional Policy Statement, NES for Sources of Human Drinking-water. Rural Land Use Policy to address the adverse effects of intensive farming and forestry on rural land. Subsequent treatment barriers employ coagulation, flocculation and sedimentation. Appropriate controls on pest management programmes.	Abstraction can be turned off and revert to treated water storage. District plan or Building Act abatement notices can be served. Incident response plan. Consumers advise water cannot be consumed.	Chemical suite, trends in raw water composition	Yes	Unlikely	Minor	Low	Y	Reliable	Consider assessment of raw water chemistry for allocation of Priority 2 chemicals.	WWM PDE
	Chemical Contamination	1.05	Kaihu River @ Rotu: Cyanobacteria growth in source water	Possible	Catastrophic	High	Taste and or odour, visual bloom observed	River status and condition reviewed before intake used. Subsequent treatment barriers	Abstraction can be turned off and revert to treated water storage	Regional Council SoE monitoring	Partially	Unlikely	Moderate	Medium	Y	Unsure	Consider more detailed algae risk assessment and if needed management protocol	WWM PDE
	Loss of supply	1.06	Low flows in source water through drought	Unlikely	Major	Medium	Water levels and flow rates, weather conditions	Consent conditions . Visual checks. Regional Council monitoring programme provides for early detection.	Initiate water demand and conservation management. Follow Drought Management Plan and implement supplementary supplies	Catchment rainfall, steam and river levels Operator checks on long term forecast	Partially	Rare	Moderate	Low	Y	Unsure	Review Drought Management Plant	WWM PDE
2. Abstraction	Loss of supply	2.01	Raw water pipeline failure	Unlikely	Catastrophic	High	Loss of flow and pressure to plant Raw main consumers report loss of water Bridge collapse	Most breaks can be repaired quickly by maintenance Treated water storage Emergency intake at Ahikiwi Bridge crossings (22) under roading management	Carry out emergency work to reinstate/repair the intake. Invoke emergency water use restrictions for the town under the Water Bylaw. Use reservoir storage in the short term if sufficient.	Monitor plant intake flow rates continuously by Magflow meter.	Yes	Unlikely	Moderate	Medium	Y	Reliable	Perform in-depth condition assessment of the raw water transfer line	WWM PDE
	Loss of supply	2.02	Intake Vandalism/Sabotage	Unlikely	Major	Medium	Volume and flow to plants. Visible damage, threats, reported suspicious activity	Intakes are located in isolated areas . Treated water storage. Legal Deterrents. Intake structures designed to withstand some damage	Repairs, consumer advisory to conserve water	Review intakes security if interference or vandalism becomes more common	Yes	Rare	Moderate	Low	Y	Confident	Review intake sites security generally and improve it if vandalism becomes an issue	WWM PDE
	Loss of water	2.03	Pump failure @ Rotu intake	Possible	Major	High	Loss of water or pressure in reticulation Frequent low reservoir level	Asset management Certified maintenance staff. Redundancy in plants and intakes Alarms. Secondary intake for supply	Incident management plan. Demand restrictions imposed	Reservoir level	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Micro & chem contamination	2.04	Provision of raw water to consumers on raw pipeline	Almost Certain	Major	Extreme	Consumer complaints, illness	Consumers advised water is untreated. Connections included backflow devices	Reminders provided	Number of connections Backflow devices	Yes	Possible	Minor	Medium	Y	Reliable		WWM PDE
	Particles/Protozoa not captured / removed	3.01	Floc not formed due to poor coagulant mixing	Likely	Major	High	No or poor floc formation. High turbidity in water leaving the clarifier or filter .	Dosing points are at sites of maximum mixing energy. Plant flow maintained at optimal rate NTU meters trigger alarm and shut down plant Coagulant dose controlled by streaming current meter Subsequent filtration stage also removes particles	Adjust plant flow. Run water to waste and rely on storage when turbidity is particularly high Refer to Elevated Turbidity Source Water contingency plan Zeroing of the streaming current meter	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident	Install SCADA telemetry system as well as alarms so the plants data can be viewed remotely Review ways of controlling wastage of water and chemical during the sedimentation process	OEWS WO&M
	Particles/Protozoa not captured / removed	3.02	Floc not formed due to alum or poly dose pump failure.	Likely	Major	High	No or poor floc formation. High turbidity in water leaving the clarifier or filter .	Operator at plant daily Turbidity is monitored online in water leaving the filters Dosing pumps are well maintained and calibrated Subsequent filtration stage removes particles	Adjust plant flow.	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident	Auto-changeover duty/standby for all dose pumps at the plants	OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Confidence	Additional Measures	Resp
											Yes	Unlikely	Minor	Low	Y			
3. Dargaville Treatment - Coagulation, Clarification, Sedimentation, Filtration	Particles/ Protozoa not captured / removed	3.03	Floc not formed due to inappropriate dose rate of coagulant chemicals.	Likely	Major	High	No or poor floc High turbidity in water leaving the clarifier or filters. Chemicals exceeding MAVs in final water	Operator at plant daily. Poly pump stroke is manually adjusted but flow paced Pumps are routinely calibrated Turbidity is monitored online and alarmed in water leaving the filters Very small poly dose used because intake water turbidity is very low Subsequent filtration stage removes particles	Adjust plant flow. Increase capacity in other plants	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/ Protozoa not captured / removed	3.04	Clarifier fails to remove particles due to sudden change of raw water turbidity	Possible	Major	High	Poor floc formation or no floc blanket Filters clog up quickly High turbidity in water leaving filters	Filter headloss monitored and alarmed Turbidity is monitored online in water leaving clarifier and the filters Subsequent filtration stage removes particles	Adjust plant flow. Adjust coagulant dose	Sediment blanket Online Turbidity Catchment weather	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/ Protozoa not captured / removed	3.05	Floc not formed due to coagulant chemicals supply exhausted.	Possible	Major	High	No floc formed Filters clog up quickly High turbidity in water leaving filters. Co-ag day tank empty	Operators at plant daily and monitor chemical storage Chemicals are held in bulk at treatment plant Sufficient polyelectrolyte onsite for a minimum 20 days at maximum demand	Arrange urgent delivery	Delivery schedules. Bulk tank levels	Yes	Unlikely	Minor	Low	Y	Confident	Investigate plant flows to limit excess water being run to waste from clarifier and associated unnecessary use of coagulant	OEWS WO&M
	Particles/ Protozoa not captured / removed	3.06	Poor floc formation due to raw water pH incorrect for optimal coagulation	Possible	Moderate	Medium	Poor floc formation. Excessive floc carryover to the filters High turbidity in water leaving the clarifier	Raw water pH rarely changes Turbidity is monitored online in water leaving the filters Operator vigilance and training. Treated water storage Subsequent filtration stage removes particles	Shut off the supply if a serious pH problem is suspected Calibrate the pH meter as per manufacturers' instructions.	online pH	Yes	Unlikely	Minor	Low	Y	Confident	Install system to allow for continuous monitored data to be used for compliance Review calibration procedures for all monitoring equipment.	OEWS WO&M
	Particles/ Protozoa not captured / removed	3.07	Inability to backwash effectively due to power outage	Possible	Major	High	High turbidity in water leaving the filter. Other power dependent equipment goes offline	Turbidimeters on each filter indicate filter performance Back up power supply, mobile generators	Initiate emergency power, initiate water conservation measures	Backwash procedure	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/ Protozoa not captured / removed	3.08	Backwash pump failure	Possible	Major	High	Backwash cycle doesn't happen Increased post filter turbidity	Regular maintenance of backwash pumps	Repair/Replace	Pumps monitored for noise and vibration	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/ Protozoa not captured / removed	3.09	Failure of backwash air scour	Possible	Major	High	Visual inspection of backwash process identifies backwash blower failure	Maintenance includes backwash air scour Air blower can be repaired or replaced with off-the-shelf item Subsequent UV stage inactivates oocysts	Repair/Replace		Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/ Protozoa not captured / removed	3.10	Caking or mudballing of the filter media.	Possible	Major	High	Visual inspection shows caking or mud-balling. Irregular pattern of filter media fluidisation during backwash cycle Elevated filtered water turbidity	Air scour and backwashing process fluidises filter media during backwash cycle Visual inspection undertaken of backwash cycle Turbidimeters on each filter indicate filter performance Filters are soaked in caustic each year to minimise cracking due to the polyelectrolyte binding the sand grains Subsequent UV stage inactivates oocysts	Run water to waste and rely on storage when turbidity is particularly high	Visual assessment during back wash	Yes	Unlikely	Minor	Low	Y	Confident	Establish backwashing procedure	OEWS WO&M

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Dargaville Treatment Plant - UV	Inadequate disinfection	4.01	UV intensity insufficient due to build-up of deposits on sleeve	Likely	Catastrophic	Extreme	E. coli detected in water leaving the plant or illness in the community. Visible build-up of deposits on sleeve and sensor lens	UV intensity is continuously monitored and alarmed. Dual reactors in place as contingency Routine cleaning and maintenance schedule for lamp sleeves and UV sensor. Regular replacement of UV lamp. UVI reference sensor checked regularly and calibrated annually UV intensity is alarmed and shuts production down	Clean UV sleeves, Undertake cleaning and maintenance Change lamps Incident Response plan – Microbiological contamination Increase chlorine dosing in reservoir Shut off reactor not performing	UV Intensity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	4.02	Flow rate through UV unit too rapid for effective treatment	Likely	Catastrophic	Extreme	Flow rate through plant greater than UV unit maximum	Routine maintenance and calibration checks on flow rate controller	Slow plant flow rate to that which is optimal for UV units Recalculate dose rates and change flow settings	Flow rates Maintenance records of flow rate controller Flow controller calibrations	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	4.03	Excessive turbidity/colour in water decreasing the effectiveness of the UV treatment (UVT too low)	Likely	Catastrophic	Extreme	High turbidity levels detected in raw water E. coli detected in water or illness in the community	Water has received clarification and filtration. Setpoints within validation conditions and are controlled by the supplier Alarms	Backwash sand filters Ensure coagulation dosing system operating correctly.	NTU, UVT Filter maintenance schedule	Yes	Unlikely	Minor	Low	Y	Confident	Develop a system of internal checking of important procedures such as calibration	OEWS WO&M
	Inadequate disinfection	4.04	Power failure resulting in UV unit being unable to work	Likely	Major	High	Alarms	Alarm to indicate power failure Regular maintenance of UV power supply Generator connections installed Treated storage	Replace faulty equipment Conservation measures until power is restored and arrange for another supply of water	Power supply maintenance schedule Maintenance log and schedule for equipment	Yes	Unlikely	Moderate	Medium	Y	Confident	Investigate agreement for priority allocation of generators	OEWS WO&M
5. Dargaville Treatment -Chlorination	Inadequate disinfection	5.01	Inadequate contact time	Unlikely	Major	Medium	Calculation of retention time determines contact time is inadequate E. Coli or coliforms detected despite adequate FAC residual concentration	Minimum contact time provided by reservoirs and bulk main Chlorine dose point is set to 1.3 mg/L leaving plant.	Low chlorine contingency	Contact time, Microbiological quality, Flow rates, online FAC	Yes	Rare	Minor	Low	Y	Reliable	Auto shut down of plant on low Cl alarm	OEWS WO&M
	Inadequate disinfection	5.02	Gas chlorine supply exhausted	Possible	Catastrophic	High	FAC is less than 0.2 mg/L or E. coli (or elevated coliforms) detected in water in the distribution system. Illness in community.	FAC is continuously monitored on-line with alarms to operators and date telemetered Gas chlorine tanks installed in an automated duty/standby arrangement. Sufficient gas bottles are on hand at the plant all times and replacements are easily obtained 920kg duty cylinder supplies approximately 6 months three 70kg standby cylinders at the water treatment plant.	Replace chlorine gas bottle manually	Post treatment FAC Cylinders onsite/turnover	Yes	Rare	Moderate	Low	Y	Reliable	Improve method for knowing how much Cl is left in cylinders	OEWS WO&M
	Inadequate disinfection	5.03	Dosing system failure	Likely	Catastrophic	Extreme	FAC is less than 0.2mg/L or E. coli detected in water in the distribution system.	Operator visits the plant daily to check operation of chlorination system FAC is semi continuously monitored at the treatment plant and in the reticulation twice weekly Operator checks at least two times a week and more often to check the chlorine dosing equipment Annual check and servicing of the chlorine dosing equipment with overhaul every two years.	Repair and return to service Contractor staff competency audits Repair any equipment faults, with plant shutdown and reservoir storage used to cover repair period Low chlorine contingency Re-train staff as necessary in correct procedures	Operation of chlorine dosing pump FAC alarms, on-line data FAC records stored on SCADA Record all events of chlorination problems Record chlorinator maintenance	Yes	Unlikely	Moderate	Medium	Y	Reliable	Carry out training needs assessments annually Review the positioning of the chlorine analyser to see if Bacteria Compliance Criteria 2a can be used	OEWS WO&M
	Inadequate disinfection	5.04	Automated chlorine dose rate incorrect	Likely	Catastrophic	Extreme	FAC is less than 0.2 mg/L or higher or E. coli detected in water leaving the WTP	Chlorine dose rate is flow paced Operator visits the plant at least daily to check operation of chlorination system FAC is continuously monitored on-line with alarms to operators and date telemetered	If FAC sampling indicates incorrect FAC level, adjust dose rate as required	FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident	Update Operations and Maintenance manuals to reflect actual FAC target values per practice.	OEWS WO&M
6. Dargaville Storage	Inadequate disinfection	5.05	Chlorine demand exceeds chlorine dose due to high raw water turbidity	Possible	Catastrophic	High	High turbidity in water. Chlorine dose rate needs to be high to maintain an adequate residual FAC is less than 0.2 mg/L or E. coli detected in water leaving the WTP	Source water has turbidity monitored and alarms Operator visits the plant at least daily to check operation of chlorination system FAC is continuously monitored on-line with alarms to operators and date telemetered	Increase chlorine dose level	Turbidity of water at treatment plant FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident	Review measures for protecting reservoirs from foreign matter	OEWS WO&M
	Over Chlorination	5.06	Dosing system failure.	Possible	Moderate	Medium	FAC level exceeds 1.6 mg/L. Odour and taste complaints	Operator visits the plant daily to check operation of chlorination system FAC is continuously monitored on-line with alarms	Advise consumers if high chlorine FAC is delivered to the distribution zone	Operation of chlorine dosing pump FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident	Review contact Tanks for damage and lid security	OEWS WO&M
	Over Chlorination	5.07	Chlorine dose rate incorrect	Possible	Moderate	Medium	FAC is more than 1.6 mg/L in water leaving the WTP Odour and taste complaints	Chlorine dose rate is flow paced Operator visits the plant daily FAC is continuously monitored on-line with alarms to operators and date telemetered	Advise consumers if high chlorine FAC is delivered to the distribution zone	Operation of chlorine dosing pump FAC in reticulation system downstream of treatment plant	Yes	Unlikely	Minor	Low	Y	Confident	Review O&M cleaning procedures for reservoir and distribution system	OEWS WO&M
	Microbiological contamination	6.01	Leakage through reservoir roof or other parts of structure or access by birds or vermin.	Likely	Moderate	High	Visual evidence of leakage E. coli in water leaving reservoirs	Reservoir is covered and all entry hatches are locked against unauthorised access Regular inspection of reservoirs is carried out. Asset condition assessment	Repair any reservoir leaks or bird and vermin access points without delay. Take out of service. Install replacement liners where feasible	Leakage from reservoir Access points for birds and vermin Evidence of birds or vermin inside reservoir	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
	Micro and chem contamination	6.02	Vandalism or unauthorised entry to the storage reservoir	Possible	Moderate	Medium	E. coli in water leaving reservoir Reports from the public Evidence of damage or tampering with reservoir	Reservoir is a large concrete structure with all entry hatches locked against unauthorised access Reservoir is located on land with restricted access. Operator checks site daily.	Inspect reservoir in response to reports of suspicious activity Report any damage or interference to Council immediately. Refer to Contingency Plan - Contamination Reservoir Water.	Access hatches	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
7. Reticulation	Micro and chem contamination	6.03	Sediment accumulation within reservoir	Likely	Moderate	High	Visible suspended matter in water in distribution system Visible sludge in bottom of reservoir Complaints from consumers	High chlorine residual provides protection against contaminants Regular inspection of reservoir is carried out and cleaning undertaken if required	Isolate and clean reservoir as required Adjust chlorine dose if FAC is less than 0.2mg/l ex reservoir in any sample	Check accumulation of sediment in reservoir every 5 years Turbidity	Yes	Unlikely	Minor	Low	Y	Confident	Pumping- upgrade to duty and standby arrangement for pumping. Hold spares allowing for repair/replace <24hrs	OEWS WO&M
	Loss of supply	6.04	Failure of reservoirs	Unlikely	Catastrophic	High	Complaints from consumers about loss of supply or pressure Obvious signs of leakage or failure at reservoir site	Asset condition assessments. Reservoirs are constructed of concrete and steel.	Isolate damaged or failing reservoir and supply directly from treatment plant or use other reservoirs	Structural integrity of reservoir Condition reports	Yes	Rare	Moderate	Low	Y	Confident	Review/Develop written proactive maintenance programmes for the distribution system	OEWS WO&M
	Loss of supply	6.05	Insufficient storage for peak demand	Possible	Catastrophic	High	Loss of water or pressure in reticulation Frequent low reservoir level Records of consumer complaints (e.g. regarding low pressures or loss of supply)	Multiple reservoirs Reservoirs are just adequate for the average demands on them	Emergency water restrictions Introduce conservation and efficiency measures	Reservoir level Plant flows daily and monthly from the Magflow meter	Yes	Unlikely	Minor	Low	Y	Confident	Audit commercial high risk premises and rural properties annually for back-flow testing	OEWS WO&M
	Loss of water	7.01	Pump failure	Possible	Major	High	Loss of water or pressure in reticulation Frequent low reservoir level	Asset management, certified maintenance staff. Redundancy in plants and intakes. Alarms	Incident management plan. Demand restrictions imposed	Reservoir level	Yes	Unlikely	Moderate	Medium	Y	Confident	Improve audit and tracking process of SoPs. Ensure auditing of development manual requirements and contract requirements are undertaken Audit/review hygienic repair procedures by Broadspectrum under the O&M service contract.	OEWS WO&M
	Micro/Chem contamination	7.02	Inadequate controls on maintenance and construction work	Likely	Major	High	Complaints from consumers about taste or odour. E. coli present in reticulation system	Maintenance and replacement work is undertaken by trained qualified and experienced contractors. Contractors are trained in emergency chlorination procedures for repair works – when identified, contaminated water is scoured from the mains and replaced with chlorinated water O&M Contract requires immediate attention to any pipe failures.	Implement a boil water notice as outlined in the contingency plan if the quality of the water supplied cannot be assured	Sanitation procedures and sanitation practices of contractors.	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Micro/Chem contamination	7.03	Backflow from consumer connections.	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste or odour complaints from consumers.	Council policy (in Bylaw) on backflow prevention requires existing at-risk commercial consumers to have back flow Preventers installed Pressure in the reticulation is generally maintained at 400 kPa	Implement a boil water notice as outlined in the contingency plan Isolate the affected part If possible.	Land-use and building use changes Check reticulation pressures under very high demand situations	Yes	Unlikely	Minor	Low	Y	Confident	Consider new dual main or increased storage for Baylys Beach	OEWS WO&M
	Inadequate Supply of Water	7.04	Poor quality workmanship or inappropriate materials used for reticulation pipes and fittings	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste and odour complaints from consumers	Water supply bylaw. Materials used in reticulation to meet standard specifications. SoPs, and best practice reticulation approach taken to reticulation installation/repairs. Asset management and pipe replacement programme. GIS management of network and materials	Redo work that has been poorly undertaken. Replace any materials that do not meet minimum specifications. Undertake pipe repairs as required in the O&M contract and record on Councils database. O&M contract requires prompt attention to leaks and bursts Enforce contractor performance conditions for hygienic pipe repairs under the O&M contract Refer to Contaminated Distribution System Contingency Plan	Quality of work undertaken. Types of material used Plumbosolvent water leaching heavy metals out of private pipes and fittings	Yes	Unlikely	Minor	Low	Y	Confident	Ensure WSP is understood by Council Staff and Operations and Maintenance Contractor's staff Ensure WSP and schedule of improvements are reviewed and updated after major works have been completed to reflect changing circumstances and requirements. Create O&M Manual for the Dargaville Water Supply, Develop a quality assurance system for monitoring and instrument calibration Staff training in quality assurance. Start using approved methods for monitoring. Train staff	OEWS WO&M
	Sediment/biofilm formation	7.05	Silt build up or biofilm within reticulation pipes	Likely	Minor	Medium	Reduced flows in reticulation. Complaints from consumer about quality of water. Low FAC readings in network	Flushing undertaken in response to complaints. Regular dead end mains flushing Reticulation turbidity taken manually once per week	Undertake flushing as required	Dirty water complaints	Yes	Unlikely	Minor	Low	Y	Confident	Audit/review of monitoring activities and issue of non-compliances to the contractor where performance against the contract is inadequate. Clearly label and identify plant components and functions and update the O&M Manuals.	OEWS WO&M
	Loss of supply	7.06	Treated water main to Baylys beach fails	Possible	Moderate	Medium	Loss of water or pressure in reticulation Records of consumer complaints (e.g. regarding low pressures or loss of supply)	Best practice reticulation approach taken to reticulation installation/repairs. Asset management and pipe replacement programme. GIS management of network and materials	Introduce conservation and efficiency measures Provide emergency water (tankered)	Reservoir level Plant flows daily and monthly from the Magflow meter	Yes	Unlikely	Moderate	Medium	Y	Confident	Establish a compliant sampling schedule which confirms with the new DWSNZ 2005 (revised 2018)	OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
8. Other	Operator error/mismanagement	8.01	Inadequate training, professional development and up-skilling of operators	Likely	Major	High	Staff not provided with adequate ongoing training. Poor operation of plant. Plant compliance failure. Loss of supply. Vacancies. Staff feedback. WSP not properly understood and followed by staff. Failure of staff to follow KDC QA procedures	Experienced staff employed. Staff attend appropriate professional conferences and other professional development opportunities. Operators have or are completing the National Cert or Dip in Drinking Water Treatment. Appropriately experienced and qualified engineering personnel. Regular staff training for new staff in particular. Regular refresher and induction training for new staff. Contractor performance measures include completeness of required documentation and recording. Up to date QA and O&M manuals. Include key staff in the WSP process and provide training before and during implementation. Operator training and refresher courses Comprehensive O&M Manual for the supply	Review documentation. Provide in-house training where abilities are in deficit. Standard Operating Procedures are available for staff. Amend the contract if service levels are inappropriate and/ or Council audit reveals weaknesses Corrective action may still be possible for tardy test results if the problem is ongoing. Amend the WSP to include any new supply elements Refer to Contaminated Distribution System Contingency Plan	Documentation. Operator abilities, knowledge and training qualifications Training attendances	Yes	Unlikely	Moderate	Medium	Y	Confident	Data - review SCADA management	OEWS WO&M
	Operator error/mismanagement	8.02	Inadequate supply planning and management	Likely	Major	High	Lowering levels of service. Consents not renewed. Capital costs uncontrolled. Failing infrastructure strategy. 3rd party audits e.g. OAG. Reduction in funding	Relevant statutory obligations ie LGA, RMA, Council policies. Infrastructure planning team. Regular monthly audit of contractor performance under the O&M contract to ensure the required 'Levels of Service' are met. Contractor reports three monthly on service provided against the O&M contract. Condition assessment of mains in the AMP/GIS database identifies life expectancy of pipes Reticulation system is built to a modern standard	Apply contingencies for changes in legislation or other key planning considerations	New Legislation, regulations or Standards. Residential and industrial growth/connections Regular WSP reviews	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Sampling Failure	8.03	Inadequate sampling programme or sample collection error.	Almost Certain	Moderate	High	DWSNZ compliance failure e.g. due to days of week, days between samples, insufficient samples, information gaps, positive results or sampling error.	Sampling programme prepared and checked against standards. Sampling is IANZ accredited and an MoH accredited laboratory is used Alert notices for non-compliant test results (transgressions) are required Working relationship with lab where incorrect or erroneous results can be managed	Review sampling programme Carry out E.coli follow -up sampling following all transgressions Log any incidents and corrective actions taken in the incidents register and in DWO	Sampling programme against DWSNZ. Monthly reports to Council on water quality monitoring activities by the contractor and recorded on DWO Council audit 2-3% of all work carried by the contractor. Test results	Yes	Unlikely	Minor	Low	Y	Confident	Review compliance documentation and record keeping	OEWS WO&M
	Unidentified Operational Failure	8.04	Insufficient monitoring and alarming of key operational data	Almost Certain	Major	Extreme	Contamination identified in supply. Operational near miss identified. Inadequate information collected to provide confidence in supply operation	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Operators validate treatment plant equipment weekly and calibrate equipment as required	Undertake manual grab sampling if required. Initiate incident management plan.	Trends and alarms of Cl2, UVT, pH and turbidity continuous monitoring	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Failure due to Inadequate Maintenance	8.05	Supply equipment fails due to inadequate asset information and inadequate maintenance planning	Likely	Moderate	High	Unexpected plant equipment failure.	Council and contractor have a good understanding of water supply assets allowing maintenance to be planned and undertaken	Attend to failure as a priority Plan to renew or improve assets as required	Condition and forward planning for asset renewal	Yes	Unlikely	Moderate	Medium	Y	Confident	Renew water take consent for Waipapataniwha Stream	OEWS WO&M
	Failing to meet DWSNZ	8.06	Treatment processes of the water supply are not sufficient to comply with the requirements of the DWSNZ	Almost Certain	Major	Extreme	Insufficient treatment processes at the treatment plant to comply with the DWSNZ. DWA reports	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Chlorination. E.coli and FAC monitoring	Implement boil water notice if safety of supply cannot be guaranteed	DWSNZ compliance data	Yes	Unlikely	Moderate	Medium	Y	Confident	Monitor plant security and increase security if minor incidents occur that might escalate	OEWS WO&M
	Failure to Provide Safe Water	8.07	Inadequate data collection, reporting and control systems	Likely	Moderate	High	Information about how the supply is operating is not available. Manual collection and recording of data. IT failure. Inadequate or outdated QA and O&M manuals.	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant	Undertake manual grab sampling if required	Trends and alarms of Cl2, UVT, pH and turbidity continuous monitoring	Yes	Possible	Moderate	Medium	Y	Confident	As per 8.01 and 8.03	OEWS WO&M
	Loss of supply	8.08	Resource consent limits reached or exceeded or no current consent	Unlikely	Major	Medium	Consent conditions Information from Regional Council	Priority consent Existing use rights Consented at Rotu	Daily abstraction rates are always within the water take limits. Emergency provisions of RMA would be exercised to allow water to be used.	Regional Council Policy	Partially	Possible	Insignificant	Low	Y	Confident		OEWS WO&M
	Microbiological or chemical contamination	8.09	Vandalism to plant equipment	Possible	Major	High	Obvious signs of damage to treatment or storage equipment Reduced/no flow to treatment plant or distribution system	Controls and treatment plant are in robust concrete block buildings. Supply equipment is visited and checked regularly. Legal deterrents, ie prosecution. Operator completes daily inspections which includes a general security check. Operator visit the plant daily No history of significant damage as yet	Implement boil water notice if safety of supply cannot be guaranteed. Activate incident management plan. Engage Contingency Plan measures if there is evidence of deliberate contamination of the supply	Condition of treatment buildings and equipment	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M

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	Total Plant Failure	8.10	Catastrophic natural disaster or failure including earthquake and flooding	Rare	Catastrophic	Medium	Major natural disaster occurs. Intense sustained weather. River bank slip, flooding. Total plant failure is evident. Warnings from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police.	Prior warning from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police. Robust secure plant structures and buildings. Business continuity plan in place and exercised. Emergency response plan. Regional Emergency Plan exists and requires local authority emergency plans to be drawn up An Emergency Plan for less serious incidents is included in the O&M Contract	Execute the actions in the O&M Contract for minor emergencies Repair any damage as soon as possible Emergency Water Response and Action Plan not implemented for the supply	Prior warnings issued by Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police	Partially	Rare	Major	Medium	Y	Reliable	Complete the Emergency Response and Action Management Plan as to align with the Regional Emergency Plan	OEWS WO&M

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1. Catchment	Raw water quality too poor to treat	1.01	Bush catchment destroyed by fire/weather/harvesting allows for erosion and elevated turbidity (Piroa/Cattlemount/Baldrock)	Unlikely	Catastrophic	High	High NTU levels which enter treatment plant.	Alarm levels set on the raw water turbidity Treated storage available Implementation of Resource Management Planning Rules Rural Land Use Policy addresses adverse effects of intensive farming/forestry on rural land. Treatment barriers effective against dirty water. Regional Water and Soil Plan	Revert to secondary intake Invoke emergency water use restrictions for the town under the Water By-law. Refer to Contingency Plans	Turbidity is continuously monitored entering the water treatment plant. Weekly applications received from NRC for consents	Partially	Rare	Minor	Low	Y	Reliable		WWM PDE
	Microbiological contamination	1.02	Cattlemount - contamination from animals/wildlife Piroa - contamination from animals/wildlife	Likely	Catastrophic	Extreme	Animals reported in catchment. High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Attenuation from bush catchment Alarm levels set on the raw water turbidity Treated storage available Implementation of Resource Management Planning Rules Treatment barriers effective against microbiological contamination	Revert to secondary intake Invoke emergency water use restrictions Refer to Contingency Plans	Turbidity is continuously monitored entering the water treatment plant	Yes	Unlikely	Minor	Low	Y	Unsure		WWM PDE
	Microbiological contamination	1.03	Brynderwyn: Surface contamination from farmland/agri lifestyles in the adjacent area Baldrock: Surface contamination from farmland/agri lifestyles in the adjacent area	Likely	Catastrophic	Extreme	High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Only used for emergency/supplementary source Implementation of Resource Management Planning Rules Regional Policy Statement, NES for Sources of Human Drinking-water. Land use consents. Treatment barriers effective against microbiological contamination	Abstraction can be turned off and revert to treated water storage. Boil water notice can be issued. Incident response plan	Conditions prior to activating	Yes	Unlikely	Minor	Low	Y	Unsure	Complete five yearly catchment risk survey for all catchments.	WWM PDE
	Microbiological contamination	1.04	Brynderwyn: Discharges from onsite wastewater systems, dairy effluent irrigation, farmed animals or septic tank systems, unconsented overflow	Possible	Catastrophic	High	Commercial/residential development or construction. High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Only used for emergency/supplementary source Implementation of Resource Management Planning Rules Regional Policy Statement, NES for Sources of Human Drinking-water. Land use consents. Treatment barriers effective against microbiological contamination	Abstraction can be turned off and revert to treated water storage and other sources. Boil water notice can be issued. Incident response plan	Activities in catchment	Yes	Unlikely	Minor	Low	Y	Reliable		WWM PDE
	Chemical Contamination	1.05	Brynderwyn: Surface runoff containing chemical contaminants from agricultural activities.	Possible	Moderate	Medium	Taste and or odour, information provided by Regional pollution hotline or public. Source water chemical screen indicates chemicals. Active weed control programme. Regional Council SoE reporting	Implementation of Resource Management Planning Rules Regional Policy Statement, NES for Sources of Human Drinking-water. Rural Land Use Policy to address the adverse effects of intensive farming and forestry on rural land. Treatment barriers employ coagulation, flocculation and sedimentation. Appropriate controls on pest management programmes. Treatment barriers effective against chemical contamination	Abstraction can be turned off and revert to treated water storage. District plan or Building Act abatement notices can be served. Incident response plan. Consumers advise water cannot be consumed.	Chemical suite, trends in raw water composition	Yes	Unlikely	Minor	Low	Y	Unsure	Consider assessment of raw water chemistry for allocation of Priority 2 chemicals	WWM PDE
	Chemical Contamination	1.06	Brynderwyn and Baldrock - use of agri herbicides or pesticides for weed control in catchment.	Possible	Moderate	Medium	Source water chemical screen indicates chemicals. Regional Council SoE reporting	Weed control programmes conducted to minimise run off or away from intakes. HSNO controls on use and certified operators used.	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advise water cannot be consumed. Defer or cease operation	Consents and approvals. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Reliable	Update sources details in DWO	WWM PDE
	Chemical Contamination	1.07	Brynderwyn chemical contamination/spill in catchment e.g traffic accident Piroa chemical contamination/spill in catchment e.g quarry activities	Unlikely	Moderate	Medium	Notification or report to pollution hotline or emergency services call out	Secondary catchment Some setback from road Attenuation from surrounding land Treatment barriers effective against chemical contamination Quarry operations awareness	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advise water cannot be consumed.	Timeliness of Reporting. Land use changes or new activities in the catchment	Yes	Rare	Moderate	Low	Y	Reliable		WWM PDE
	Algae	1.08	Growth of cyanobacterial blooms in Baldrock Dam	Possible	Catastrophic	High	Growth of planktonic blooms are observed Taste/odour reported Illness in community	Secondary catchment Treatment barriers employ coagulation, flocculation and sedimentation.	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advise water cannot be consumed.	Lake temperatures and nutrient conditions	Yes	Unlikely	Minor	Low	Y	Unsure		WWM PDE
	Loss of supply	1.09	Piroa, Cattlemount, Baldrock - Low flows in source water through drought	Unlikely	Major	Medium	Water levels and flow rates, weather conditions	Consent conditions. Visual checks. Regional Council monitoring programme provides for early detection.	Initiate water demand and conservation management. Follow Drought Management Plan and implement supplementary supplies	Catchment rainfall, steam and river levels	Partially	Unlikely	Moderate	Medium	Y	Reliable		WWM PDE
	Loss of supply	1.10	Brynderwyn- Low flows in source water through drought	Unlikely	Moderate	Medium	Water levels and flow rates, weather conditions	Secondary Intake Consent conditions. Visual checks. Regional Council monitoring programme provides for early detection.	Initiate water demand and conservation management. Follow Drought Management Plan and implement supplementary supplies	Catchment rainfall, steam and river levels	Partially	Rare	Minor	Low	Y	Reliable		WWM PDE
	Loss of supply	2.01	Raw water pipeline failure	Unlikely	Catastrophic	High	Loss of flow and pressure to plant Raw main consumers report loss of water Bridge collapse Civil Defence Events	Most breaks can be repaired quickly by maintenance Treated water storage Brynderwyn Emergency intake closer to plant so some capacity if failure occurs to the East. Bridge crossings under roading management	Carry out emergency work to reinstate/repair the intake. Invoke emergency water use restrictions for the town under the Water Bylaw. Use reservoir storage in the short term if sufficient.	Monitor plant intake flow rates continuously by Magflow meter.	Yes	Unlikely	Moderate	Medium	Y	Reliable	Perform in-depth condition assessment of the raw water transfer line	WWM PDE

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2. Abstraction	Loss of supply	2.02	Intake Vandalism/Sabotage	Unlikely	Major	Medium	Volume and flow to plants. Visible damage, threats, reported suspicious activity	Intakes are mostly located in isolated areas an private land . Treated water storage. Legal Deterrents. Intake structures designed to withstand some damage	Repairs, consumer advisory to conserve water	Review intakes security if interference or vandalism becomes more common	Yes	Rare	Moderate	Low	Y	Confident	Review intake sites security generally and improve it if vandalism becomes an issue	WWM PDE
	Loss of water	2.03	Pump failure @ Piroa, Baldrock, Brynderwyn	Possible	Major	High	Loss of water or pressure in reticulation Frequent low reservoir level	Main supply source at Cattlemount is gravity fed Asset management Certified maintenance staff.	Incident management plan. Demand restrictions imposed	Reservoir level	Yes	Unlikely	Minor	Low	Y	Confident	Install alarm for pump failure at Piroa and Brynderwyn	WWM PDE
	Micro & chem contamination	2.04	Provision of raw water to consumers on raw pipeline from Baldrock	Almost Certain	Major	Extreme	Consumer complaints, illness	Consumers advised water is untreated. Connections included backflow devices	Reminders provided	Number of connections Backflow devices	Partially	Likely	Minor	Medium	Y	Reliable		WWM PDE
3. Maungaturoto Treatment - Coagulation, Clarification, Sedimentation, Filtration	Particles/Protozoa not captured / removed	3.01	Floc not formed due to poor coagulant mixing	Likely	Major	High	No or poor floc formation. High turbidity in water leaving the clarifier or filter.	Baffling/retention in mixing tank Plant flow maintained at optimal rate Turbidity meters used to trigger alarm and shut down plant Coagulant dose controlled by SCM Subsequent filtration stage removes particles	Adjust plant flow. Run water to waste and rely on storage when turbidity is particularly high Refer contingency plan Zeroing of the streaming current meter	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not captured / removed	3.02	Floc not formed due to polyaluminium chloride or poly dose pump failure.	Likely	Major	High	No or poor floc formation. High turbidity in water leaving the clarifier or filter.	Operator at plant 2x week Turbidity is monitored online in water leaving the filters Dosing pumps are well maintained and calibrated Subsequent filtration stage removes particles	Adjust plant flow. Adjust coagulant dose	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not captured / removed	3.03	Floc not formed due to inappropriate dose rate of coagulant chemicals.	Likely	Major	High	No or poor floc High turbidity in water leaving the clarifier or filters. Chemicals exceeding MAVs in final water	Operator at plant 2x week Poly pump stroke is manually adjusted but flow paced Pumps are routinely calibrated Turbidity is monitored online and alarmed in water leaving the filters Subsequent filtration stage removes particles	Adjust plant flow. Increase capacity in other plants	Online turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not captured / removed	3.04	Clarifier fails to remove particles due to sudden change of raw water turbidity	Possible	Major	High	Poor floc formation or no floc blanket Filters clog up quickly High turbidity in water leaving filters	Filter headloss monitored and alarmed Turbidity is monitored online in water leaving clarifier and the filters Subsequent filtration stage removes particles	Adjust plant flow. Adjust coagulant dose	Sediment blanket Online Turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not captured / removed	3.05	Floc not formed due to coagulant chemical supply exhausted.	Possible	Major	High	No floc formed Filters clog up quickly High turbidity in water leaving filters. Co-ag day tank empty	Operator at plant 2x week to monitor use Chemicals are held in bulk at treatment plant Sufficient polyelectrolyte onsite for a minimum 20 days at maximum demand	Arrange urgent delivery Utilise storage	Delivery schedules. Bulk tank levels	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not captured / removed	3.06	Poor floc formation due to raw water pH incorrect for optimal coagulation	Possible	Moderate	Medium	Poor floc formation Excessive floc carryover to the filters High turbidity in water leaving the clarifier Record pH on the plant log sheets. Calibration of pH meter is undertaken	Raw water pH rarely changes however pH is alarmed Turbidity is monitored online in water leaving the filters Operator vigilance and training. Subsequent filtration stage removes particles	Shut off the supply if a serious pH problem is suspected during plant visits Rely on stored water if this is clearly not affected by the event. Calibrate the pH meter as per manufacturers' instructions.	Online pH	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa removed	3.07	Inability to backwash effectively due to power outage	Possible	Major	High	High turbidity in water leaving the filter. Other power dependent equipment goes offline	Turbidimeters on each filter indicate filter performance Back up power supply, mobile generators	Initiate emergency power, initiate water conservation measures	Backwash procedure	Yes	Unlikely	Minor	Low	Y	Confident	Install a generator interface at WTP so a backup generator can be installed.	OEWS WO&M
	Particles/Protozoa removed	3.08	Balance Tank Pump failure Backwash pump failure	Possible	Major	High	Flow rates Backwash cycle doesn't happen Increased post filter turbidity	Regular maintenance of backwash pumps Treated water Storage	Repair/Replace	Pumps monitored for noise and vibration	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M

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	Particles/Protozoa removed	3.09	Pressure sand filter malfunction including incorrect operation	Likely	Major	High	Turbidity Filter pressure differential Leaks around housing Monitor High flow alarms	Trained operators Monitor Differential pressure and flow rates Filter housing chlorinated when changing the cartridge Water goes to waste for 3 minutes after start-up Treated water storage Maintenance & repairs	Identify short comings in staff training and rectify Shut down production Investigate VSD or any other cause of high flows	Filtered water turbidity Follow manufacturers instructions/ specifications Treatment plant manuals	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa removed	3.10	Backwash pump failure	Possible	Major	High	Backwash cycle doesn't happen Increased post filter turbidity	Regular maintenance of backwash pumps	Repair/Replace	Pumps monitored for noise and vibration	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
4. Maungaturoto UV	Inadequate disinfection	4.01	UV intensity insufficient due to build-up of deposits on sleeve	Likely	Catastrophic	Extreme	E. coli detected in water leaving the plant or illness in the community. Visible build-up of deposits on sleeve and sensor lens UVI alarm	UV intensity is continuously monitored and alarmed. Dual reactors in place as contingency Routine cleaning and maintenance schedule for lamp sleeves and UV sensor. Regular replacement of UV lamp. UVI reference sensor checked regularly and calibrated annually	Clean UV sleeves, Undertake cleaning and maintenance Change lamps Incident Response plan – Microbiological contamination Increase chlorine dosing in reservoir Standby reactor switches to Duty	UV Intensity	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	4.02	Flow rate through UV unit too rapid for effective treatment	Likely	Catastrophic	Extreme	Flow rate through plant greater than UV unit maximum Flow alarm	Routine maintenance and calibration checks on flow rate controller	Slow plant flow rate to that which is optimal for UV units Recalculate dose rates and change flow settings	Flow rates Maintenance records of flow rate controller Flow controller calibrations	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	4.03	Excessive turbidity/colour in water decreasing the effectiveness of the UV treatment (UVT too low)	Likely	Catastrophic	Extreme	High turbidity levels detected in raw water E. coli detected in water or illness in the community	Water receives clarification and filtration. Setpoints within validation conditions and are controlled by the supplier Regular replacement and maintenance of filters	Backwash filters Ensure coagulation dosing system operating correctly.	NTU, UVT Filter maintenance schedule	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	4.04	Power failure resulting in UV unit being unable to work	Possible	Catastrophic	High	Alarms	Alarm to indicate power failure Regular maintenance of UV power supply Generator connections installed	Replace faulty equipment Initiate response contingency	Power supply maintenance schedule Maintenance log and schedule for equipment	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
5. Maungaturoto - Chlorination	Inadequate disinfection	5.01	Inadequate contact time	Unlikely	Major	Medium	Calculation of retention time determines contact time is inadequate FAC levels. E. Coli or elevated coliforms trends in verification testing	Contact time provided by reservoir and mains Pre-treatment controls chlorine demand	Chlorine dose point is set to 1.3mg/L (SCADA alarmed)	Contact time, Microbiological quality, Flow rates, Post treatment FAC and pH	Yes	Rare	Moderate	Low	Y	Reliable		OEWS WO&M
	Inadequate disinfection	5.02	Gas chlorine supply exhausted	Possible	Catastrophic	High	Illness in community. FAC is less than 0.2 mg/L or E. coli detected in water in the distribution system.	Supply agreement with IXOM Maintain 3 months chemical supply on-site FAC is continuously monitored on-line with alarms to operators and date telemetered Groundwater source lower microbiological risk Pre-treatment controls chlorine demand	Low chlorine contingency	Post treatment FAC Drums onsite/turnover	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	5.03	Dosing system failure	Likely	Catastrophic	Extreme	FAC is less than 0.2mg/L or E. coli detected in water in the distribution system.	Operator visits the plant daily to check operation of chlorination system FAC is semi continuously monitored at the treatment plant and in the reticulation twice weekly Operator checks at least two times a week and more often to check the chlorine dosing equipment Annual check and servicing of the chlorine dosing equipment with overhaul every two years.	Repair and return to service Contractor staff competency audits Repair any equipment faults, with plant shutdown and reservoir storage used to cover repair period If corrective actions fail: Refer to FAC Concentration below Target Level Contingency Plan Re-train staff as necessary in correct procedures	Operation of chlorine dosing pump FAC alarms, on-line data FAC records stored on SCADA Record all events of chlorination problems Record chlorinator maintenance	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Inadequate disinfection	5.04	Automated chlorine dose rate incorrect	Likely	Catastrophic	Extreme	FAC is less than 0.2 mg/L or higher or E. coli detected in water leaving the WTP	Chlorine dose rate is flow paced Operator visits the plant at least daily to check operation of chlorination system FAC is continuously monitored on-line with alarms to operators and date telemetered	If FAC sampling indicates incorrect FAC level, adjust dose rate as required	FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	5.05	Chlorine demand exceeds chlorine dose due to high raw water turbidity	Possible	Catastrophic	High	High turbidity in water. Chlorine dose rate needs to be high to maintain an adequate residual FAC is less than 0.2 mg/L or E. coli detected in water leaving the WTP	Source water has turbidity monitored and alarms Operator visits the plant at least weekly to check operation of chlorination system FAC is continuously monitored on-line with alarms to operators and date telemetered	Increase chlorine dose level	Turbidity of water at treatment plant FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	5.06	Dosing system failure.	Possible	Moderate	Medium	FAC level exceeds 1.3 mg/L setpoint leaving WTP Odour and taste complaints	Operator visits plant at least 2x week FAC is continuously monitored on-line with alarms to operators and date telemetered Pre-treatment controls chlorine demand Supervised & trained operators	Advise consumers if high chlorine FAC is delivered to the distribution zone Flush network if needed	Post treatment FAC Operation of chlorine dosing pump FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	5.07	Chlorine dose rate incorrect	Possible	Moderate	Medium	FAC level exceeds 1.3 mg/L setpoint leaving WTP Odour and taste complaints	Chlorine dose rate is flow paced Operator visits plant at least 2x week FAC is continuously monitored on-line with alarms to operators FAC>2.0mg/L Pre-treatment controls chlorine demand Supervised & trained operators	Advise consumers if high chlorine FAC is delivered to the distribution zone Flush network if needed	Post treatment FAC Operation of chlorine dosing pump FAC in reticulation system downstream of treatment plant	Yes	Unlikely	Minor	Low	Y	Reliable	Test for Disinfection by-products after moderate to heavy rainfall at the end of the reticulation network.	OEWS WO&M

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6. Maungaturoto Storage	Micro contamination	6.01	Leakage through reservoir roof or other parts of structure or access by birds or vermin.	Likely	Moderate	High	Visual evidence of leakage E. coli in water leaving reservoirs	Reservoir is covered and all entry hatches are locked against unauthorised access Regular inspection of reservoirs is carried out. Asset condition assessment Chlorine residual leaving reservoir monitored	Repair any reservoir leaks or bird and vermin access points without delay. Take out of service. Install replacement liners where feasible	Post reservoir FAC Leakage from reservoir Access points for birds and vermin Evidence of birds or vermin inside reservoir	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Micro/Chem contamination	6.02	Vandalism or unauthorised entry to the storage reservoir	Possible	Moderate	Medium	E. coli in water leaving reservoir Reports from the public Evidence of damage or tampering with reservoir	Entry hatches locked against unauthorised access Reservoir is located on land with restricted access. Chlorine residual Operator site visits	Inspect reservoir in response to reports of suspicious activity	Post reservoir FAC Access hatches	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Micro/Chem contamination	6.03	Sediment accumulation within reservoir	Likely	Moderate	High	Visible suspended matter in water in distribution system Visible sludge in bottom of reservoir Complaints from consumers	Source has low sediment load and turbidity below 1 NTU Regular inspection of reservoir is carried out and cleaning undertaken if required	Isolate and clean reservoir as required	Post reservoir FAC Check accumulation of sediment in reservoir every 5 years Turbidity	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Loss of supply	6.04	Failure of reservoirs	Unlikely	Catastrophic	High	Complaints from consumers about loss of supply or pressure Obvious signs of leakage or failure at reservoir site	Reservoirs are constructed of concrete and steel and are regularly inspected for structural integrity 3x treated water reservoirs	Isolate damaged or failing reservoir and supply directly from treatment plant or use other reservoirs	Structural integrity of reservoir	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Loss of supply	6.05	Insufficient storage for peak demand	Possible	Catastrophic	High	Loss of water or pressure in reticulation Frequent low reservoir level	Planning controls on new development/connections Treated water storage provides 230m3 plus 2x460m3 at Griffin Road Designed to achieve 20 hours reserve capacity @ average flow	Introduce conservation and efficiency measures	Reservoir level	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
7. Reticulation	Loss of water	7.01	Pump failure	Possible	Major	High	Loss of water or pressure in reticulation Frequent low reservoir level	Asset management, certified maintenance staff. Alarms	Incident management plan. Demand restrictions imposed	Reservoir level	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Micro/Chem contamination	7.02	Inadequate controls on maintenance and construction work	Likely	Major	High	Complaints from consumers about taste or odour. E. coli present in reticulation system	Maintenance and replacement work is undertaken by trained qualified and experienced contractors. Specialist contractors used when required. Council audit of contractors	Implement a boil water notice as outlined in the contingency plan if the quality of the water supplied cannot be assured	Sanitation procedures and sanitation practices of contractors.	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Micro/Chem contamination	7.03	Backflow from consumer connections.	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste or odour complaints from consumers.	Council policy (Bylaw Part 16 - Water Supply) . Maintain pressure in the supply (400kPa)	Implement a boil water notice as outlined in the contingency plan if there is evidence of a backflow event	Land-use and building use changes	Partially	Unlikely	Minor	Low	Y	Reliable	Audit commercial high risk premises /rural properties annually for back-flow testing Check reticulation pressures under very high demand situations	OEWS WO&M
	Loss of water	7.04	Unidentified leakage or illegal connections	Likely	Minor	Medium	Consumption exceeds calculated expectation	Known breaks and leaks repaired as a priority. Illegal connections identified	Repair leaks as priority. Disconnect or legitimise illegal connections	Suspicious of illegal connections	Yes	Unlikely	Insignificant	Low	Y	Reliable		OEWS WO&M
	Inadequate Supply	7.05	Poor quality workmanship or inappropriate materials used for reticulation pipes and fittings	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste and odour complaints from consumers	Water supply bylaw. Materials used in reticulation to meet standard specifications. SoPs, and best practice reticulation approach taken to reticulation installation/repairs. Asset management and pipe replacement programme. GIS management of network and materials	Redo work that has been poorly undertaken. Replace any materials that do not meet minimum specifications. Initiate incident management plan	Quality of work undertaken. Types of material used	Yes	Unlikely	Minor	Low	Y	Reliable		OEWS WO&M
	Sediment/ biofilm	7.06	Silt build up or biofilm within reticulation pipes	Likely	Minor	Medium	Reduced flows in reticulation. Complaints from consumer about quality of water. Low FAC readings in network	Flushing undertaken in response to complaints. Regular dead end mains flushing Reticulation turbidity taken manually once per week	Undertake flushing as required	Dirty water complaints	Yes	Unlikely	Minor	Low	Y	Reliable		OEWS WO&M
Operator error mismanagement		8.01	Inadequate training, professional development and up-skilling of operators	Likely	Major	High	Staff not provided with adequate ongoing training. Poor operation of plant. Plant compliance failure. Loss of supply. Vacancies. Staff feedback. WSP not properly understood and followed by staff. Failure of staff to follow KDC QA procedures	Experienced staff employed. Staff attend appropriate professional conferences and other professional development opportunities. Operators have or are completing the National Cert or Dip in Drinking Water Treatment. Appropriately experienced and qualified engineering personnel. Regular staff training for new staff in particular. Regular refresher and induction training for new staff. Contractor performance measures include completeness of required documentation and recording. Up to date QA and O&M manuals. Include key staff in the WSP process and provide training before and during implementation. Comprehensive O&M Manual for the supply	Review documentation. Provide in-house training where abilities are in deficit. Amend the contract if service levels are inappropriate and/ or Council audit reveals weaknesses Amend the WSP to include any new supply elements Refer to Contingency Plan	Documentation. Operator abilities, knowledge and training qualifications Training attendances	Partially	Unlikely	Moderate	Medium	Y	Confident	Carry out training needs annually Create O&M Manual for the Maungaturoto Water Supply	OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
8. Other	Operator error mismanagement	8.02	Inadequate supply planning and management	Likely	Major	High	Lowering levels of service. Consents not renewed. Capital costs uncontrolled. Failing infrastructure strategy. 3rd party audits e.g OAG. Reduction in funding	Relevant statutory obligations ie LGA, RMA, Council policies. Sub regional three waters strategy. Infrastructure planning team	Apply contingencies for changes in legislation or other key planning considerations	New Legislation, regulations or Standards. Residential and industrial growth/connections	Yes	Possible	Moderate	Medium	Y	Confident	Audit/review of monitoring activities and issue of non-compliances to the contractor where performance against the contract is inadequate. Clearly label and identify plant components and functions and update the O&M Manuals.	OEWS WO&M
	Sampling Failure	8.03	Inadequate sampling programme or sample collection error.	Likely	Moderate	High	DWSNZ compliance failure due to days of week, days between samples, insufficient samples, information gaps, positive results or sampling error	Sampling programme prepared and checked against standards. IANZ accredited laboratory	Review sampling programme	Sampling programme against DWSNZ	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Unidentified Operational Failure	8.04	Insufficient monitoring and alarming of key operational data	Almost Certain	Major	Extreme	Contamination identified in supply. Operational near miss identified. Inadequate information collected to provide confidence in supply operation	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Operators validate treatment plant equipment weekly and calibrate equipment as required	Undertake manual grab sampling if required. Initiate incident management plan.	Trends and alarms of Cl2, UVT, pH and turbidity continuous monitoring	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failure due to Inadequate Maintenance	8.05	Supply equipment fails due to inadequate asset information and inadequate maintenance planning	Likely	Moderate	High	Unexpected plant equipment failure.	Annual check and servicing of the chlorine dosing equipment with overhaul every two years Subcontractor agreements Active preventive maintenance programme in place	Attend to failure as a priority Plan to renew or improve assets as required	Condition and forward planning for asset renewal asset register and maintenance programme	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failing to meet DWSNZ	8.06	Treatment processes of the water supply are not sufficient to comply with the requirements of the DWSNZ	Almost Certain	Major	Extreme	Insufficient treatment processes at the treatment plant to comply with the DWSNZ	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Chlorination. E.coli and FAC monitoring	Implement boil water notice if safety of supply cannot be guaranteed	DWSNZ compliance data	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failure to Provide Safe Water	8.07	Inadequate data collection, reporting and control systems	Almost Certain	Moderate	High	Information about how the supply is operating is not available. Manual collection and recording of data. IT failure	Continuous on-line alarmed monitoring for pH, NTU, FAC at the treatment plant	Undertake manual grab sampling if required	Trends and alarms of continuous monitoring	Yes	Possible	Moderate	Medium	Y	Confident		OEWS WO&M
	Loss of supply	8.08	Resource consent limits reached or exceeded or no current consent	Unlikely	Major	Medium	Consent conditions Information from Regional Council	Priority consent Existing use rights Baldrock Water Supply Agreement until 2034	Daily abstraction rates are always within the water take limits	Regional Council Policy changes	Partially	Unlikely	Minor	Low	Y	Confident	Renew consent for Cattlemount	OEWS WO&M
	Micro/Chem contamination	8.09	Vandalism to plant equipment	Possible	Major	High	Obvious signs of damage to treatment or storage equipment Reduced/no flow to treatment plant or distribution system	Controls and treatment plant are in robust concrete block buildings. Supply equipment is visited and checked regularly. Legal deterrents, ie prosecution	Implement boil water notice if safety of supply cannot be guaranteed. Activate incident management plan. Provision of tankered water	Condition of treatment buildings and equipment	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Total Plant Failure	8.10	Catastrophic natural disaster or failure including earthquake and landslide	Rare	Catastrophic	Medium	Major natural disaster occurs. Intense sustained weather. River bank slip, flooding. Total plant failure is evident. Warnings from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council. Warnings from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council.	Prior warning from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police. Robust secure plant structures and buildings. Business continuity plan in place and exercised. Emergency response plan	Implement all measures necessary to ensure plant continues to operate in a natural disaster	Prior warnings issued by Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police	Partially	Rare	Major	Medium	Y	Confident	Complete the Emergency Response and Action Management Plan as a priority to align with the Regional Emergency Plan	OEWS WO&M

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1. Bore recharge zone	Microbiological contamination	1.01	Surface contamination from farming/ag activities in the adjacent area	Possible	Catastrophic	High	High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Implementation of RMA Planning Rules ie Regional Policy Statement, NES for Sources of Human Drinking-water. Land use consents. Subsequent treatment barriers effective against microbiological contamination. Over 100m setback from bores. Abstraction depths over 60M with confining layers Testing has indicated that water in the aquifer to >1 year	Abstraction can be turned off and revert to treated water storage. Boil water notice can be issued. Incident response plan. Provision of tankered water	Effectiveness of disinfection barriers, source water monitoring results Land use changes. Weekly applications received from NRC for consents Regional Council HAIL list	Yes	Unlikely	Minor	Low	Y	Reliable	Schedule raw water sampling.	WWM PDE
	Microbiological contamination	1.02	Discharges from septic tank systems.	Possible	Catastrophic	High	High raw water E. coli results, Turbidity in raw water, Illness in community, Regional Council SoE reporting	Implementation of RMA Planning Rules i.e. Regional Policy Statement, NES for Sources of Human Drinking-water. Treatment barriers effective against microbiological contamination. Building Act obligations for septic tanks. Abstraction depths over 60M with confining layers	Abstraction can be turned off and revert to treated water storage. Boil water notice can be issued. District plan or Building Act abatement notices can be served. Provision of tankered water The plant will shut down if the raw water turbidity exceeds 3.5 NTU	Compliance with consent conditions. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Reliable		WWM PDE
	Chemical Contamination	1.03	Surface runoff containing chemical contaminants from agricultural/commercial activities.	Possible	Moderate	Medium	Taste and or odour. Information provided by Regional pollution hotline or public. Source water chemical screen indicates chemicals. Regional Council SoE reporting	Implementation of Resource Management Planning Rules ie Regional Policy Statement, NES for Sources of Human Drinking-water. Subsequent treatment barriers oxidise some chemicals HSNO control on using and handling chemicals. Regional Water Plan	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advise water cannot be consumed.	Chemical suite, trends in raw water composition Regional Council HAIL list	Yes	Unlikely	Minor	Low	Y	Unsure		WWM PDE
	Chemical Contamination	1.04	Naturally occurring chemical contaminants e.g iron manganese	Almost Certain	Minor	High	Chemical analysis results identify chemical contaminants in excess of 50% of the DWSNZ MAVs	Subsequent treatment barriers oxidise some chemicals	If there are any indications of chemical contamination of the source water in excess of DWSNZ MAVs or at levels that could be harmful, consumers must be advised not to consume the water	Chemical suite results provide a biennial check, otherwise taste and odour complaints indicate contaminants are in surface water	Partially	Unlikely	Insignificant	Low	Y	Confident		WWM PDE
	Chemical Contamination	1.05	Chemical spill in recharge zone e.g traffic or boating accident in Wairoa river	Possible	Moderate	Medium	Notification or report to pollution hotline or emergency services call out pH of raw water. Taste and odour	Abstraction depths over 60M Bores set back from road, low traffic area.	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Timeliness of Reporting	Yes	Unlikely	Minor	Low	Y	Reliable	Develop notification procedures with NRC and Police to inform of chemical spills	WWM PDE
	Chemical Contamination	1.06	Use of herbicides or pesticides in recharge zone	Possible	Moderate	Medium	Source water chemical screen indicates chemicals. Regional Council SoE reporting. Weed control or pesticide controls programme operating	Weed control programmes conducted to minimise run off. HSNO controls on use and certified operators used. Abstraction depths over 60M with confining layers	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Defer or cease operation	Consents and approvals. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Reliable		WWM PDE
	Chemical Contamination	1.07	Saline intrusion	Possible	Minor	Medium	Source water chemical screen indicates salinity. Regional Council SoE reporting. Consumer complaints	Abstraction depths over 60M with confining layers. Consent controls on adjoin land use activities e.g wharf area	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Consents and approvals	Yes	Unlikely	Insignificant	Low	Y	Reliable		WWM PDE
	Loss of supply	1.08	Drought reduces quantity of water that can be abstracted	Possible	Catastrophic	High	Water levels and flow rates, weather conditions	Consent conditions for aquifer users. Visual checks. Regional Council monitoring programme provides for early detection.	Initiate water demand and conservation management Tanker supplies of treated water can be brought in during drought periods to overcome limitations of water source.	Catchment rainfall Monitor leakage and high flow rates, send contractor to investigate.	Partially	Unlikely	Moderate	Medium	Y	Reliable		WWM PDE
2. Bore and Well	Microbiological contamination	2.01	Bore casing, bore head or well structure failure allowing for contaminated water getting into the bore from shallow depths	Possible	Major	High	Positive E. Coli results from the bores or distribution system. Turbidity	Asset management and maintenance Bore head protection. Alarms at NTU >3.5	Treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Raw water turbidity Visual inspection of bore head and well structure E. coli results	Yes	Unlikely	Minor	Low	Y	Reliable	Inspect bore casing 2 yearly Schedule a CCTV inspection of the bore	WWM PDE
	Microbiological contamination	2.03	Flooding of the bore chamber	Possible	Major	High	Positive E. Coli results from the bores or distribution system. Weather/flooding Turbidity	Secure bore head protection installed including bore head above flood level Alarms at NTU >3.5	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Turbidity trends, particularly after heavy rain	Yes	Unlikely	Minor	Low	Y	Reliable		WWM PDE
	Loss of supply	2.04	Mechanical or electrical failure of bore pumps	Possible	Major	High	Positive E. Coli results from the bores or distribution system Flow logs from bores	Asset management and maintenance Multiple Bores	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Maintenance logs	Yes	Unlikely	Minor	Low	Y	Reliable		WWM PDE
	Loss of supply	2.05	Cannot abstract water due consent conditions	Unlikely	Major	Medium	Volume and flow to plants. Expiry date of existing resource consents.	Implementation of Resource Management Planning Rules SCADA shuts the plant down if volume exceeds the consent limit.	Renew before expiry.	Any changing Regional Council policy	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Loss of supply	2.06	Intentional vandalism or accidental damage to the bore head or well	Unlikely	Major	Medium	Volume and flow to plants. Visible damage, threats, reported suspicious activity	Exclusion zones around intakes and restricted access. Treated water storage. Legal deterrents. Intake structures designed to withstand some damage. Subsequent treatment barriers	Repairs, consumer advisory to conserve water	Raw water turbidity Access to intakes, recreational water use	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
3. Raw Water Main	Microbiological contamination	3.01	Ingress of surface/ground water into raw water line	Possible	Major	High	Positive E. Coli results from the bores or distribution system Pumping and leakage Turbidity	Land use around raw water main provides some protection (mostly reserve land) Maintenance & repairs Treated water storage Plant shut down >3.5 NTU	Treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Online turbidity Raw water sampling	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Loss of supply	3.02	Raw water main failure	Possible	Catastrophic	High	Reduced/no flow to treatment plant Low storage tank levels Condition and type of materials of main Condition assessment of raw main shows materials in poor condition	Maintenance & repairs Treated water storage	Incident response plan. Provision of tankered water	Raw water turbidity Records of rising main failures and repairs	Yes	Unlikely	Moderate	Medium	Y	Confident		WWM PDE
tnment	Particles not removed	4.01	Insufficient oxidation (pre and post balance tank)	Likely	Moderate	High	Sodium hypochlorite use Turbidity post filters	Oxidant dosing PLC controlled Treated water storage Subsequent treatment includes filtration barrier	Plant shut down if raw water >3.5NTU or pH outside 7-8 range	Raw water turbidity Balance tank level records	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M

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4. Pre-trea	Particles not removed	4.02	Insufficient (Filox) filtration of suspended solids, iron and manganese	Likely	Moderate	High	Pressure differential Turbidity post filters	3 x Filox allow redundancy backwash sequence to maintain production Back wash when filter pressure differential reaches set point or filter backwash at set cycle time or filter backwash at NTU setpoint Balance tank allows constant feed to filters Further filtration	Low balance tank level shuts of filtration	Turbidity Balance tank level records	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
5. Cartridge Filtration	Particles/protozoa not removed	5.01	Filter/cartridge malfunction including incorrect install/replacement	Likely	Major	High	Turbidity Filter pressure differential Leaks around housing Monitor High flow alarms	Trained operators Monitor Differential pressure and flow rates Filter housing chlorinated when changing the cartridge Water goes to waste for 3 minutes after start-up Treated water storage Maintenance & repairs	Replace the cartridge filter Identify short comings in staff training and rectify Shut down production Investigate VSD or any other cause of high flows	Filtered water turbidity Follow manufacturers instructions/speciation's Treatment plant manuals	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not removed	5.02	Filter media failure including breakthrough	Likely	Major	High	Filter pressure differential High turbidity in water leaving the filter	2x Harmsco Filters allow some redundancy Pre-treatment oxidation and Filox filters Turbidimeters on each filter Treated water storage	Replace filter cartridge - held onsite Shut down production >0.4NTU	Filtered water turbidity Flow rates	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not removed	5.03	Filter media failure including clogging	Likely	Major	High	Filter pressure differential Flow meters	Pre-treatment oxidation and Filox filters Turbidimeters on each filter Treated water storage	Clean or Replace filter cartridge - held onsite initiate water conservation measures	Filtered water turbidity Cleaning procedure	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles/Protozoa not removed	5.04	Backwash pump failure	Likely	Major	High	Backwash cycle doesn't happen. Increased post filter turbidity	Regular maintenance of backwash pumps Treated water storage	Shut down production	Filtered water turbidity Pumps monitored for noise and vibration	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.01	Inadequate contact time	Possible	Major	High	Calculation of retention time determines contact time is inadequate FAC levels E. Coli or elevated coliforms trends in verification testing	Contact time provided by reservoir and mains Groundwater source lower microbiological risk Pre-treatment controls chlorine demand	Chlorine dose point is set to 1.3mg/L (SCADA alarmed)	Contact time, Microbiological quality, Flow rates, Post treatment FAC and pH	Yes	Possible	Minor	Medium	Y	Reliable		OEWS WO&M
6. Chlorination	Inadequate disinfection	6.02	Sodium hypochlorite supply exhausted	Possible	Catastrophic	High	Illness in community. FAC is less than 0.2 mg/L or E. coli detected in water in the distribution system.	Supply agreement with IXOM Maintain 3 months chemical supply on-site FAC is continuously monitored on-line with alarms to operators and date telemetered Groundwater source lower microbiological risk Pre-treatment controls chlorine demand	Low chlorine contingency	Post treatment FAC Drums onsite/turnover	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.03	Dosing system failure	Likely	Catastrophic	Extreme	FAC is less than 0.2mg/L or E. coli detected in water in the distribution system.	Operator visits plant at least 2x week FAC is continuously monitored with alarms to operators and shut down on low chlorine dose Groundwater source lower microbiological risk Pre-treatment controls chlorine demand Supervised & trained operators	Repair and return to service Calibration of analyser	FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.04	Automated chlorine dose rate incorrect	Likely	Catastrophic	Extreme	FAC is less than 0.2 mg/L or higher or E. coli detected in water leaving the WTP	Chlorine dose rate is flow paced Operator visits the plant at least daily to check operation of chlorination system FAC is continuously monitored on-line with alarms to operators and date telemetered	If FAC sampling indicates incorrect FAC level, adjust dose rate as required	Post treatment FAC FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident	Update Operations and Maintenance manuals to reflect actual FAC target values as per actual practice.	OEWS WO&M
	Inadequate disinfection	6.05	Chlorine demand exceeds chlorine dose due to dissolved Fe & Mg	Possible	Catastrophic	High	High turbidity in water. Chlorine dose rate needs to be high to maintain an adequate residual FAC is less than 0.2 mg/L or E. coli detected in water leaving the WTP	Source water has turbidity monitored and alarms Operator visits the plant at least weekly to check operation of chlorination system FAC is continuously monitored with alarms to operators	Increase chlorine dose level Investigation filtration performance	Post treatment FAC FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.06	Lack of chlorine due to dosing line failure or leak.	Possible	Catastrophic	High	FAC is less than 0.2mg/L or E. coli detected in water leaving the WTP Strong chlorine smell at treatment plant	Operator visits the plant at least weekly to check operation of chlorination system FAC is continuously monitored with alarms to operators and date telemetered	Repair chlorine dosing line	Post treatment FAC FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	6.07	Dosing system failure.	Possible	Moderate	Medium	FAC level exceeds 1.3 mg/L setpoint leaving WTP Odour and taste complaints	Operator visits plant at least 2x week FAC is continuously monitored on-line with alarms to operators and date telemetered Pre-treatment controls chlorine demand Supervised & trained operators	Advise consumers if high chlorine FAC is delivered to the distribution zone Flush network if needed	Post treatment FAC Operation of chlorine dosing pump FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	6.08	Chlorine dose rate incorrect	Possible	Moderate	Medium	FAC level exceeds 1.3 mg/L setpoint leaving WTP Odour and taste complaints	Chlorine dose rate is flow paced Operator visits plant at least 2x week FAC is continuously monitored on-line with alarms to operators FAC>2.0mg/L Pre-treatment controls chlorine demand Supervised & trained operators	Advise consumers if high chlorine FAC is delivered to the distribution zone Flush network if needed	Post treatment FAC Operation of chlorine dosing pump FAC in reticulation system downstream of treatment plant	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Micro contamination	7.01	Leakage through reservoir roof or other parts of structure or access by birds or vermin.	Likely	Moderate	High	Visual evidence of leakage E. coli in water leaving reservoirs	Reservoir is covered and all entry hatches are locked against unauthorised access Regular inspection of reservoirs is carried out. Asset condition assessment Chlorine residual leaving reservoir monitored	Repair any reservoir leaks or bird and vermin access points without delay. Take out of service. Install replacement liners where feasible	Post reservoir FAC Leakage from reservoir Access points for birds and vermin Evidence of birds or vermin inside reservoir	Yes	Unlikely	Minor	Low	Y	Confident	Review measures for protecting reservoirs from foreign matter	OEWS WO&M
Micro /chem contamination	7.02	Vandalism or unauthorised entry to the storage reservoir	Possible	Moderate	Medium	E. coli in water leaving reservoir Reports from the public Evidence of damage or tampering with reservoir	Entry hatches locked against unauthorised access Reservoir is located on land with restricted access. Chlorine residual Operator site visits	Inspect reservoir in response to reports of suspicious activity	Post reservoir FAC Access hatches	Yes	Unlikely	Minor	Low	Y	Confident	Improve documentation and audit process for contractors working on reservoirs or other treated water services	OEWS WO&M	

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7. Storage	Micro contamination	7.03	Sediment accumulation within reservoir	Likely	Moderate	High	Visible suspended matter in water in distribution system Visible sludge in bottom of reservoir Complaints from consumers	Source has low sediment load and turbidity below 1 NTU Regular inspection of reservoir is carried out and cleaning undertaken if required	Isolate and clean reservoir as required	Post reservoir FAC Check accumulation of sediment in reservoir every 5 years Turbidity	Yes	Unlikely	Minor	Low	Y	Confident	Implement regular reservoir cleaning/scouring at a five year interval	OEWS WO&M
	Loss of supply	7.04	Failure of reservoirs	Unlikely	Catastrophic	High	Complaints from consumers about loss of supply or pressure Obvious signs of leakage or failure at reservoir site	Assesst condition assessments. Reservoirs are constructed of concrete and steel.	Isolate damaged or failing reservoir and supply directly from treatment plant or use other reservoirs	Visual assessment. Structural integrity of reservoir	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Loss of supply	7.05	Insufficient storage for peak demand	Possible	Catastrophic	High	Loss of water or pressure in reticulation Frequent low reservoir level	Planning controls on new development/connections Treated water storage provides 228m3 Designed to achieve 2 days peak flow storage	Introduce conservation and efficiency measures	Reservoir level	Partially	Unlikely	Moderate	Medium	Y	Confident	Develop policy on supply of water incl restriction thresholds. Develop policy on climate change and associated modelling	OEWS WO&M
8. Reticulation	Loss of water	8.01	Pump failure	Possible	Major	High	Loss of water or pressure in reticulation Frequent low reservoir level	Asset management, certified maintenance staff. Alarms	Incident management plan. Demand restrictions imposed	Reservoir level	Partially	Unlikely	Moderate	Medium	Y	Confident	Pumping- upgrade to duty and standby arrangement for pumping. Hold spares allowing for repair/replace <24hrs	OEWS WO&M
	Micro/Chem contamination	8.02	Inadequate controls on maintenance and construction work	Likely	Major	High	Complaints from consumers about taste or odour. E. coli present in reticulation system	Maintenance and replacement work is undertaken by trained qualified and experienced contractors. Specialist contractors used when required. Council audit of contractors	Implement a boil water notice as outlined in the contingency plan if the quality of the water supplied cannot be assured	Sanitation procedures and sanitation practices of contractors.	Yes	Unlikely	Minor	Low	Y	Confident	Review repairs for hygiene practice	OEWS WO&M
	Micro/Chem contamination	8.03	Backflow from consumer connections.	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste or odour complaints from consumers.	Council policy (Bylaw Part 16 - Water Supply). Maintain pressure in the supply (400kPa)	Implement a boil water notice as outlined in the contingency plan if there is evidence of a backflow event	Land-use and building use changes	Yes	Unlikely	Minor	Low	Y	Confident	Improve backflow protection programme. Check pressures during high demand	OEWS WO&M
	Loss of water	8.04	Unidentified leakage or illegal connections	Likely	Minor	Medium	Consumption exceeds calculated expectation	Known breaks and leaks repaired as a priority. Illegal connections identified	Repair leaks as priority. Disconnect or legitimise illegal connections	Suspicions of illegal connections	Yes	Unlikely insignificant	Minor	Low	Y	Reliable		OEWS WO&M
	Inadequate Supply	8.05	Poor quality workmanship or inappropriate materials used for reticulation pipes and fittings	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste and odour complaints from consumers	Water supply bylaw. Materials used in reticulation to meet standard specifications. SoPs, and best practice reticulation approach taken to reticulation installation/repairs. Asset management and pipe replacement programme. GIS management of network and materials	Redo work that has been poorly undertaken. Replace any materials that do not meet minimum specifications. Initiate incident management plan	Quality of work undertaken. Types of material used	Yes	Unlikely	Minor	Low	Y	Reliable	Reticulation - Improve audit and tracking process of SoPs. Ensure auditing of development manual requirements and contract requirements are undertaken	OEWS WO&M
	Sediment biofilm	8.06	Silt build up or biofilm within reticulation pipes	Likely	Minor	Medium	Reduced flows in reticulation. Complaints from consumer about quality of water. Low FAC readings in network. Reticulation NTU	Flushing undertaken in response to complaints. Regular dead end mains flushing	Undertake flushing as required	Dirty water complaints	yes	Unlikely	Minor	Low	Y	Reliable	Model network analysis to identify potential problem pressure areas Install a flushing point at the dead end of reticulation.	OEWS WO&M
9. Other	Operator error mismanagement	9.01	Inadequate training, professional development and up-skilling of operators	Likely	Major	High	Staff not provided with adequate ongoing training. Poor operation of plant. Plant compliance failure. Loss of supply. Vacancies. Staff feedback. WSP not properly understood and followed by staff. Failure of staff to follow KDC QA procedures	Experienced staff employed. Staff attend appropriate professional conferences and other professional development opportunities. Operators have or are completing the National Cert or Dip in Drinking Water Treatment. Appropriately experienced and qualified engineering personnel. Regular staff training for new staff in particular. Regular refresher and induction training for new staff. Contractor performance measures include completeness of required documentation and recording. Up to date QA and O&M manuals. Include key staff in the WSP process and provide training before and during implementation. Comprehensive O&M Manual for the supply	Review documentation. Provide in-house training where abilities are in deficit. Amend the contract if service levels are inappropriate and/ or Council audit reveals weaknesses Amend the WSP to include any new supply elements Refer to Contingency Plan	Documentation. Operator abilities, knowledge and training qualifications Training attendances	Yes	Unlikely	Moderate	Medium	Y	Reliable		OEWS WO&M
	Operator error mismanagement	9.02	Inadequate supply planning and management	Likely	Major	High	Lowering levels of service. Consents not renewed. Capital costs uncontrolled. Failing infrastructure strategy. 3rd party audits e.g OAG. Reduction in funding	Relevant statutory obligations ie LGA, RMA, Council policies. Sub regional three waters strategy. Infrastructure planning team	Apply contingencies for changes in legislation or other key planning considerations	New Legislation, regulations or Standards. Residential and industrial growth/connections	Yes	Possible	Moderate	Medium	Y	Confident		OEWS WO&M
	Sampling Failure	9.03	Inadequate sampling programme or sample collection error.	Likely	Moderate	High	DWSNZ compliance failure due to days of week, days between samples, insufficient samples, information gaps, positive results or sampling error	Sampling programme prepared and checked against standards. IANZ accredited laboratory	Review sampling programme	Sampling programme against DWSNZ	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Unidentified Operational Failure	9.04	Insufficient monitoring and alarming of key operational data	Almost Certain	Major	Extreme	Contamination identified in supply. Operational near miss identified. Inadequate information collected to provide confidence in supply operation	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Operators validate treatment plant equipment weekly and calibrate equipment as required	Undertake manual grab sampling if required. Initiate incident management plan.	Trends and alarms of Cl2, pH and turbidity continuous monitoring	Yes	Unlikely	Minor	Low	Y	Confident	Data - review SCADA management	OEWS WO&M
	Inadequate Maintenance	9.05	Supply equipment fails due to inadequate asset information and inadequate maintenance planning	Almost Certain	Moderate	High	Unexpected plant equipment failure.	Annual check and servicing of the chlorine dosing equipment with overhaul every two years Subcontractor agreements Active preventive maintenance programme in place	Attend to failure as a priority Plan to renew or improve assets as required	Condition and forward planning for asset renewal asset register and maintenance programme	Yes	Unlikely	Minor	Low	Y	Reliable		OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Confidence	Additional Measures	Resp
	Failing to meet DWSNZ	9.06	Treatment processes of the water supply are not sufficient to comply with the requirements of the DWSNZ	Almost Certain	Major Extreme	Insufficient treatment processes at the treatment plant to comply with the DWSNZ	Continuous on-line alarmed monitoring for pH and turbidity at the treatment plant. Chlorination. E.coli and FAC monitoring	Implement boil water notice if safety of supply cannot be guaranteed	DWSNZ compliance data	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failure to Provide Safe Water	9.07	Inadequate data collection, reporting and control systems	Likely	Moderate High	Information about how the supply is operating is not available. Manual collection and recording of data. IT failure	Continuous on-line alarmed monitoring for pH, NTU, FAC at the treatment plant	Undertake manual grab sampling if required	Trends and alarms of continuous monitoring	Yes	Possible	Moderate	Medium	Y	Confident	Conduct a review of data storage capacity at treatment plants and remote RTU sites. Conduct a review of data collection, Storage and validation	OEWS WO&M
	Microchem contamination	9.08	Vandalism to plant equipment	Possible	Major High	Obvious signs of damage to treatment or storage equipment Reduced/no flow to treatment plant or distribution system	Controls and treatment plant are in robust concrete block buildings. Supply equipment is visited and checked regularly. Legal deterrents, ie prosecution	Implement boil water notice if safety of supply cannot be guaranteed. Activate incident management plan. Provision of tankered water	Condition of treatment buildings and equipment	Yes	Rare	Moderate	Low	Y	Confident	Establish security policy	OEWS WO&M
	Loss of Supply	9.09	Power fault or outage	Possible	Catastrophic High	Power Company notifies planned outages Plant production	Maintenance inspection of internal wiring	Introduce conservation and efficiency measures Provision of tankered water	Bring in emergency generator	Partially	Unlikely	Moderate	Medium	Y	Confident	Install on-site electricity generator interface	OEWS WO&M
	Total Plant Failure	9.10	Catastrophic natural disaster or failure including earthquake and flooding	Rare	Catastrophic Medium	Major natural disaster occurs. Intense sustained weather. Flooding. Total plant failure is evident. Warnings from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police.	Prior warning from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police. Robust secure plant structures and buildings. Business continuity plan in place and exercised. Emergency response plan	Implement all measures necessary to ensure plant continues to operate in a natural disaster	Prior warnings issued by Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police	Partially	Rare	Major	Medium	Y	Reliable	Complete ERP	OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
1. Spring recharge zone	Microbiological contamination	1.01	Surface contamination from farming/ag activities in the adjacent area	Unlikely	Catastrophic	High	High raw water E. coli results, Turbidity in raw water, Prolonged heavy rain, extreme weather events, Illness in community	Implementation of Resource Management Planning Rules ie Regional Policy Statement, NES for Sources of Human Drinking-water. Land use consents. Subsequent treatment barriers effective against microbiological contamination. Immediate area around spring is fenced and protected	Abstraction can be turned off and revert to treated water storage. Boil water notice can be issued. Incident response plan. Provision of tankered water	Effectiveness of disinfection barriers, source water monitoring results Land use changes. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Microbiological contamination	1.02	Surface contamination directly around infiltration gallery, ie animals/birds	Almost Certain	Catastrophic	Extreme	Animals and Birds in spring area. Illness in community	Infiltration gallery buried and not directly exposed to contamination Subsequent treatment barriers effective against microbiological contamination. Abstraction area fenced off	Abstraction can be turned off and revert to treated water storage. Boil water notice can be issued. Incident response plan. Provision of tankered water	Effectiveness of disinfection barriers, source water monitoring results Land use changes. Weekly applications received from NRC for consents Signs of animals/birds	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Chemical Contamination	1.03	Surface runoff containing chemical contaminants from agricultural activities.	Unlikely	Moderate	Medium	Taste and or odour, information provided by Regional pollution hotline or public. Source water chemical screen indicates chemicals. Regional Council SoE reporting	Implementation of Resource Management Planning Rules , NES for Sources of Human Drinking-water. Subsequent treatment barriers oxidise some chemicals HSNO control on using and handling chemicals Regional Water Plan, Clean streams accord	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advise water cannot be consumed.	Chemical suite, trends in raw water composition Regional Council HAIL list	Yes	Rare	Minor	Low	Y	Reliable		WWM PDE
	Chemical Contamination	1.04	Chemical spill in recharge zone e.g traffic accident on Red Hill Road or Glinks Road above intake	Unlikely	Moderate	Medium	Notification or report to pollution hotline or emergency services call out pH of raw water	Roading set back from abstraction area Attenuation from area directly around spring	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Timeliness of Reporting	Yes	Rare	Minor	Low	Y	Confident	Develop notification procedures with NRC and Police and schedule any raw water sampling.	WWM PDE
	Chemical Contamination	1.05	Use of herbicides or pesticides in recharge zone	Possible	Moderate	Medium	Source water chemical screen indicates chemicals. Regional Council SoE reporting. Weed control or pesticide controls programme operating	Weed control programmes conducted in a manner to minimise run off. HSNO controls on use and certified operators used. Attenuation from area directly around spring	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Defer or cease HSNO operation	Consents and approvals. Weekly applications received from NRC for consents	Yes	Unlikely	Minor	Low	Y	Confident		WWM PDE
	Loss of supply	1.07	Drought reduces quantity of water that can be abstracted	Unlikely	Catastrophic	High	Water levels and flow rates, weather conditions	Consent conditions prioritise water take. Visual checks. Regional Council monitoring programme provides for early detection. Treated water storage	Initiate water demand and conservation management Tanker supplies of treated water can be brought in during drought periods to overcome limitations of water source.	Catchment rainfall Monitor leakage and high flow rates, send contractor to investigate.	Partially	Unlikely	Moderate	Medium	Y	Reliable	Investigate options of increasing supply during peak through capacity of the raw water supply line or increasing storage	WWM PDE
2. Abstraction	Microbiological contamination	2.01	Infiltration gallery failure allowing for contaminated water getting into gallery from shallow depths	Possible	Catastrophic	High	Raw water reservoir level Positive E. Coli results from distribution system	Monthly inspections Asset management and maintenance	Treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Raw water turbidity Visual inspection of abstraction area E. coli results	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Loss of supply	2.02	Cannot abstract water due consent conditions	Unlikely	Major	Medium	Volume and flow to plants. Expiry date of existing resource consents.	Implementation of Resource Management Planning Rules Current consent up to 100m3 /day	Renew before expiry.	Any changing Regional Council policy	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Loss of supply	2.03	Intentional vandalism or accidental damage to gallery	Unlikely	Major	Medium	Raw water reservoir level Volume and flow to plants. Visible damage, threats, reported suspicious activity	Monthly inspections. Site is remote Legal deterrents. Gallery can withstand some damage. Subsequent treatment barriers Treated storage.	Repairs, consumer advisory to conserve water	Raw water turbidity Access to red hill springs	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
3. Raw Water Main	Microbiological contamination	3.01	Ingress of surface/ground water into raw water line	Possible	Major	High	Raw water reservoir level Turbidity Positive E. Coli results from distribution system Signs of leaks of surface	Land use around raw water main provides some protection (mostly reserve land) Maintenance & repairs Treated water storage. Subsequent treatment barriers	Treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water Plant shut down	Line between gallery and treatment plant	Yes	Unlikely	Minor	Low	Y	Reliable		OEWS WO&M
	Loss of supply	3.02	Raw water main failure	Possible	Catastrophic	High	Reduced/no flow to treatment plant Low storage tank levels Condition and type of materials of main Condition assessment of raw main shows materials in poor condition	Maintenance & repairs Treated water storage	Incident response plan. Provision of tankered water	Line between gallery and treatment plant Records of rising main failures and repairs	Yes	Unlikely	Minor	Low	Y	Reliable		OEWS WO&M
4. Pretreatment	Particles not removed	4.01	Pressure Multi Media Sand Filter - insufficient filtration of suspended solids, particles (15 micron)	Likely	Moderate	High	Pressure differential Flows Clogging of next filters in series Treated water turbidity	Treated water back wash when filter pressure differential reaches set point or weekly backwash Subsequent treatment includes filtration barrier Trained operators	Plant shut down Repairs, consumer advisory to conserve water	Maintenance records Pressure differential weekly NTU weekly	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles not removed	4.02	Jumbo Filter - insufficient filtration of suspended solids, particles (5 micron)	Likely	Major	High	Pressure differential Flows Clogging of next filters in series Treated water turbidity	Previous filtration Treated water storage Subsequent treatment includes filtration barrier Trained operators. Spare cartridges onsite	Replace filter cartridge Repairs, consumer advisory to conserve water	Maintenance records Pressure differential weekly NTU weekly	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Particles not removed	4.03	Filterite Filter - insufficient filtration of suspended solids, particles (1 nominal/1 absolute)	Likely	Major	High	Pressure differential Flows Clogging of next filters in series Treated water turbidity	Previous filtration Treated water storage Subsequent treatment includes filtration barrier Trained operators Spare cartridges onsite	Replace filter cartridge Repairs, consumer advisory to conserve water	Maintenance records Pressure differential weekly NTU weekly	Yes	Unlikely	Minor	Low	Y	Confident	Investigate options of installing inline turbidity monitoring equipment	OEWS WO&M
n	Inadequate disinfection	5.01	Inadequate contact time	Possible	Major	High	Calculation of retention time determines contact time is inadequate FAC levels. E. Coli or elevated coliforms trends in verification testing	Contact time provided by reservoir and mains Groundwater source lower microbiological risk Pretreatment controls chlorine demand	Chlorine dose point is set to 0.8 mg/L	Contact time. Microbiological quality, Flow rates, Post treatment FAC and pH weekly	Yes	Unlikely	Minor	Low	Y	Unsure		OEWS WO&M
	Inadequate disinfection	5.02	Sodium hypochlorite supply exhausted	Possible	Catastrophic	High	Illness in community. FAC is less than 0.2 mg/L or E. coli detected in water in the distribution system.	Supply agreement with IXOM Maintain 3 months chemical supply on-site Groundwater source lower microbiological risk Pretreatment controls chlorine demand	Abstraction can be turned off and revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Post treatment FAC - 2x weekly Containers onsite/turnover	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M

	Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
5. Glinks Treatment Plant - Chlorination	Inadequate disinfection	5.03	Dosing system failure		Likely	Catastrophic	Extreme	FAC is less than 0.2mg/L or E. coli detected in water in the distribution system.	Operator visits plant at least 2x week Groundwater source lower microbiological risk Pretreatment controls chlorine demand Supervised & trained operators	Repair and return to service All staff trained in dosing operation. Revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Operation of chlorine dosing pump Post treatment FAC - 2x weekly Containers onsite/turnover	Yes	Unlikely	Minor	Low	Y	Confident	Investigate option of installing inline chlorine monitoring equipment	OEWS WO&M
	Inadequate disinfection	5.04	Automated chlorine dose rate incorrect		Likely	Catastrophic	Extreme	FAC is less than 0.2 mg/L or higher or E. coli detected in water leaving the WTP	Chlorine dose rate is flow paced Operator visits plant at least 2x week	If FAC sampling indicates incorrect FAC level, adjust dose rate as required	Post treatment FAC	Yes	Unlikely	Minor	Low	Y	Confident	Update Operations and Maintenance manuals to reflect actual FAC target values.	OEWS WO&M
	Inadequate disinfection	5.05	Lack of chlorine due to dosing line failure or leak.		Possible	Catastrophic	High	FAC is less than 0.2mg/L or E. coli detected in water leaving the WTP Strong chlorine smell at treatment plant	Maintenance Operator visits plant at least 2x week	Repair chlorine dosing line Revert to treated water storage. Incident response plan. Consumers advised water cannot be consumed. Provision of tankered water	Post treatment FAC	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	5.06	Dosing system failure.		Possible	Moderate	Medium	FAC level exceeds 2 mg/L. Odour and taste complaints	Maintenance Operator visits plant at least 2x week	Advise consumers if high chlorine FAC is delivered to the distribution zone	Post treatment FAC Operation of chlorine dosing pump FAC alarms, on-line data and in distribution zone	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Over Chlorination	5.07	Chlorine dose rate incorrect		Possible	Moderate	Medium	FAC is more than 1.6 mg/L in water leaving the WTP Odour and taste complaints	Maintenance Operator visits plant at least 2x week	Advise consumers if high chlorine FAC is delivered to the distribution zone	Post treatment FAC Operation of chlorine dosing pump FAC in reticulation system downstream of plant	Yes	Unlikely	Minor	Low	Y	Confident	Test for Disinfection by-products after moderate to heavy rainfall at the end of the reticulation network	OEWS WO&M
6. Glinks Treatment Plant - UV	Inadequate disinfection	6.01	UV intensity insufficient due to build-up of deposits on sleeve		Likely	Catastrophic	Extreme	E. coli detected in water leaving the plant or illness in the community. Visible build-up of deposits on sleeve and sensor lens	Routine cleaning and maintenance schedule for lamp sleeves and UV sensor. Regular replacement of UV lamp. UVI reference sensor checked regularly and calibrated annually	Clean UV sleeves, Undertake cleaning and maintenance Change lamps, isolate faulty lamp Incident Response plan. Increase chlorine dosing in reservoir	UV Intensity weekly UV hours weekly	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.02	Flow rate through UV unit too rapid for effective treatment		Likely	Catastrophic	Extreme	Flow rate through plant greater than UV unit maximum	Restricted to 75L/min	Slow plant flow rate to that which is optimal for UV units Recalculate dose rates and change flow settings	Flow rates Maintenance records of flow rate controller	Yes	Rare	Moderate	Low	Y	Confident		OEWS WO&M
	Inadequate disinfection	6.03	Excessive turbidity/colour in water decreasing the effectiveness of the UV treatment (UVT too low)		Likely	Catastrophic	Extreme	High turbidity levels detected in raw water E. coli detected in water or illness in the community	Water receives filtration. Setpoints within validation conditions and are controlled by the supplier Regular replacement and maintenance of filters	Clean filters Replace filter cartridge	NTU, UVT Filter maintenance schedule	Yes	Unlikely	Minor	Low	Y	Confident	Develop a system of internal checking of important procedures such as calibration	OEWS WO&M
	Inadequate disinfection	6.04	Power failure resulting in UV unit being unable to work		Possible	Catastrophic	High	Alarms	Alarm to indicate power failure Regular maintenance of UV power supply	Replace faulty equipment Close the supply until power is restored and arrange for another supply of water Consider manual dosing of chlorine	Power supply maintenance schedule Maintenance log and schedule for equipment	Yes	Possible	Minor	Medium	Y	Confident	Investigate agreement for priority allocation of generators	OEWS WO&M
7. Storage	Micro contamination	7.01	Leakage through reservoir roof or other parts of structure or access by birds or vermin.		Likely	Moderate	High	Visual evidence of leakage E. coli in water leaving reservoirs	Reservoir is covered and all entry hatches are locked against unauthorised access Regular inspection of reservoirs is carried out. Asset condition assessment Chlorine residual	Repair any reservoir leaks or bird and vermin access points without delay. Take out of service. Install replacement liners where feasible	Post reservoir FAC Leakage from reservoir Access points for birds and vermin Evidence of birds or vermin inside reservoir	Yes	Unlikely	Minor	Low	Y	Confident	Review measures for protecting reservoirs from foreign matter	OEWS WO&M
	Micro/chem contamination	7.02	Vandalism or unauthorised entry to the storage reservoir		Possible	Moderate	Medium	E. coli in water leaving reservoir Reports from the public Evidence of damage or tampering with reservoir	Reservoir is a large concrete structure with all entry hatches locked against unauthorised access Reservoir is located on land with restricted access. Chlorine residual Operator site visits	Inspect reservoir in response to reports of suspicious activity	Post reservoir FAC Access hatches	Yes	Unlikely	Minor	Low	Y	Confident	Improve documentation and audit process for contractors working on reservoirs or other treated water services	OEWS WO&M
	Microbiological contamination	7.03	Sediment accumulation within reservoir		Likely	Moderate	High	Visible suspended matter in water in distribution system Visible sludge in bottom of reservoir Complaints from consumers	Source has low sediment load and turbidity below 1 NTU Regular inspection of reservoir is carried out and cleaning undertaken if required	Isolate and clean reservoir as required	Post reservoir FAC Check accumulation of sediment in reservoir every 5 years	Yes	Unlikely	Minor	Low	Y	Reliable	Implement regular reservoir cleaning/scouring at a five year interval	OEWS WO&M
	Loss of supply	7.04	Failure of reservoirs		Unlikely	Catastrophic	High	Complaints from consumers about loss of supply or pressure Obvious signs of leakage or failure at reservoir site	Asset condition assessments. Reservoirs are constructed of concrete and steel.	Isolate damaged or failing reservoir and supply directly from treatment plant or use other reservoirs	Visual assessment. Structural integrity of reservoir	Yes	Rare	Minor	Low	Y	Confident	Installation of seismic valves storage reservoirs	OEWS WO&M
	Loss of supply	7.05	Insufficient storage for peak demand		Possible	Catastrophic	High	Loss of water or pressure in reticulation Frequent low reservoir level	Planning controls on new development and connections Treated water storage provides 228m3 Designed to achieve 2 days peak flow storage	Introduce conservation and efficiency measures	Reservoir level	Yes	Likely	Minor	Medium	Y	Confident		OEWS WO&M
8. Reticulation	Loss of water	8.01	Pump failure		Possible	Major	High	Frequent low reservoir level	Asset management, certified maintenance staff.	Incident management plan. Demand restrictions imposed	Reservoir level	Yes	Unlikely	Moderate	Medium	Y	Confident	Pumping- upgrade to duty and standby arrangement for pumping. Hold spares allowing for repair/replace <24hrs	OEWS WO&M
	Micro/Chem contamination	8.02	Inadequate controls on maintenance and construction work		Likely	Major	High	Complaints from consumers about taste or odour. E. coli present in reticulation system	Maintenance and replacement work is undertaken by trained qualified and experienced contractors. Specialist contractors used when required. Council audit of contractors	Implement a boil water notice as outlined in the contingency plan if the quality of the water supplied cannot be assured	Sanitation procedures and sanitation practices of contractors.	Yes	Unlikely	Minor	Low	Y	Reliable	Review repairs for hygiene practice	OEWS WO&M
	Micro/Chem contamination	8.03	Backflow from consumer connections.		Likely	Moderate	High	Contaminants identified in the reticulation system. Taste or odour complaints from consumers.	Implementation of bylaw. Maintain pressure in the supply	Implement a boil water notice as outlined in the contingency plan if there is evidence of a backflow event	Land-use and building use changes	Yes	Unlikely	Minor	Low	Y	Unsure	Improve backflow protection programme. Check pressures during high demand	OEWS WO&M
	Loss of water	8.04	Unidentified leakage or illegal connections		Likely	Minor	Medium	Water loss	Known breaks and leaks repaired as a priority. Illegal connections identified	Repair leaks as priority. Disconnect or legitimise illegal connections	Suspicious of illegal connections	Yes	Unlikely	Insignificant	Low	Y	Unsure		OEWS WO&M

Stage	Event	No.	Cause	Likelihood	Consequence	Max Risk	Indicators	Preventive measures in place	Correction Actions	What to Check	Risk Managed	Likelihood	Consequence	Residual Risk	Acceptable	Certainty	Additional Measures	Resp
9. Other	Inadequate Supply of Water	8.05	Poor quality workmanship or inappropriate materials used for reticulation pipes and fittings	Likely	Moderate	High	Contaminants identified in the reticulation system. Taste and odour complaints from consumers	Materials used in reticulation to meet standard specifications. Asset management and pipe replacement programme. GIS management of network and materials	Redo work that has been poorly undertaken. Replace any materials that do not meet minimum specifications. Initiate incident management plan	Quality of work undertaken. Types of material used	Yes	Unlikely	Minor	Low	Y	Confident		OEWS WO&M
	Sediment/biofilm formation	8.06	Silt build up or biofilm within reticulation pipes	Likely	Minor	Medium	Reduced flows in reticulation. Complaints from consumer about quality of water. Low FAC readings in network. Reticulation NTU	Flushing undertaken in response to complaints. Regular dead end mains flushing	Undertake flushing as required	Dirty water complaints	Yes	Unlikely	Minor	Low	Y	Unsure		OEWS WO&M
	Operator error mismanagement	9.01	Inadequate training, professional development and up-skilling of operators	Likely	Major	High	Staff not provided with adequate ongoing training. Poor operation of plant. Plant compliance failure. Loss of supply.	Experienced staff employed. Operators have or are completing the National Cert or Dip in Drinking Water Treatment. Appropriately experienced and qualified engineering personnel. Active preventive maintenance programme in place	Review documentation. Provide in-house training where abilities are in deficit. Standard Operating Procedures, O&M manuals available for staff	Documentation. Operator abilities, knowledge and training qualifications	Yes	Possible	Moderate	Medium	Y	Reliable	Create an O&M Manual for the Glinks Gully Water Supply Develop a quality assurance system for monitoring and instrument calibration	OEWS WO&M
	Op's error mismanagement	9.02	Inadequate supply planning and management	Likely	Major	High	Lowering levels of service. Consents not renewed. Capital costs uncontrolled. Failing infrastructure strategy. 3rd party audits e.g OAG. Reduction in funding	Relevant statutory obligations ie LGA, RMA, Council policies. Sub regional three waters strategy. Infrastructure planning team	Apply contingencies for changes in legislation or other key planning considerations	New Legislation, regulations or Standards. Residential and industrial growth/connections	Yes	Unlikely	Moderate	Medium	Y	Reliable		OEWS WO&M
	Sampling Failure	9.03	Inadequate sampling programme or sample collection error.	Likely	Moderate	High	DWSNZ compliance failure due to days of week, days between samples, insufficient samples, information gaps, positive results or sampling error	Sampling programme prepared and checked against standards. IANZ accredited laboratory	Review sampling programme	Sampling programme against DWSNZ	Yes	Unlikely	Minor	Low	Y	Unsure		OEWS WO&M
	Unidentified Op's Failure	9.04	Insufficient monitoring and alarming of key operational data	Almost Certain	Major	Extreme	Contamination identified in supply. Operational near miss identified. Inadequate information collected to provide confidence in supply operation	Operators validate treatment plant equipment weekly and calibrate equipment as required	Undertake manual grab sampling if required. Initiate incident management plan.	Manual readings	Partially	Unlikely	Moderate	Medium	Y	Confident	Review calibration procedure for all monitoring equipment	OEWS WO&M
	Failure from poor maintenance	9.05	Supply equipment fails due to inadequate asset information and inadequate maintenance planning	Almost Certain	Moderate	High	Unexpected plant equipment failure.	Annual check and servicing of the chlorine dosing equipment with overhaul every two years Subcontractor agreements Active preventive maintenance programme in place	Attend to failure as a priority Plan to renew or improve assets as required	Condition and forward planning for asset renewal asset register and maintenance programme	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failing DWSNZ	9.06	Treatment processes of the water supply are not sufficient to comply with the requirements of the DWSNZ	Almost Certain	Major	Extreme	Insufficient treatment processes at the treatment plant to comply with the DWSNZ	Target Section 10 DWSNZ. Chlorination. E.coli and FAC monitoring	Implement boil water notice if safety of supply cannot be guaranteed	DWSNZ compliance data	Yes	Unlikely	Moderate	Medium	Y	Confident		OEWS WO&M
	Failure to Provide Safe Water	9.07	Inadequate data collection, reporting and control systems	Likely	Moderate	High	Information about how the supply is operating is not available. Manual collection and recording of data. IT failure	Target Section 10 DWSNZ. Chlorination. E.coli and FAC monitoring	Undertake manual grab sampling if required	Trends and alarms of Cl2, UVT, pH and turbidity manual monitoring	Yes	Possible	Minor	Medium	Y	Confident	Install SCADA telemetry system as well as alarm	OEWS WO&M
	Micro/Chem contamination	9.08	Vandalism to plant equipment	Possible	Major	High	Obvious signs of damage to treatment or storage equipment Reduced/no flow to treatment plant or distribution system	Controls and treatment plant are in robust concrete block buildings. Supply equipment is visited and checked regularly. Legal deterrents, ie prosecution	Implement boil water notice if safety of supply cannot be guaranteed. Activate incident management plan. Provision of tankered water	Condition of treatment buildings and equipment	Yes	Rare	Moderate	Low	Y	Confident	Establish security policy	OEWS WO&M
Total Plant Failure	Loss of Supply	9.09	Power fault or outage	Possible	Catastrophic	High	Notification from Power Company of planned outages Pressure loss	Maintenance inspection of internal wiring	Introduce conservation and efficiency measures Provision of tankered water	Bring in emergency generator	Partially	Unlikely	Moderate	Medium	Y	Confident	Install on-site electricity generator interface	OEWS WO&M
		9.10	Catastrophic natural disaster or failure including earthquake and flooding	Rare	Catastrophic	High	Major natural disaster occurs. Intense sustained weather. Slips, flooding. Total plant failure is evident. Warnings from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police.	Prior warning from Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police. Emergency response plan	Implement all measures necessary to ensure plant continues to operate in a natural disaster	Prior warnings issued by Govt agencies incl Met Office, Niwa, Civil Defence, Regional Council or Police	Partially	Rare	Major	Medium	Y	Unsure		OEWS WO&M

Health and safety update

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Hannah Gillespie, GM People and Capability

Purpose/Ngā whāinga

To update the committee on Kaipara Council's health and safety performance for the second quarter, January – March 2020.

Executive summary/Whakarāpopototanga

This report and its attachments provide key information that addresses Organisational Health, Safety and Wellness matters at a governance level.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes the health and safety update for January to March 2020.

Context/Horopaki

Under the Health and Safety at Work Act 2015, all elected members are deemed officers and must exercise a duty of due diligence in relation to health and safety.

The elected members' role is to provide strategic direction to the business, to oversee the management of business risks to ensure that the PCBU (Persons Conducting a Business or Undertaking) has available for use, and uses, appropriate resources and processes to eliminate or minimise risks to health and safety from work carried out as part of the conduct of the business or undertaking.

Discussion/Ngā kōrerorero

Analysis and advice

To ensure Council is informed on the current state of health and safety performance and meeting legal health and safety obligations, we submit the following:

- Risks/Issues/Mitigations - Verify the provision and use of these resources and processes
- How we are meeting our due diligence duties.

People & Capability Owned H&S Risk/Issues as at 31 May 2020

Risk	Progress Report - Comments/Details	Due
Occupational Driving	Overspeed Guidelines for Managers has just been finalised and is due for review. The Safe Driving Standard will then be reviewed.	Dec 20
Fire Safety Compliance	Drills are overdue due to COVID-19 but have been rescheduled for the end of the financial year. Dargaville office has all wardens trained however with working from home may come the need to identify and train more wardens up to cover the lack of reliability of staff being 'at work' to respond to an emergency.	H&SS June 20
Workplace Incident/ Emergencies	Various incidents are the catalyst for an investigation into staff safety and security. Combined reports and action plan now sit for review by the GM Customer Experience.	GM P&C to review monthly
Working Alone/ Remote work	Various incidents are the catalyst for an investigation into staff safety and security. Combined reports and action plan now sit for review by the GM Customer Experience. H&S is liaising with service providers to provide an after-hours incident notification service due to no staff being employed to be on call. There is also a need to urgently review the numbers of INREACH units to ensure staff can comply with the H&S Standard for Lone Working. Personal Duress is another area which urgently needs to be reviewed with AMO's now coming inhouse. Matter is sitting with GM Customer Experience as the risk lays within that work unit.	GM P&C + CSX To review monthly
Staff Security/ Aggressive customers	Various incidents have instigated an investigation into staff safety and security. Combined recommendations, reports and action plans now sit for review by the GM Customer Experience. Each Department/Business Unit is responsible for identifying risks during their annual review of their risk registers.	GM P&C + CSX To review monthly
Organisational Health, Safety, Environment & Quality (HSEQ) performance reporting, evaluation & assurance	GM People & Capability is the risk owner – this has been identified in the Health and Safety Management System (HSMS) Review. An Organisational H&S Strategy is near completion and this will detail the H&S Plan with targets and objectives to be incorporated into various Department Business Plans 20/21. These KPIs have been broken into Contractor HSE Performance and Organisational HS Performance as there are two different risk owners, being GM Infrastructure Services (to include NTA) and GM People & Capability respectively. Work has started on a H&S Planning and H&S Assurance Standards	H&SS June 20 *Sep 20
Communications/ Important Messages/Tasks	Commence investigation into more appropriate ways of communicating where we can ensure that safety messages are relayed to staff across council. Numerous occasions where T2 & T3 Managers have not onforwarded important messages or completed tasks requested.	GM P&C

Risk	Progress Report - Comments/Details	Due
Staff Mental Wellbeing	<p>Additional providers have been engaged to provide EAP services.</p> <p>Mental Health First Aid training has been completed to Peer Support Officers. Training was scheduled for T3 and Executive Team staff including resilience workshops. Training budget will need to be reviewed.</p>	<p>Completed</p> <p>Dec 20</p>
Hazard Identification & Risk Management	Review has just been completed of the Organisational H&S Risks and new risk register has been submitted to Executive Team.	Completed
Incident reporting, investigation and escalation	<p>Budgeting for three staff to attend ICAM training in the 20/21 Business Plan.</p> <p>Council still relies on manual reporting and recording on excel spreadsheet. HRIS – Fusion 5 – H&S module is scheduled for installation by June 2021</p>	Dec 20
Employee consultation and engagement	<p>H&S Representative Meeting was held in April. H&S Meetings for each Workgroup to be scheduled quarterly with any unresolved items to be escalated to the H&S Committee.</p> <p>TOR will need to be reviewed accordingly.</p>	<p>Completed</p> <p>Dec 20</p>
H&S training & competencies	Further work is being done on the H&S Training & Competencies Matrix in anticipation for the HRIS system.	Ongoing
H&S Resourcing	<p>Staff resourcing is regularly reviewed in line with the significant demands of this ever-evolving portfolio.</p> <p>Budget has been reviewed for training and management of H&S issues.</p>	<p>GM P&C</p> <p>Completed</p>
Injury Management	<p>Injury management and rehabilitation has historically been handled in an ad hoc fashion. The need for a H&S Standard has been identified. Some forms have been developed to assist with staff returning to work after injury.</p>	Mar 21
Legal Compliance	A requirement of ISO 45001 is that council maintains a H&S legal register but does not currently exist.	Dec 20

Other Division Owned H&S Risk/Issues as at 31 May 2020

Risk	Progress Report – Comments/Details
H&S in Events Mgt	There has been a committee and subcommittee established to rectify this however there appears to be issues with ownership of the portfolio and staff resourcing, which will hope to be resolved in the proposed restructure. There appears to be gaps in some officer knowledge of fundamental H&S principles in relation to PCBU/asset risk
H&S in Community Grants	GM Engagement and Transformation is taking the lead in this review (as risk owner).
H&S in Volunteer associations/groups working for council on council assets	GM Engagement and Transformation in is taking the lead in this review (as risk owner).
H&S in Contractor Mgt	GM Infrastructure Services is continuing to review this activity and there are monthly meetings to track progress. Clarity around roles and responsibilities is an area for improvement fragmented.
H&S in Procurement	GM Infrastructure Services is taking the lead in this review (as risk owner).
H&S in Fleet Management	GM Infrastructure is taking the lead in this review (as risk owner)
H&S in Building/Asset/Facility	GM Infrastructure is taking the lead in this review (as risk owner)

Acronyms:

CSX	Customer Experience
EAP	Employee Assistance Programme
GM	General Manager
H&SS	Health and Safety Specialist
HSMS	Health & Safety Management System
HSR	Health and Safety Representatives
P&C	People & Capability Unit



Achievements

COVID-19

We are currently in an unprecedented time as a Council with Covid-19. Our response to date has been measured and forward thinking in relation to our regional peers. In many ways we were ahead of the response.

Staff have been surveyed during this period to get an understanding on our response and whether we have any gaps that need addressing.

Pleasingly 88% of the 123 respondents were favourable in the company confidence to Covid-19.

IMPACT ▼	QUESTION	FAVORABLE SCORE	TREND	COMPARISON
N/A	I have confidence in Kaipara District Council's response to the COVID-19 Pandemic	5  89	—	—
N/A	Kaipara District Council is supporting employees during the COVID-19 Pandemic	5  87	—	—

We have also shared nationally with SOLGM our protocols and procedures for level 2&3 under covid-19 to the CE, Mayors and Chairs group.

Staff have a strong level of confidence with the leadership during this period.

Elected members received H&S Due Diligence training 18 March (presented by Simpson and Grierson).

Infrastructure improvements:

- Site inspection Pre-start Hazard checklist implemented
- Inspection and Hazard & Risk Guidelines handbook created
- NTA, W&W and P&R Traffic Management Plans improved and updated
- Vehicle kits created containing all the above documentation
- Infrastructure master register created containing training, PPE, equipment, calibrations, chemicals and inoculations
- Systems in place requiring contractors and consultants to submit Site Specific Safety plans to include Covid-19 protocols
- Systems in place for staff site visits requiring documentation to include Covid-19 protocols

Next steps/E whaiake nei

- Adopt corporate H&S targets and objectives for inclusion in the H&S Strategy (being finalised)
- Incorporate targets and objectives into Divisional and Business Unit Plans and for Executive/T3 Roadmap plans
- Revise the current H&S Policy.
- Prioritise the development of Core H&S Standards for H&S Accountability, H&S Planning and H&S Assurance
- Commence a full review of existing H&S Standards to ensure currency and alignment to newly adopted Risk Management Framework
- Completion of annual reviews of operational risk registers (Business Unit KPI)
- Maintain the gap/issues register and assign, manage and report on actions
- Continue to review Council's end to end risk management processes
- Assist HSEQ Officer in the further development of the Infrastructure Contractor H&S Performance and Monitoring report (including with KPI's in the Business Plan)
- Monitor outstanding action items from previous AR&F Committee Meetings
- Re-invigorate H&S Consultation & Staff Engagement Framework (includes Wellness)
- Nominate candidates for incident investigation training (ICAM and entry level)

- Reschedule H&S training after cancellations from COVID-19
- Commence monitoring and reporting of staff mental wellbeing including stress, burnout, bullying, harassment etc
- Work with HRIS to ensure H&S system delivers on expectations
- Develop naming protocols for H&S documents, data and records to suit the final taxonomy model for Te Aka.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Attachments/Ngā tapiritanga

	Title
A	Lag indicators Organisational Health and Safety – 01 January – 31 March 2020
B	Incidents, near miss or hazards with potential to cause a serious outcome
C	Lead indicators - third quarter scorecard – 01 January – 31 March 2020

Appendix A – Lag Indicators – Last Quarter Scorecard - Period 1 January – 31 March 2020

	KDC	Contractor	Public	QTR 3	KDC	Contractor	Public	QTR 4	KDC	Contractor	Public	QTR 1	KDC	Contractor	Public	QTR 2	KDC	Contractor	Public	QTR 3
Fatality (coroner's report)	0	0	0	0	0	0	0	0	0	0	1 Road fatality - report is with coroner	1	0	0	1 no council involvement – drowning at lakes	1	0	0	0	0
Environmental Incident	0	2	0	2	0	0	1	1	0	0	N/A	0	0	1	N/A	0	0	1	0	1
Notifiable Incident	0	0	0	0	0	1	0	1	0	0	0	0	0	1 *chemical spill	0	1	0	0	0	0
Lost time injury	0	0	0	0	1	1	0	2	1 ACC	0	N/A	1	1	0 REPORTED	N/A	1	0	1 Fell in culvert. Badly bruised shins	0	1
Medical treatment only	1	2	0	3	2*	0	0	2	1 ACC (no lost time)	2+1 heart attack	0	4	0	3	1 old lady on scooter	4	0	0	0	0
First Aid only	0	3	0	3	0	1	0	1	0	6	0	6	2 1*haz	3	0	5	1 tripped on footpath enroute to work	3	0	3
Report Only	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 *suburn	0		1
Occupational Illness	0	0	0	0	0	0	0	0	0	0	N/A	0	0	0	N/A	0	0	0	0	0
Pain and discomfort	0	0	0	0	14	0	0	14	1	0	N/A	1	3	0	N/A	3	5	0	0	5
Property Damage (other)	4	14	0	18	0	12	0	12	5	4	2	11	3 parks 1 building	5	3	12	0	2	0	2
Near Miss (other)	2	13	0	15	0	14	1	15	2	NOW BROKEN DOWN INTO TYPES		2	0	0	1 pontoon *another 2 in Jan	1	1 *contractor not inducted & potential for asbestos	0	0	1
Property damage (Motor vehicle) including driving	3	0	0	3	0	3	0	3	0	8	0	8	1	1	1	3	0	2	0	2
Near Miss (Motor vehicle) including driving – thru traffic control	1	0	0	1	0	1	0	1	0	14	N/A	14	1	12	N/A	13	0	0	0	0
Occupational Violence/Threats	2	0	0	2	1	2	0	3	0	4	N/A	4	2 *one reported to NZP	3	N/A	5	0	2 abusive person speeding thru site + Staff sworn at and pushed	1 *MOP fighting @ Lakes, called NZP	3

Disclaimer – unknown how many contracts exist, nor who reports HSE returns
Because of this, the figures in the table above may not identify the actual current state.
HSEQ administrator starts as KDC 10/2/20 to address this.

	KDC	Contractor	Public	QTR 3	KDC	Contractor	Public	QTR 4	KDC	Contractor	Public	QTR 1	KDC	Contractor	Public	QTR 2	KDC	Contractor	Public	QTR 3
Public Nuisance	PREVIOUSLY NOT REPORTED AIM IS TO INCREASE REPORTING BUT ALSO TO START ADDING IN MORE CATEGORIES SO WE CAN ANAYLSE TRENDS								3	0	N/A	3	7	0	N/A	7	1	0	0	1
Traffic Management Incident/Hazard/ Non conformances					1	2	0	3	0	5	N/A	5	0	2	N/A	2	0	2 as noted by WIM (Jan)	0	2
Hazards reported					6	3	1	10	1	6	0	7	4*	5	0	9	2	0	0	2
Dangerous event	PREVIOUSLY NOT REPORTED AIM IS TO INCREASE REPORTING BUT ALSO TO START ADDING IN MORE CATEGORIES SO WE CAN ANAYLSE TRENDS								0	2 uncovered load & fire at refuse	0	2	Kai Iwi lakes	1	2 *pontoon NEAR MISS *gas EXPLOSION in tent exp	3	1 *ATV rollover	0	0	1
Asset strike									0	2	N/A	2	0	5	N/A	5	0	1	0	1
Animal attack/threat									0	1	0	1	0	0	0	0	1	0	2 horses vs dog *one incident – Pahi	3
Chemicals/haz substances									0	1	0	1	0	0*	0	0	0	0	0	0
Theft/Security									0	3	0	3	0	1	0	1	0	0	0	0
Driving accident									0	0	0	0	0	1	1	2	0	1	0	1
Incidents/near miss operating plant (excavators etc)									0	13	N/A	13	0	7	N/A	7	0	2	0	2
Incidents/near miss operating equipment									0	4	N/A	4	0	5	N/A	5	0	1	0	1
Incidents/near miss operating trade vehicles									0	8	N/A	8	0	1	N/A	1	0	0	0	0

Appendix B – Incidents, Near Miss or Hazards with potential to cause a serious outcome

Staff/Public/Contractor	Incident, near miss, hazard	Details	Risk Owner	Potential for serious harm/implications	Action/Response
Public	Pond Safety Review (post Gore drowning)	A review into the security and safety of the Dargaville PP Pond was conducted after a child drowned in a similar pond in Gore.	GM INFR	Likelihood UNLIKELY Consequence CATASTROPHIC RISK SCORE 10	Donnick advises this has been addressed in an application for Accelerated Programme so will be done after approval. He states that we will look for alternative funding immediately after we know the result of the application.
Public	Pontoon at Kai Iwi Lakes - Taharoa domain	Members of the public have reported three near drownings relating to the pontoon. It is unknown who placed the pontoon in the lake. We have been advised it is not NRC's jurisdiction. Hannah has raised it to GM Infrastructure to discuss at Taharoa Domain Governance Committee 18/05/20.	GM INFR	3 near misses reported Likelihood ALMOST CERTAIN Consequence CATASTROPHIC RISK SCORE 25	Governance committee meeting on 28 June 2020, at this meeting the pontoon safety concerns will be discussed with an action plan to mitigate/control risk to follow.
Staff	Rollover of ATV at Kai Iwi Lakes	Investigation has been finalised.	GM INFR GM P&C	Likelihood POSSIBLE Consequence CATASTROPHIC RISK SCORE 15	Findings to be reviewed by GM Infrastructure and GM P&C Action Plan has been updated out of the findings *Hamish to advise Jim of status with copy to WIM
Public/Roading	Fatality - Te Kowhai Road	Investigation has been submitted to the Coroner.	GM INFR	Legal Action	Investigation Report has been reviewed by GM Infrastructure Action Plan was developed these are being monitored by the investigating officer who has also followed up with police and await to hear from coroner Lessons Learned will be communicated once information if forthcoming from the coroner.
KDC	Near Miss	Contractor had not received induction and was not aware that asbestos was present in the building in Dargaville	GM P&C	Contamination/Exposure	Visitor and Contractor Guidelines are nearly completed *Minor Works being arranged must be aware of H&S requirements

Risk Assessment Matrix						
Consequence	Catastrophic 5	5	10	15	20	25
	Major 4	4	8	12	16	20
	Moderate 3	3	6	9	12	15
	Minor 2	2	4	6	8	10
	Insignificant 1	1	2	3	4	5
		Rare 1	Unlikely 2	Possible 3	Likely 4	Almost Certain 5
Likelihood						

- Extreme Risks will be escalated immediately to the Executive Team
- High risks monitored & received monthly by the Executive Team
- Monitored quarterly
- Keep risks on the Risk Register and formally review them quarterly to make sure that the Likelihood and Consequence continues to pose a low level.

Attachment C – Organizational Health and Safety - Lead Indicators – Quarter 1 January – 31 March 2020

Activities	Due/Planned	Actioned/ Completed	Comments
Business activities/tasks risk assessed Hazards identified/reported	All business units	2	Annual review by business units is due – this is a H&S KPI in the 20/21 business plans The introduction of new roles such as the AMO's and Kai Iwi Lakes management has required a review of the health and safety hazards and risks. All action plans currently sit with the relevant risk owners – GM's of CSX & Infrastructure.
Site/Asset hazard registers	All business units	0	This has been raised as an issue with relevant risk owners and has been included in the H&S KPI Dashboard for future reporting *most assets sit within Infrastructure
Workplace/Office/Town Hall/Library H&S inspections	7	3	Three Library inspections completed Offices at Dargaville, and two at Mangawhai and the Town Hall are all outstanding – were due in this quarter but have had to be postponed due to COVID-19
Fire Evacuation Drills	5	0	All became due during COVID-19 - To be rescheduled *KDC coordinates drills in Dargaville Office, the Library and the Town Hall. Landlords at Mangawhai are responsible for those buildings.
Tsunami Evacuation Drill - Mangawhai	1	0	Postponed due to COVID –19 Will be scheduled for last quarter
Security Threat – Drill One for Mangawhai, Dargaville and Library	3	0	Postponed due to COVID-19 Will be scheduled for last quarter (to test LGB)
HS&E audits due	0	Ongoing review	Ongoing internal review and gap analysis exists by H&SS.
New staff inductions	8	8	Maintaining the new starters however the backlog from having the role empty has never been caught up.
Workstation Ergonomics e-learning	All staff	Collecting data to analyze	All staff are scheduled to complete the H&S Basics Refresher online last quarter. All staff are required to complete an Ergonomics Workstation Risk Assessment. With COVID-19, all staff were requested to complete one so that they could work from home.
First Aid Training	20	20	All workplaces are adequately covered by first aid officers An additional EOI will be sent out to increase # of trained first aid officers
Fire and Emergency Warden/Marshal training Dargaville Mangawhai	14 15	14* Rescheduled**	**Further training for Mangawhai staff was scheduled but was postponed due to COVID *to cover flexible work arrangements there may need to be more training to ensure each workplace always has a fire/emergency warden on hand
H&S Hazard Identification and Risk Assessment Training (external)	20	23	Key personnel identified for their involvement in project management and community work *yes, more turned up than registered More will be scheduled in the new financial year
H&S Hazard Identification and Risk Assessment Instruction (internal)	All staff	Project work planned	Module has not been developed/sourced but this is a priority module
Hazards reported	2	1	One outstanding, initially an email but employee has been tasked to complete a hazard form and provide options to mitigate.

Quarterly Finance Report

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officers: Christine Toms, Revenue Manager
Violeta Kayryakova, Financial Services Manager

Purpose/Ngā whāinga

To monitor financial performance.

Executive summary/Whakarāpopototanga

Commentary is provided on both land debt outstanding and sundry debtors. The April financial report is attached at the end.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes the quarterly finance report at 30 April 2020.

Context/Horopaki

Council Staff provide the Audit, Risk and Finance Committee (the Committee) with an update on year to date finances and debtors. Graphs have been provided to clarify debtors further.

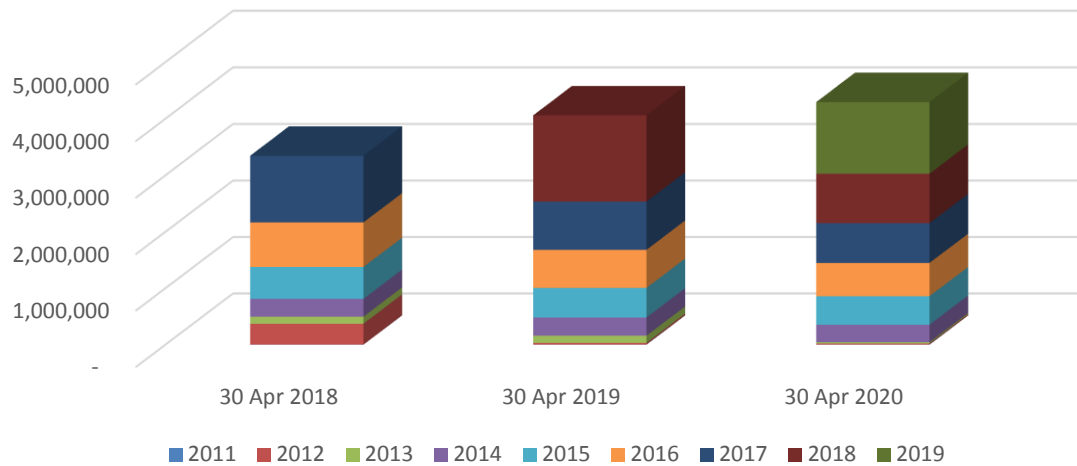
Discussion/Ngā kōrerorero

Rates Debtors as at 30 April 2020

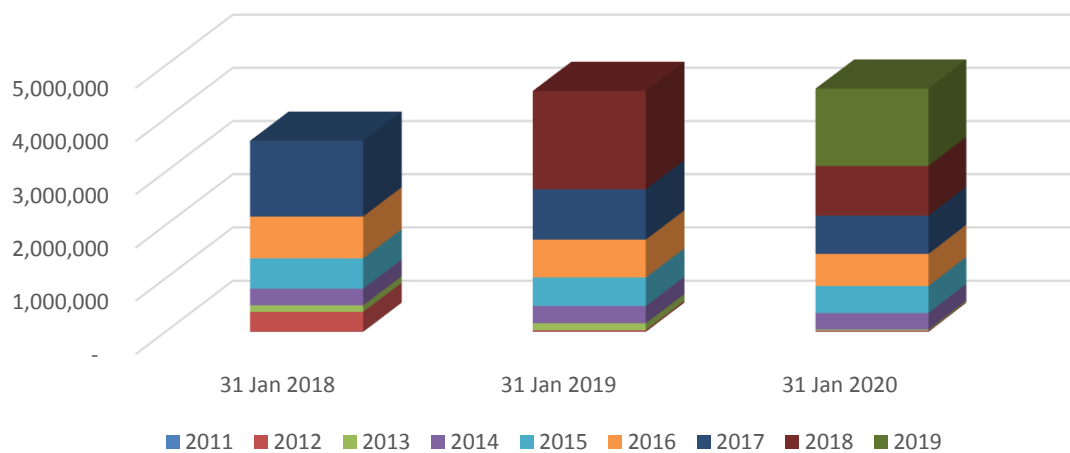
Nationwide COVID-19 restrictions and widespread economic uncertainty have seen many of our debt collection processes temporarily put on hold. Generally staff continue to converse with customers about their debt and are working with them to implement payment plans to assist them reduce the debt.

Earlier reports to the Committee focused on the land rates debt for the years up to June 2018 (previous year's arrears). This current rating year will see reports focused on the arrears up to 2019. System generated arrears reports exclude current debt, which means that the beginning of each year sees the opening debt balance increasing substantially due to the previous year debt being re-categorised as previous year arrears. The graph below shows the allocation of total land rates debt over the previous three years as at 30 April of each year.

Land Rate Arrears Summary by Year April 2020



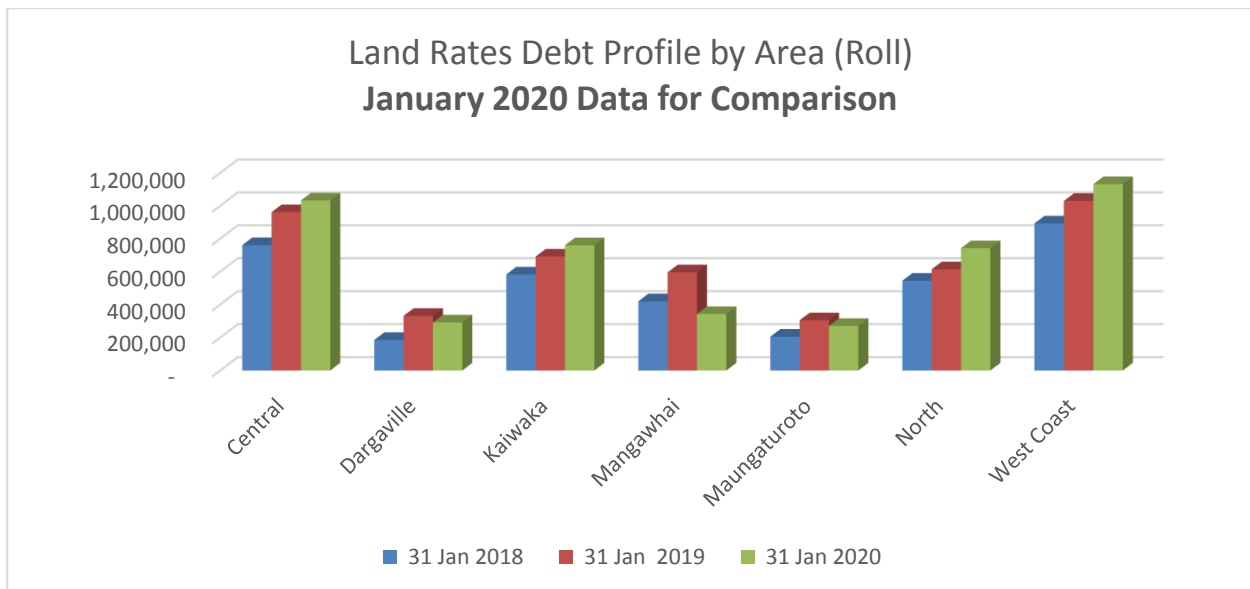
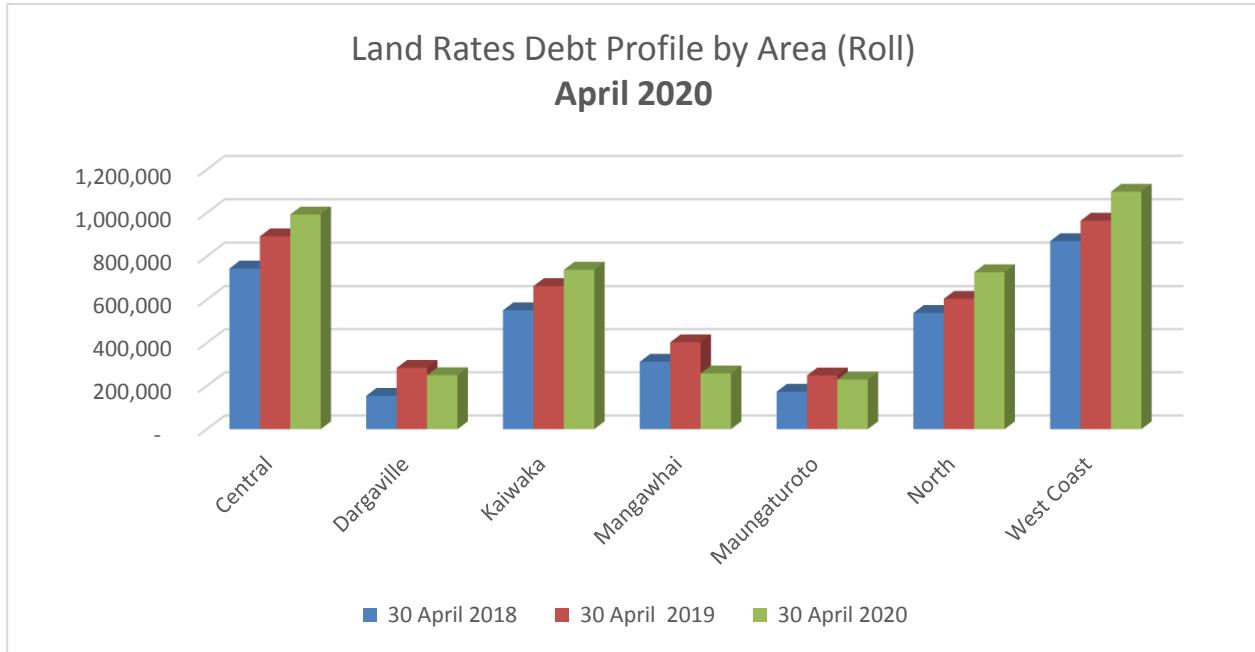
Land Rate Arrears Summary by Year January 2020 Data for comparison



The graphs above show that outstanding arrears for all years has decreased between July 2019 and April 2020. The graphs reflect what we would expect to see, with the majority of debt sitting in recent years due to Council's policy of allocating payments to the oldest debt first.

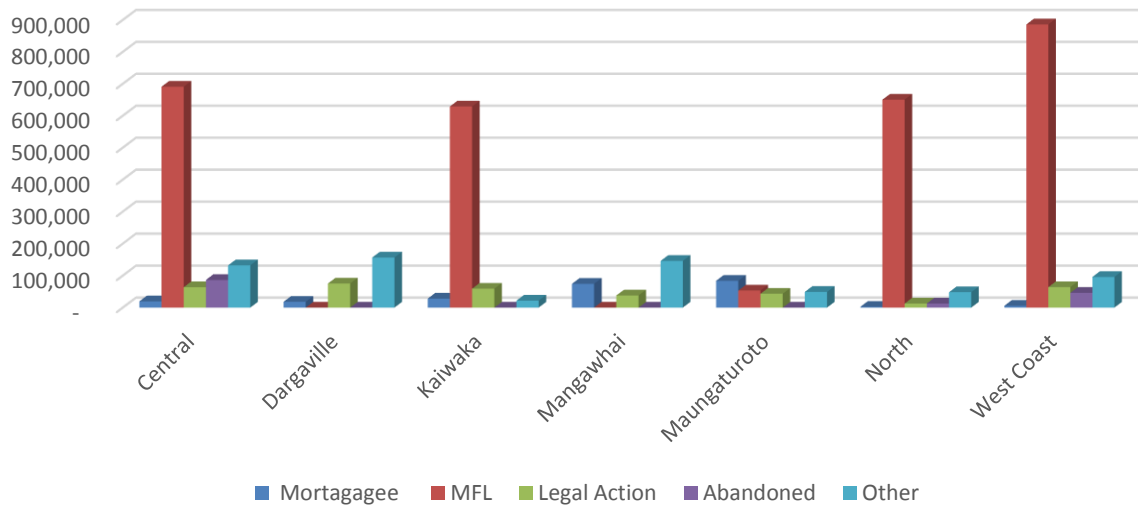
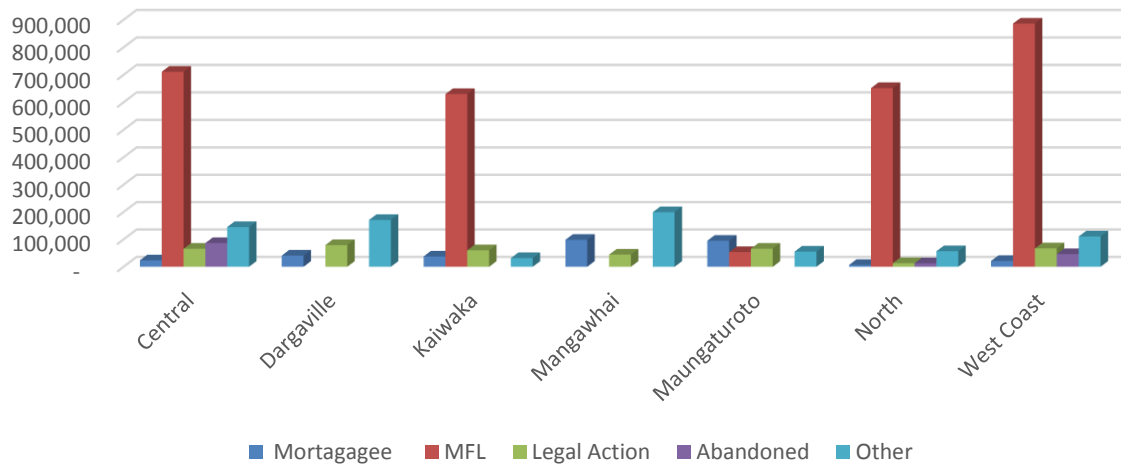
The total reported debt as at 30 June 2019 was \$7,389,300 and is now \$4,295,929. This shows an overall rates debt reduction for the ten months between July 2019 and April 2020 of \$3,093,347.

The chart below compares the debt over three years and shows by roll where the debt sits.



Rates debt has decreased by \$272,000 since last report dated 31 January 2020. The reductions have been seen across all areas, with the greatest reduction being noted in Mangawhai.

Debt Category by Area - April 2020

Debt Category by Area
January 2020 Data for Comparison

The table below summarises the data whilst the charts above show the distribution of the debt by category and area. Overall rates debt has decreased by \$2,728,752 during the period of 31 July 2019 and 30 April 2020, whilst over the same period the number of rates debtors had reduced by 1,736.

Arrears debt	31 July 2019			30 April 2020	
	No	\$		No	\$
Mortgaged Properties	725	1,926,486		67	232,990
Maori Freehold Land (MFL)	140	2,985,103		117	2,910,082
Legal Action	48	448,529		50	356,796
Abandoned Land	7	172,587		6	145,805
Other	1,275	1,491,976		219	650,256
TOTAL	2,195	7,024,681		459	4,295,929

Mortgaged Properties Category

Since last report the debt in this category has reduced by \$90,918. The remaining debt is due to a number of factors which include; staff have entered into payment arrangements with some customers that will see the debt paid off slowly in those cases, a couple of the big banks failed to pay all demands (these are being followed up on), some of these properties have private mortgagees which we have requested third party assistance with and the remainder have finance companies as mortgagees which again staff are following up on. Processes in this area have temporarily halted due to the COVID-19 restrictions. Other Councils have indicated that they have also postponed the mortgagee processes and are generally looking to review these later in year (around October/November) once the economy has settled again.

Maori Freehold Land

Staff have continued conversations with owners of Maori Freehold Land since the last report to this committee and we note a reduction of outstanding debt (\$22,533) in the category. There are pending changes to the legislation around rating of Maori Freehold Land, as highlighted in the previous Audit and Risk Committee report. Whilst the changes to the Local Government (Rating of Whenua Maori) Amendment Bill have yet to be enacted staff are still reviewing the situation to determine the implications for Kaipara District. During the period of COVID-19 lockdown staff focus has been on other matters, but as we return to business as usual, attention can return to this matter.

Legal Action

The Rogan litigation has come to an end and the outcome is favourable for both Kaipara District and Northland Regional Councils. All Court awarded costs associated with this litigation have now been paid.

As discussed in the previous Audit and Risk Committee report there are two remaining stayed defendants associated with this litigation. A Case Management Conference between the Court and Legal representatives was scheduled to be held at the end of March to discuss the next steps for any of the remaining stayed defendants at that time. This Case Management Conference was deferred due to the COVID-19 lockdown and a new date has yet to be set.

Staff have continued to work with those customers without mortgages and as a result debt in this category has reduced by 10% since the last report. It should be noted that further legal action in this space was put on hold during the COVID-19 lockdown period and will begin again once we are back into business as usual.

Abandoned Land

There have been no changes to the number of properties or debt levels in this category since the last report.

We had previously anticipated that the remaining six properties can be progressed through the District Court in the early part of the 2020 calendar year. Due to COVID-19 this action has been put on hold and will begin again once we are back into business as usual.

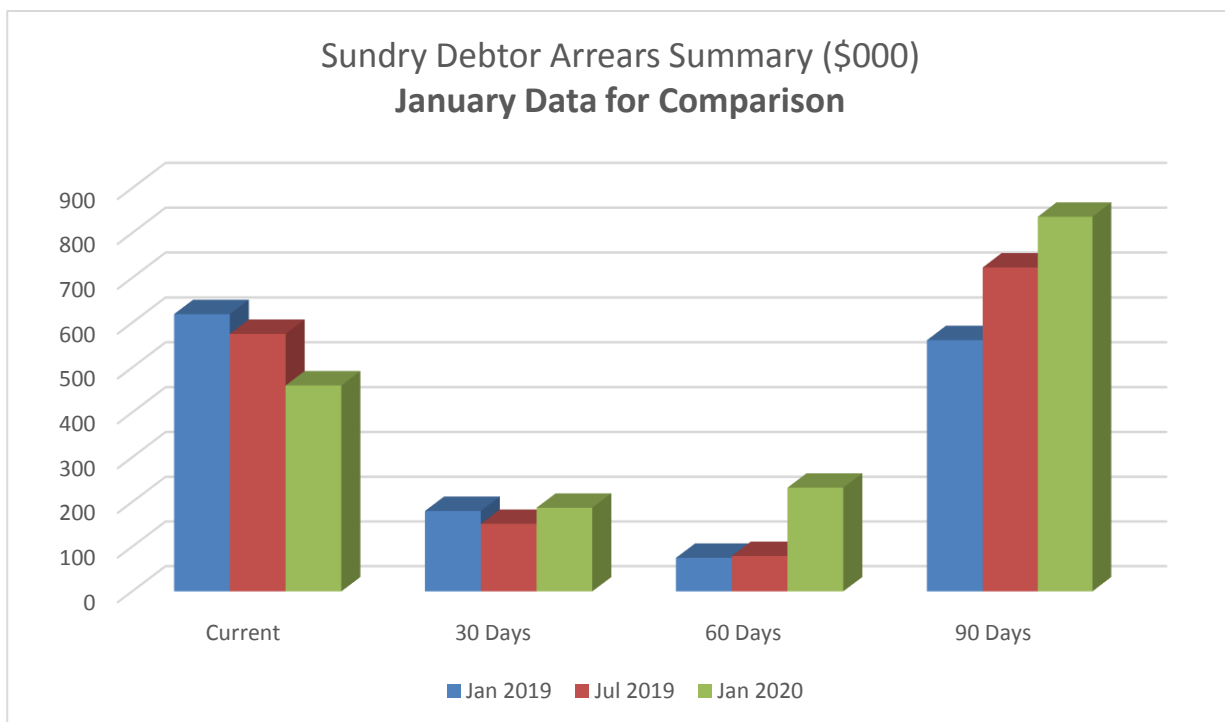
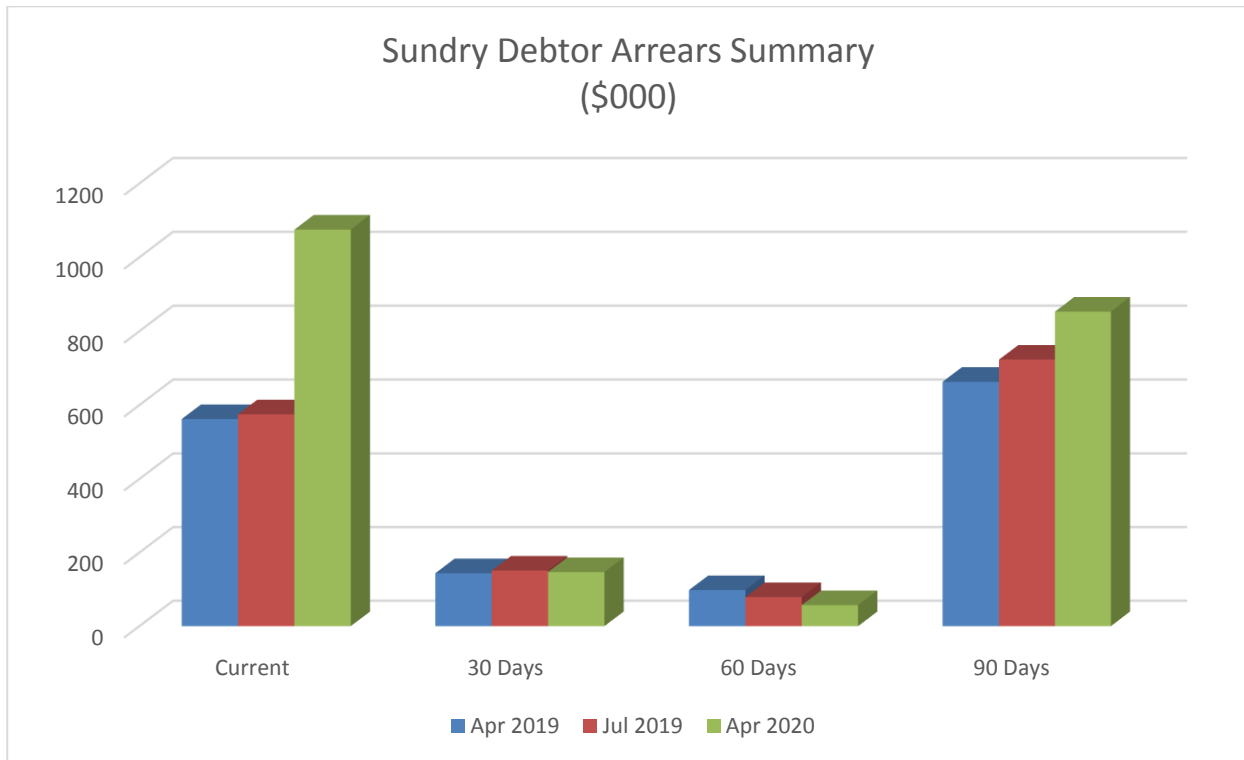
Other

Staff continue to make progress with customers in this category and have agreed to numerous payment plans that will see the debt repaid over the next one to two years. We have also seen a number of lump sum payments being made that have cleared the debt. Overall there has been a reduction in debt level of \$119,700 in this category since the previous report.

Due to COVID-19 no further debts have been referred to the third party debt collection agency (Credit Recoveries) since the last report.

Sundry Debtors

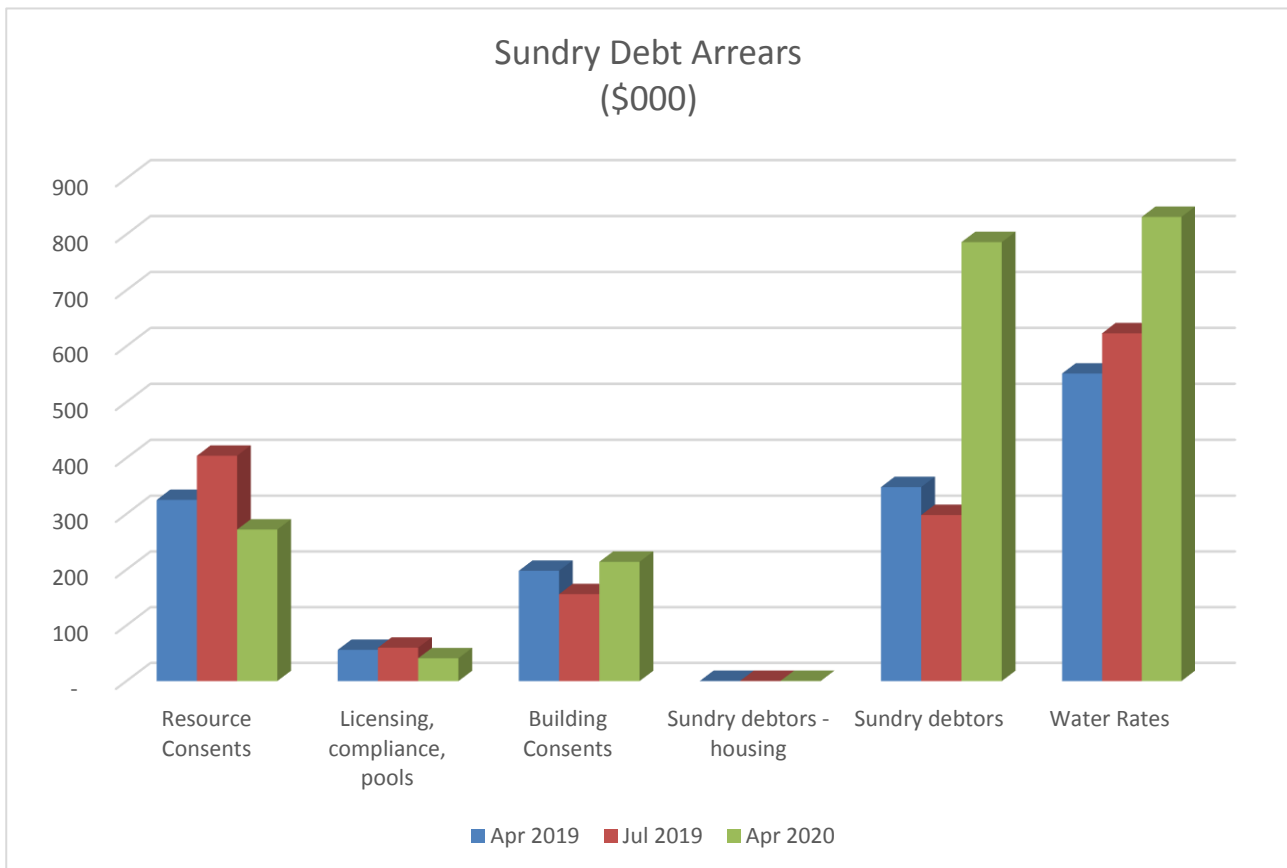
Sundry Debtors Summary \$000



The above graph demonstrates an increase in current debt with 30 and 60 days debt decreasing when comparing April and July 2019 figures to the April 2020 data. Staff have identified \$49k of older sundry debt that will be written off due to the statute bar time limitations. In addition \$46k of the older debt relates to an on-going dispute that has been recently escalated to General Manager Infrastructure to resolve. With the COVID-19 situation staff have put on hold moves to lodge older debt with the third party debt collector (Credit Recoveries). We anticipate a reduction in the older debt as a result of this action.

	Current	30 Days	60 Days	90 days	Total
Month of April 2020	1,075	147	57	853	2,132
Aging Percentage	50%	7%	3%	40%	100%
Month of July 2019	575	151	79	723	1,528
Aging Percentage	38%	11%	5%	47%	100%
Month of April 2019	562	144	98	663	1,467
Aging Percentage	38%	10%	7%	45%	100%

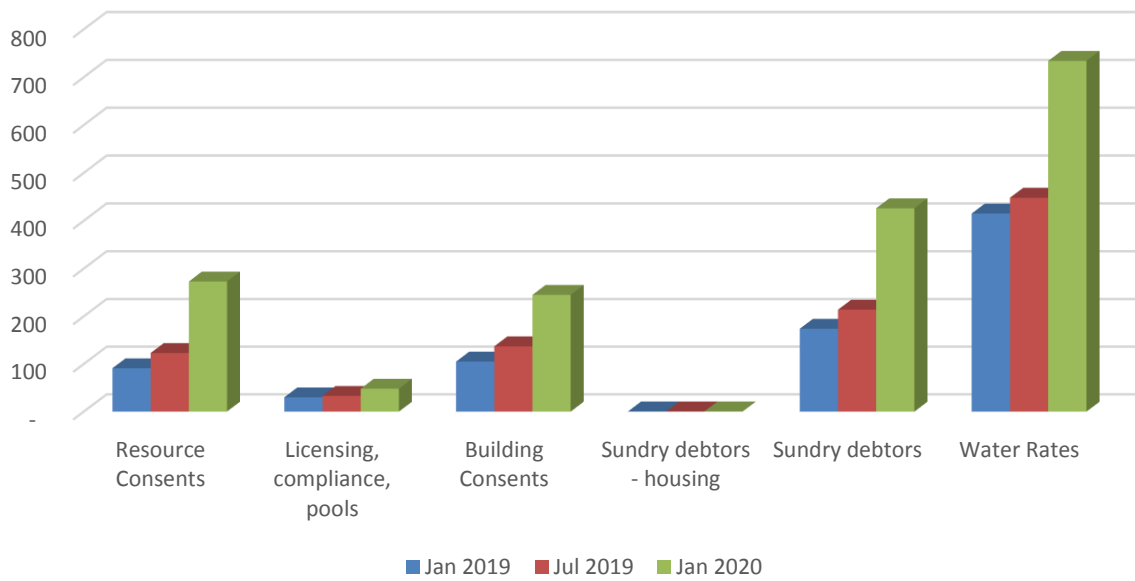
Summarising the aging of arrears for other debtors (\$000)



The total debt reported here is \$2.1m. Of this \$831,000 relates to water rates and \$787,000 to other sundry debt. We note an increase in current sundry debt which totals \$589k. Of this MBIE funding agreements that have been on charged to the value of \$327k and another large invoice to NTA for \$160k.

Staff continue to chase water debt at the same time as land rate debt.

Sundry Debt Arrears (000) January Data for Comparison



April 2020 Financial Report

Statement of Operating and Capital Performance

	This Month 30 April 2020				Indicator	Year to 30 April 2020				Indicator	Whole Year	
	Actual \$'000	Annual Plan \$'000	Variance \$'000			Actual \$'000	Annual Plan \$'000	Variance \$'000			Annual Plan \$'000	Forecast \$'000
Whole of Council												
Rates	3,080	3,077	3	●		31,646	30,709	937	●		36,884	36,884
Activity Revenue and Other Income	83	575	(492)	●		5,798	5,758	40	●		6,839	6,839
Subsidies and Grants - Operational	643	564	79	●		4,913	5,402	(489)	●		8,786	8,786
Total Operating Income	3,806	4,216	(410)	●		42,357	41,870	487	●		52,508	52,508
Employee Benefits	1,095	1,048	(48)	●		10,518	10,552	34	●		12,683	12,683
Contractors	66	194	128	●		1,318	2,049	731	●		2,448	2,448
Professional Services	353	839	486	●		5,794	6,986	1,192	●		8,356	8,356
Repairs and Maintenance	418	857	440	●		7,182	8,593	1,411	●		11,861	11,861
Finance costs	183	232	48	●		1,939	2,317	378	●		2,780	2,780
Other Operating Costs	301	450	149	●		4,731	5,261	529	●		6,004	6,004
Total Operating Costs	2,416	3,619	1,204	●		31,482	35,758	4,276	●		44,133	44,133
Operating Surplus/(Deficit) (before Depreciation)	1,391	597	794	●		10,875	6,112	4,763	●		8,375	8,375
Capital Subsidies	551	228	323	●		5,483	6,582	(1,099)	●		23,219	23,219
Contributions	96	243	(147)	●		1,759	2,430	(671)	●		3,019	3,019
Other Capital Revenue	0	0	0	●		28	0	28	●		175	175
Total Capital Revenue	646	471	175	●		7,270	9,012	(1,742)	●		26,413	26,413
Capital Expenditure	613	1,859	1,246	●		13,644	15,210	1,566	●		38,936	41,556
Total Capital Payments	613	1,859	1,246	●		13,644	15,210	1,566	●		38,936	41,556
Subtotal Capital	33	(1,388)	1,421	●		(6,374)	(6,198)	(176)	●		(12,523)	(15,143)
Surplus/(Deficit) - before Loan Payments and Depreciation	1,424	(791)	2,215	●		4,501	(86)	4,587	●		(4,148)	(6,768)

Key: ● Within 5% of budget

● Over or under budget by 5 - 10%

● Over or under budget by more than 10%

Comments on major variances

Operating Income:

Account	Rationale	\$000
Rates Revenue	Penalties are ahead of budget for the year to date due to arrears penalties applied (July and January) and instalment penalties	603
Activity Revenue and Other Income	Tourism Infrastructure Funds received from Ministry of Business, Innovation and Employment – Matakohē Toilets & Footpath and Baylys Beach Increase in Kai Iwi lakes bookings for summer season Mangawhai Campground revenue share Additional revenue received for vehicle crossing permits, discharge fees, water rates penalties and reimbursement of costs from previous year Regulatory activity revenue: <ul style="list-style-type: none"> Decrease in Building Control revenue – April low Decrease in Monitoring and enforcement fees – April COVID-19 Decrease in Resource consenting income 	150 96 71 492 (84) (25) (660)
Operating Subsidies and Grants	Operational subsidies from NZTA are lower than budget – April COVID-19 PGF funding for Kaipara Kickstart Programme not received yet – can only claim at milestones	(432) (306)

Operating Costs:

Account	Rational	\$000
Contractors	Overall reduction of contractor's costs New contract for Mangawhai wastewater treatment plant operations and maintenance started in October 2019. The contract was negotiated at lower cost than budgeted	530
Professional Services	Costs overall are lower than budget Regulatory is ahead of budget: <ul style="list-style-type: none"> Resource consenting activity costs (but off set by reduction in employee costs of \$569k) Building consenting activity costs Roeading professional services costs are ahead of budget (NTA) Budget is offset by Provincial Growth Fund and District Plan costs not committed yet – timing difference Stormwater, Wastewater and Water supply work schedule planning not started yet – timing difference	(473) (122) 1,023 463
Repairs and Maintenance	Overall costs are lower on budget year to date for all activities Dargaville wastewater desludging work is not started yet – timing difference Roeading works maintenance programme is lower than budget for the month – due to COVID-19 lockdown. There are also some outstanding invoices from Broadspectrum that we have only just been notified of	816 442
Finance Costs	Below budget due to lower inter-period loan balances.	378
Other Operating Costs	Costs overall are lower than budget year to date.	536

Capital Revenue:

Account	Rationale	\$000
Capital Subsidies	Capital subsidies from NZTA are lower on budget for the month due to capital projects paused due to COVID-19 lockdown.	(1,179)
Contributions	The financial and development contributions are lower than budget for year to date as less subdivisions.	(671)

Statement of Financial Position

	Actual	Annual Plan	Annual Report
As at	30 April 2020	June 2020	June 2019
Accumulated comprehensive revenue and expense	410,064	425,697	401,364
Asset revaluation reserves	268,601	245,084	268,601
Restricted reserves	5,574	5,389	5,574
Council created reserves	(14,777)	(14,550)	(14,777)
Total net assets/equity represented by	669,462	661,620	660,762
Current assets			
Cash and Cash Equivalents	1,220	563	1,926
Trade and Other Receivables	14,946	6,548	8,317
Accrued Revenue	679	3,438	1,641
Other Financial Assets - Current	115	115	115
Non Current Assets Held for Sale	186	186	186
LGFA Borrower notes	32	0	32
Total current assets	17,179	10,849	12,217
<i>less</i>			
Current liabilities			
Trade and Other Payables	12,704	13,329	11,219
Provisions	135	148	135
Employee Entitlements	990	1,111	905
Public debt	0	600	1,000
Total current liabilities	13,829	15,188	13,258
Working capital/(deficit)	3,350	(4,340)	(1,042)
<i>plus</i>			
Non current assets			
Property, plant, equipment	718,711	720,724	714,402
LGFA Borrower notes	672	704	672
Biological Assets	1,045	1,017	1,045
Other financial assets	279	278	279
Total non current assets	720,707	722,723	716,398
<i>less</i>			
Non current liabilities			
Public debt	44,000	47,657	44,000
Provisions	4,599	4,679	4,599
Derivative Financial Liabilities	5,995	4,427	5,995
Total non current liabilities	54,594	56,763	54,594
Net assets	669,462	661,620	660,762

Comments on major variances:

Trade and Other receivables – increase is due to:

- Rates instalment four has been applied in April, payments are due on 20 May 2020.

Public Debt

The public debt position at 30 April 2020 is \$44 million and the net debt position (debt less cash) is \$42.8 million.

Public Debt and Requirements			
	June 2019 \$000's	30 April 2020 \$000's	June 2020 \$000's
Debt			
Public debt	45,000	44,000	48,257
Cash in bank (overnight deposits)	(1,926)	(1,220)	(563)
Net Debt	43,074	42,780	47,694
Reserves (future obligations)			
Development Contribution Reserve	(24,395)	(24,395)	(26,341)
Other reserves	15,192	15,192	17,180
Total reserves (future obligations)	(9,203)	(9,203)	(9,161)
Debt Requirements			
Public debt	45,000	44,000	48,257
Future obligations	15,192	15,111	17,180
Gross Debt Requirement	60,192	59,111	65,437
Less cash in bank	(1,926)	(1,220)	(563)
Net Debt Requirement	58,266	57,891	64,875

*Note: Reserves balances are only recalculated at end of year

Activities Net Cost for the period to 30 April 2020

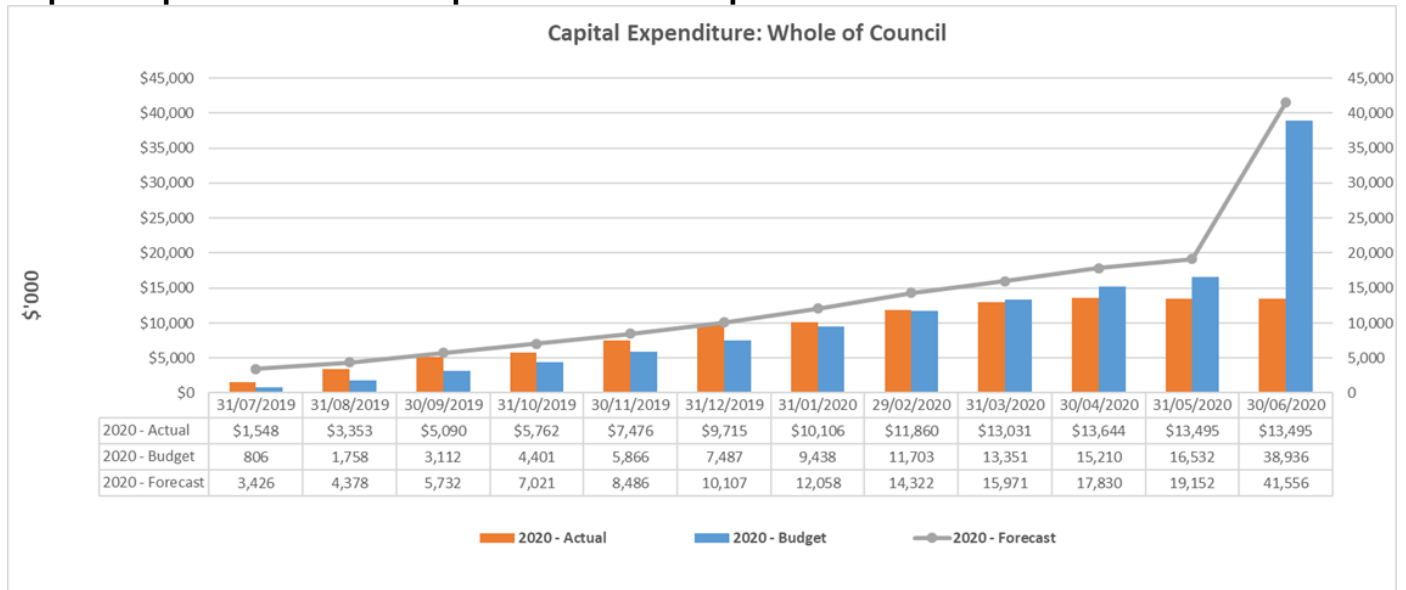
Activity	Actual as at 30 April 2020			Whole Year Annual Plan
	Operating Income \$000's	Operating Costs \$000's	Net Operating Surplus/(Deficit) \$000's	Net Operating Surplus/(Deficit) \$'000
Community Activities	5,163	4,189	973	150
District Leadership	6,447	6,869	(422)	(1,738)
Regulatory Management	5,705	6,003	(298)	51
Roads and Footpaths	12,492	8,772	3,720	4,116
Wastewater	6,495	2,318	4,177	2,970
Water Supply	2,866	1,742	1,124	1,540
Stormwater	1,514	387	1,126	836
Flood Control	596	438	158	143
Solid Waste	1,079	764	316	307
	42,357	31,482	10,875	8,375

Activities Capital projects for the period ended 30 April 2020

Activity - Capital Expenditure	Actual as at 30 April 2020			Whole Year	
	Actual \$000's	Annual Plan \$000's	Variance \$000's	Annual Plan \$000's	Forecast \$000's
Community Activities	1,001	1,296	296	2,643	3,184
District Leadership	1,566	1,437	(129)	6,175	6,407
Regulatory Management	0	0	0	0	0
Roads and Footpaths	8,515	8,705	190	24,618	25,276
Wastewater	1,871	2,049	178	2,911	3,835
Water Supply	544	1,201	657	1,952	2,068
Stormwater	68	216	148	216	316
Flood Control	57	306	249	421	421
Solid Waste	22	0	(22)	0	50
	13,644	15,210	1,566	38,936	41,556

NB In November 2019 the GM Infrastructure advised just over \$15m in Capital would need to be transferred to later years as design was still to be completed for some of the projects

Capital Expenditure – for the period ended 30 April 2020



Significant Capital projects for the period ended 30 April 2020

	Year to Date	Full Year
	Actual	Annual Plan
Roads Resurfacing 2019/2020	1,151,970	2,288,276
Tomorata Bridge Repairs	2,108,323	1,450,000
Upgrade Mangawhai Wastewater Existing Reticulation	36,900	1,000,000
Upgrade Mangawhai Wastewater Treatment Plant	663,178	800,000
Drainage Renewals 2019-2020	480,046	784,000
MCP Paths - Walkways and Cycleways 2019-2020	596,269	560,000
Insley/Moir Intersection (Intersection 1)	56,391	540,000
Moir/Molesworth Intersection (Intersection 2)	37,512	540,000
Matakohe West Rd - Road works sealed	335,109	520,000
Flexible workspace	425,689	480,000
Wood Street - Main street redevelopment	68,639	400,000
Racecourse SH14 watermain	15,691	400,000
Ararua Rd - Road works sealed	33,411	400,000
Total Significant Projects	6,009,128	10,162,276

Provincial Growth Fund

Programme performance:

	Actual from February 2019 to April 2020	Budget from February 2019 to April 2020	Forecast (All programme)
Operating Income	1,400,618	340,050	5,160,000
PGF100 Kaipara Kickstart Programme	596,362	340,050	1,300,000
PGF101 Kaipara Kickstart Kai	500,000	-	980,000
PGF102 Kaipara Kickstart Moana Investigation	150,000	-	950,000
PGF103 Kaipara Kickstart Waipoua River Road Investigation	25,088	-	120,000
PGF104 Kaipara Kickstart Waipoua Road Implementation	-	-	1,480,000
PGF105 Pouto Road Phase 2 (Investigation)	-	-	330,000
PGF108 Pouto Road Phase 1 (Physical Works)	79,168	-	-
PGF111 Kai Water	50,000	-	-
Operating costs	1,028,955	673,671	5,170,000
PGF100 Kaipara Kickstart Programme	356,846	673,671	1,300,000
PGF101 Kaipara Kickstart Kai	294,135	-	980,000
PGF102 Kaipara Kickstart Moana Investigation	318,565	-	950,000
PGF103 Kaipara Kickstart Waipoua River Road Investigation	25,088	-	130,000
PGF104 Kaipara Kickstart Waipoua Road Implementation	7,073	-	1,480,000
PGF105 Pouto Road Phase 2 (Investigation)	25,760	-	330,000
PGF108 Pouto Road Phase 1 (Physical Works)	1,488	-	-
Internal charges and recoveries	339,829		
PGF100 Kaipara Kickstart Programme	239,516	-	-
PGF101 Kaipara Kickstart Kai	51,233	-	-
PGF102 Kaipara Kickstart Moana Investigation	43,995	-	-
PGF105 Pouto Road Phase 2 (Investigation)	5,085	-	-
Capital expenditure	2,269,641	1,580,000	14,000,000
11152 Tomorata Bridge Repairs	2,108,323	1,450,000	2,150,000
9999 120 PGF Heavy metalling	-	-	-
PGF100 Kaipara Kickstart Programme	750	-	-
PGF103 Kaipara Kickstart Waipoua River Road Investigation	-800	-	-
PGF104 Kaipara Kickstart Waipoua Road Implementation	8,011	-	-
PGF105 Pouto Road Phase 2 (Investigation)	101,378	130,000	7,850,000
PGF107 Kaipara Moana Physical works	-	-	4,000,000
PGF108 Pouto Road Phase 1 (Physical Works)	51,921	-	-
PGF109 Pouto Road Phase 2 (Physical Works)	58	-	-
Grand Total	2,237,807	1,913,621	14,010,000

Please note these financials have been put together with a view of the Programme to Date. This programme of works officially commenced on 03 February 2019.

Kaipara KickStart Programme (PGF)

The overall programme is 3% behind the baseline schedule due to procurement and physical work delays impacting both Kaipara Wharves and Roding projects.

The team are managing this slippage and at this stage indicate that there are no long-term impacts on delivery timeframes.

The programme continues to be delivered within scope, budget and meeting all contractual obligations.

Two programme risks have been escalated to a 'High' level, which requires escalation to the Programme Steering Group, who meet 19 May. These risks are: -

1. 'Increased capital costs' – Two recent procurement processes have indicated increased costs over those estimated pre COVID-19 in capital costs. With limited PGF funding limits, additional financial management will be required. Also, the team are reviewing contingencies for roading and wharves capital projects.

2. 'Securing the Unsealed Network Funding' - with the prioritised list of roads developed, the focus of the Roding team is to work with NZTA to determine NLTF funding available. This is the next agreed step in securing this funding, however with the additional central government funds to support COVID-19 stimulus packages for infrastructure projects, a focus is required to confirm this funding urgently.

Policy and planning implications

These reports are in line with the Terms of Reference for monitoring the finances of the Council.

Financial implications

These are the latest Council reports. Capital expenditure is low as this is the first month of the financial year.

Risks and mitigations

Best value for the community would be delivering on the projects we stated in the Long Term Plan. The community will be more satisfied if we plan appropriately this year.

If the Council does not deliver on its projects and debt is not required as has been previously calculated, then there is a risk that this can impact on the advice our treasury advisers have provided and Council does not meet its treasury requirements.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Committee Terms of Reference update

Meeting: Audit, Risk and Finance Committee
Date of meeting: 11 June 2020
Reporting officer: Lisa Hong, Governance Advisor

Purpose/Ngā whāinga

To note the additions to the Audit, Risk and Finance Committee Terms of Reference.

Executive summary/Whakarāpopototanga

The Committee recommended additions to its Terms of Reference in March 2020. Council approved these additions in April 2020.

Recommendation/Ngā tūtohunga

That the Audit, Risk and Finance Committee:

- a) Notes the new Audit, Risk and Finance Committee Terms of Reference, noting the additions as recommended by the Committee and approved by Kaipara District Council in April 2020.

Context/Horopaki

At the 12 March 2020 meeting, the Committee formally received its Terms of Reference as part of item 2.1 'Proposed work programme to June 2021' and recommended the following additions:

- a. *Policy compliance [2nd bullet point in risk responsibilities]*
- b. *Review effectiveness of risk management and internal control systems [in risk responsibilities]*
- c. *Monitor operating and capital expenditure programme [in finance responsibilities].*

A revised version, with tracked changes, is attached as **Attachment A**. The Committee's recommendation was brought to Council at its 29 April 2020 meeting and was approved.

Discussion/Ngā kōrerorero

The purpose of the Audit, Risk and Finance Committee is:

- To oversee risk management and internal controls, audit functions, financial and other external corporate reporting, and compliance with legislation
- To monitor Council's financial performance against the Long Term Plan and Annual Plan.

The Committee felt that the recommended additions would be needed in order to satisfactorily perform its purpose, and that these should be explicitly stated in the Committee Terms of Reference to avoid doubt.

The recommended additions would increase accountability reporting from staff. This will enable the Committee, and Council by extension, to better monitor and manage Council's risks and performance.

Significance and engagement/Hirahira me ngā whakapāpā

The decisions or matters of this report do not trigger the significance criteria outlined in Council's Significance and Engagement Policy, and the public will be informed via agenda on the website.

Next steps/E whaiake nei

An updated Committee Terms of Reference will be published.

Attachments/Ngā tapiritanga

	Title
A	Audit, Risk and Committee Terms of Reference with tracked changes

Audit, Risk and Finance Committee

Reports to:	Kaipara District Council
Chair:	Stana Pezic (external appointee)
Deputy Chair:	Councillor Peter Wethey
Membership:	Deputy Mayor Anna Curnow, Councillor Jonathan Larsen, Councillor David Wills and Councillor Eryn Wilson-Collins
Meeting frequency:	Quarterly
Quorum:	Three

Terms of Reference

Purpose

- To oversee risk management and internal controls, audit functions, financial and other external corporate reporting, and compliance with legislation
- To monitor Council's financial performance against the Long Term Plan and Annual Plan.

Responsibilities

Audit

- Agree on audit scope with management
- Input into audit scope to the external auditor
- Consider the audit management letter and take appropriate actions

Risk

- Ensure a comprehensive risk management framework is in place and operates effectively
- Identify and monitor risks associated with legislative and policy compliance
- Review effectiveness of risk management and internal control systems

Finance

- Review and recommend financial strategies and policies to Council
- Monitor Council's financial performance and recommend actions
- Monitor operating and capital expenditure programme
- Recommending the Annual Report financials to Council.

Delegations

- Make recommendations to Council
- All necessary powers to meet its responsibilities.

Public excluded items 11 June 2020

The following recommendation is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 7 of the Act.

On the grounds that matters will be prejudiced by the presence of members of the public during discussions on the following items, it is recommended:

Recommendation/Ngā tūtohunga

a) That the following items are considered with the public excluded:

Item	Grounds for excluding the public
Confirmation of public excluded minutes 12 March 2020	Protect the privacy of natural persons, including that of deceased natural persons (Section 7(2)(a)) Protect the information which is subject to an obligation of confidence or which any person has been or could be compelled to provide under the authority of any enactment, where the making available of the information would be likely to damage the public interest (Section 7(2)(c)(ii)) Avoid prejudice to measures protecting the health or safety of members of the public (Section 7(2)(d)) Enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities (Section 7(2)(h)) Enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) (Section 7(2)(i)) Prevent the disclosure or use of official information for improper gain or improper advantage (Section 7(2)(j))
Contract monitoring and reporting	Enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) (Section 7(2)(i))
Potential claims update	Enable any local authority holding the information to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations) (Section 7(2)(i))
Investigation update	Protect the privacy of natural persons, including that of deceased natural persons (Section 7(2)(a)) Avoid prejudice to measures protecting the health or safety of members of the public (Section 7(2)(d)) Enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities (Section 7(2)(h))
Cyber security incident	Protect the privacy of natural persons, including that of deceased natural persons (Section 7(2)(a)) Avoid prejudice to measures protecting the health or safety of members of the public (Section 7(2)(d)) Enable any local authority holding the information to carry out, without prejudice or disadvantage, commercial activities (Section 7(2)(h))