AGENDA

Ordinary Council meeting
Tuesday, 1 December 2026

I hereby give notice that an Ordinary meeting of Council will be held on:

Date: Tuesday, 1 December 2026

Time: 9:00 am

Location: Tauranga City Council Chambers
L1, 90 Devonport Road
Tauranga

Gareth Green

Interim Chief Executive

Terms of reference – Council

Membership

Chair	Mayor Mahé Drysdale
Deputy Chair	Deputy Mayor Jen Scoular
Members	Cr Hautapu Baker Cr Glen Crowther Cr Rick Curach Cr Steve Morris Cr Marten Rozeboom Cr Kevin Schuler Cr Rod Taylor Cr Hēmi Rolleston
Quorum	Half of the members present, where the number of members (including vacancies) is even; and a majority of the members present, where the number of members (including vacancies) is odd.
Meeting frequency	Three weekly or as required

Role

- To ensure the effective and efficient governance of the City.
- To enable leadership of the City including advocacy and facilitation on behalf of the community.
- To review and monitor the performance of the Chief Executive.

Scope

- Oversee the work of all committees and subcommittees.
- Exercise all non-delegable and non-delegated functions and powers of the Council.
- The powers Council is legally prohibited from delegating include:
    - Power to make a rate.
    - Power to make a bylaw.
    - Power to borrow money, or purchase or dispose of assets, other than in accordance with the long-term plan.
    - Power to adopt a long-term plan, annual plan, or annual report
    - Power to appoint a chief executive.
    - Power to adopt policies required to be adopted and consulted on under the Local Government Act 2002 in association with the long-term plan or developed for the purpose of the local governance statement.
    - All final decisions required to be made by resolution of the territorial authority/Council pursuant to relevant legislation (for example: the approval of the City Plan or City Plan changes as per section 34A Resource Management Act 1991).
- Council has chosen not to delegate the following:
    - Power to compulsorily acquire land under the Public Works Act 1981.
- Make those decisions which are required by legislation to be made by resolution of the local authority.

- Authorise all expenditure not delegated to officers, Committees or other subordinate decision-making bodies of Council.
- Make appointments of members to the council-controlled organisation Boards of Directors/Trustees and representatives of Council to external organisations.
- Undertake statutory duties in regard to Council-controlled organisations, including reviewing statements of intent, with the exception of the Local Government Funding Agency where such roles are delegated to the City Delivery Committee. (Note that monitoring of all Council-controlled organisations' performance is undertaken by the City Delivery Committee. This also includes Priority One reporting.)
- Consider all matters related to Local Water Done Well.
- Consider any matters referred from any of the Standing or Special Committees, Joint Committees, Chief Executive or General Managers.
- Review and monitor the Chief Executive's performance.
- Develop Long Term Plans and Annual Plans including hearings, deliberations and adoption.

Procedural matters

- Delegation of Council powers to Council's committees and other subordinate decision-making bodies.
- Adoption of Standing Orders.
- Receipt of Joint Committee minutes.
- Approval of Special Orders.
- Employment of Chief Executive.
- Other Delegations of Council's powers, duties and responsibilities.

Regulatory matters

Administration, monitoring and enforcement of all regulatory matters that have not otherwise been delegated or that are referred to Council for determination (by a committee, subordinate decision-making body, Chief Executive or relevant General Manager).

Order of Business

1 Opening karakia 7
2 Apologies 7
3 Public forum 8
3.1 Public Forum - Ms Belinda Edwards - CEO - Basketball New Zealand 8
3.2 Public Forum - Ms Mary Dillon - Envirohub 8
3.3 Public Forum - Graeme Neilson - Chairperson - BOP Badminton Facilities Trust 8
4 Acceptance of late items 9
5 Confidential business to be transferred into the open 9
6 Change to the order of business 9
7 Confirmation of minutes 9
Nil
8 Declaration of conflicts of interest 9
9 Deputations, presentations, petitions 9
Nil
10 Recommendations from other committees 9
Nil
11 Business 10
11.1 Mauao ara hikoi - Mauao Walkways - Quantitative Landslide Risk Analysis 10
11.2 Mauao Recovery: Business Support and Rates Relief Options 149
11.3 January Weather Event - Recovery Progress Report 180
11.4 Mauao Reopening Arrangements 181
11.5 Refinement to Major Transport Projects for Draft 2027-37 LTP Prioritisation 182
11.6 Arena Extension Business Case 193
11.7 Rating Policy Matters for 2027-37 Long-term Plan 194
11.8 Update - AIP Summaries and Financial Information 226
11.9 Allocation of Elder Housing sale proceeds 239
11.10 Establishment of Ratepayer Assistance Scheme (RAS) 249
11.11 Local government reform functions analysis - approval of next steps 263
11.12 Tāheke – Bay Waters Limited: Setting & Collection of Charges 273
11.13 Proposed Private Plan Change 40 - Mount Maunganui Golf Club Incorporated Rezoning - Adoption of Recommendations and Notification of Decision 284
11.14 Te Maunga Partnership Programme 331
11.15 Appointment of Co-chair to Matapihi Southern Pipeline Advisory Group 353
11.16 Animal Services - Annual Section 10A Report 368
12 Discussion of late items 379
13 Public excluded session 380
13.1 Revaluation 2026 - QV 380

13.2 Potential in-housing of contract 380
13.3 Economic Development Partnership Agreements 380
13.4 Bay of Plenty Housing Equity Fund - Founding Shareholder Resolutions..... 380
Confidential Attachment 1 11.9 - Allocation of Elder Housing sale proceeds..... 380
14 Closing karakia 382

1 OPENING KARAKIA

2 APOLOGIES

3 PUBLIC FORUM

3.1 Public Forum - Ms Belinda Edwards - CEO - Basketball New Zealand

ATTACHMENTS

Nil

3.2 Public Forum - Ms Mary Dillon - Envirohub

ATTACHMENTS

Nil

3.3 Public Forum - Graeme Neilson - Chairperson - BOP Badminton Facilities Trust

ATTACHMENTS

Nil

4 ACCEPTANCE OF LATE ITEMS

5 CONFIDENTIAL BUSINESS TO BE TRANSFERRED INTO THE OPEN

6 CHANGE TO THE ORDER OF BUSINESS

7 CONFIRMATION OF MINUTES

Nil

8 DECLARATION OF CONFLICTS OF INTEREST

9 DEPUTATIONS, PRESENTATIONS, PETITIONS

Nil

10 RECOMMENDATIONS FROM OTHER COMMITTEES

Nil

11 BUSINESS

11.1 Mauao ara hikoi - Mauao Walkways - Quantitative Landslide Risk Analysis

File Number: **A21472725**

Author: **Amanda Davies, Portfolio Manager: Community Projects**

Authoriser: **Charlie Rahiri, Recovery Manager**

PURPOSE OF THE REPORT

1. To present the final, independently peer-reviewed Quantitative Landslide Risk Analysis (QLRA) for the Mauao walking-track network and seek direction on the future management of landslide and rockfall risk affecting track access, configuration and operation

RECOMMENDATIONS

That the Council:

(a) Receives the report **"Mauao ara hīkoi – Mauao Walkways – Quantitative Landslide Risk Analysis"** and the final independently peer-reviewed QLRA included as Attachment 1.

(b) Notes that the QLRA provides the technical evidence base for evaluating future track access, risk-reduction measures and long-term walking-track network options, but does not determine whether the assessed landslide and rockfall risks are acceptable or tolerable.

(c) Confirms that the annual individual loss-of-life risk benchmark of 1×10^{-4} previously adopted by Council for the wider Mauao QLRA study area will be used as the primary benchmark for evaluating walking-track access and risk-reduction options.

(d) Notes that the 1×10^{-4} benchmark is not a pass-or-fail threshold and that decisions on reopening and future track configuration must also consider:

- cumulative risk across the complete visitor journey;
- societal risk;
- the reliability and duration of proposed controls;
- whether residual risk has been reduced as low as reasonably practicable;
- cultural and environmental effects;
- visitor-access outcomes and operational feasibility; and
- whole-of-life cost.

(e) Directs staff to complete any site-specific investigations necessary, including further assessment of **Motukauri D, Connector 1 and the north-western section of Oruahine**, where the QLRA identifies incomplete or potentially understated risk information.

(f) Agrees that existing interim access controls remain in place until the required investigations, controls, health and safety assessment and governance approvals support a change in access.

EXECUTIVE SUMMARY

2. Following the severe rainfall event on 22 January 2026, which triggered 49 mapped landslides across Mauao and caused substantial damage to the walking-track network, Tauranga City Council commissioned WSP New Zealand Limited to undertake a QLRA for people using the tracks.

3. The assessment covers Te Ara Tūtanga, Motukauri, Waikorire, Oruahine and connecting tracks. It assesses life-safety risk from landslides and rockfall using local personal risk, annual individual fatality risk (AIFR) and risk per trip. The final assessment models a frequent visitor completing 52 one-way trips per year and compares the results with the Bay of Plenty Regional Policy Statement and Department of Conservation Natural Hazard Risk Analysis guidance.
4. The assessment and independent peer review have been completed. Peer-review recommendations, including sensitivity testing and clarification of assumptions and limitations, have been addressed in the final QLRA. The report provides the technical evidence base for evaluating future track access, risk-reduction measures and long-term network options.
5. Risk varies materially by track section. For a 52-trip-per-year user, Motukauri B is assessed at approximately 1.00×10^{-4} AIFR. Motukauri C, Te Ara Tūtanga, Waikorire G and Connector 4-I fall within the 10^{-5} to 10^{-4} range. Several other sections are below 10^{-5}. Motukauri D and Connector 1 were not assessed.
6. Landslides are the principal risk driver for most lower and mid-slope sections. Rockfall is the principal driver for some upper-slope sections, including Oruahine and Waikorire H. Results for the north-western part of Oruahine may be understated because of limitations in the boulder inventory and require site-specific assessment.
7. A weekly summit traverse using Waikorire and Motukauri is estimated at approximately 1.91×10^{-4} AIFR, or 3.68×10^{-6} per trip. This demonstrates that track-section results cannot be considered in isolation when assessing a complete journey.
8. The final QLRA does not decide whether a particular risk is acceptable or tolerable. That is a governance decision. The recommended approach is to apply the 10^{-4} annual individual loss-of-life benchmark already adopted for the wider Mauao study area as the primary decision benchmark, while also considering cumulative route exposure, Department of Conservation guidance, societal risk, control reliability and whether residual risk has been reduced as low as reasonably practicable.
9. The next phase is an options assessment. This will compare network configurations, access restrictions, alternative alignments, operational controls and engineering responses, and will return a preferred option or shortlist for further consideration.

BACKGROUND

10. On 22 January 2026, an intense rainfall event associated with Tropical Disturbance 05F caused widespread landsliding on Mauao. The event triggered 49 mapped landslides with a combined mapped area of approximately 6,367 m² and resulted in closure of the Beachside Holiday Park, the Mauao walking tracks, Adams Avenue and Pilot Quay.
11. The walking-track QLRA is separate from, but complementary to, the Tonkin + Taylor QLRA for the Beachside Holiday Park, Mount Hot Pools, Mount Maunganui Lifeguard Service, Pilot Bay boat ramp and Adams Avenue. The two assessments were progressed concurrently under technical coordination and independent peer review.
12. Mauao supports one of New Zealand's most heavily used recreation networks. Track-counter data indicates more than one million users annually, with estimated combined use of approximately 1.3 to 1.4 million trips after adjustment for double counting.
13. The QLRA was commissioned to provide a network-scale evidence base for decisions on reopening, temporary or permanent closure, track configuration, monitoring, warning systems, inspections, engineering measures and long-term management.

SCOPE AND METHDOLODGY

14. The final QLRA assesses life-safety risk from landslides and rockfall. It does not assess property loss, tree fall, sinkholes or the financial value of track assets. Site-specific slope

stability investigations and detailed mitigation design sit outside the network-scale assessment.

15. Risk is calculated from four components: the annual probability of a hazard occurring; the probability debris or rockfall reaches the person; the probability the person is present; and the probability of fatality if impacted.

16. The assessment uses three principal metrics:

    (a) Local personal risk: the theoretical annual probability of fatality for a person continuously present at a location.

    (b) Annual individual fatality risk (AIFR): the annual probability of fatality for a representative user completing a defined number of visits.

    (c) Risk per trip: the probability of fatality during one one-way trip along a specified track or route.

17. The assessment generally corresponds to an advanced assessment under the Department of Conservation guidance. Some components remain at a basic or developing level because of incomplete historical inventories, simplified rockfall modelling, limited worker-movement data and uncertainty in vulnerability and triggering parameters. These limitations are documented and were considered through sensitivity testing and peer review.

PEER REVIEW AND ASSURANCE

18. The technical assessment has been independently peer reviewed. The review considered the methodology, datasets, risk calculations, sensitivity testing, interpretation of results and the clarity of assumptions and limitations.

19. Recommendations arising from the peer review have been addressed in the final QLRA. This included completion or refinement of sensitivity testing, clarification of the assessment level under the Department of Conservation guidance, and clearer identification of sections requiring site-specific assessment.

20. Completion of peer review provides independent technical assurance but does not remove uncertainty inherent in natural-hazard assessment. The QLRA remains a network-scale decision-support tool and should not be used as a substitute for site-specific investigation or design where local treatment or reopening decisions depend on finer-scale conditions.

KEY FINDINGS

21. The landslide inventory contains 221 mapped failures between 1943 and 2026. The January 2026 event produced 49 mapped landslides. The inventory is more complete from 2005 onward and is dominated by significant storm events in 2005, 2011 and 2026.

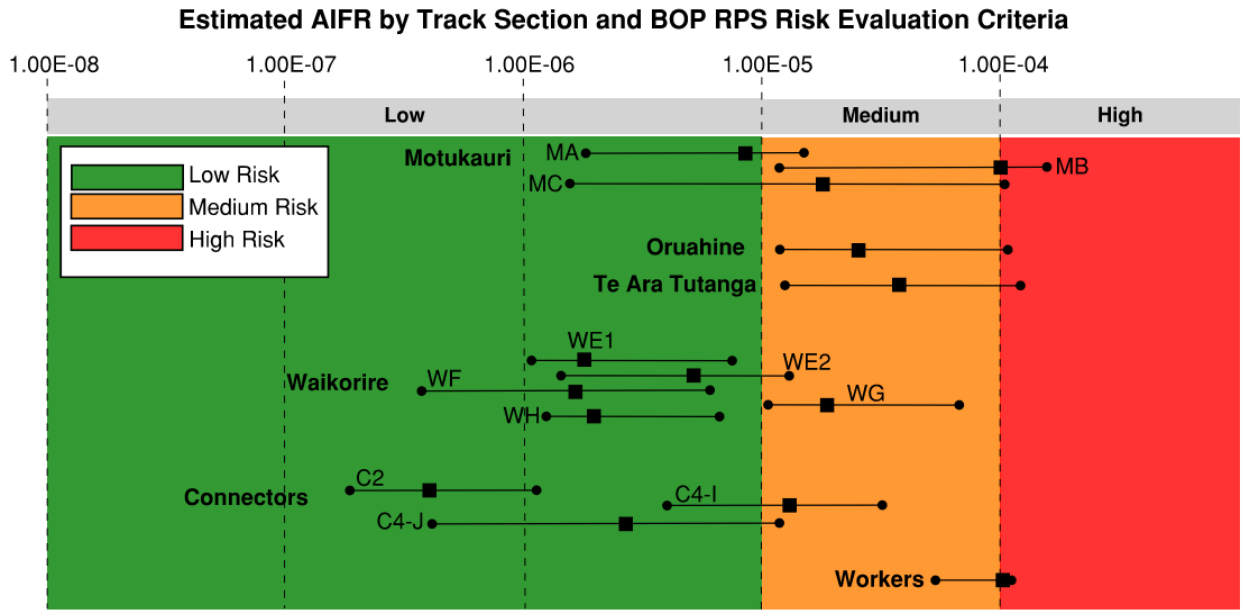
22. Approximately 13,000 boulders were mapped from aerial imagery and selected field observations. The average mapped boulder diameter is approximately 0.9 m, and a 1 m design boulder was adopted for the risk assessment.

23. Landslide risk generally decreases with elevation, while rockfall risk is concentrated below summit bluffs and on inland tracks. Some mid-slope locations have elevated combined risk because they are exposed to multiple runout scenarios and substantial upslope source areas.

24. The results for a representative frequent visitor completing 52 trips per year are summarised below.

Track section	AIFR, 52 trips/year	BOP RPS	DOC NHRA	Main driver
Motukauri A	9.4E-06	Low	Substantial	Landslide
Motukauri B	1.0E-04	High	Extreme	Landslide
Motukauri C	3.2E-05	Medium	High	Landslide
Motukauri D	Not assessed	–	–	Not assessed
Oruahine	4.7E-05	Medium	High	Rockfall
Te Ara Tūtanga	1E-05	Medium	High	Landslide
Waikorire E1	3.2E-06	Low	Substantial	Landslide
Waikorire E2	7.3E-06	Low	Substantial	Landslide
Waikorire F	2.9E-06	Low	Substantial	Landslide
Waikorire G	3.3E-05	Medium	High	Landslide / both
Waikorire H	3.6E-06	Low	Substantial	Rockfall
Connector 1	Not assessed	–	–	Not assessed
Connector 2	6.3E-07	Low	Moderate	Rockfall
Connector 3	1.2E-09	Low	Low	Rockfall
Connector 4-I	2.0E-05	Medium	High	Both
Connector 4-J	4.8E-06	Low	Substantial	Both

25. The risk estimates carry substantial uncertainty. Sensitivity testing indicates that the uncertainty range for some track sections spans more than one risk classification, as shown in the figure below. The preferred values (black squares) represent the best estimates of AIFR values; the circles represent minimum and maximum bounds in consideration of the variability in individual parameters.



26. Interpretation: AIFR increases with the number and duration of visits. A complete route must be assessed by adding the risk from every section used during the journey. The net risk of a visitor traversing multiple track sections, and the uncertainties therein, should be considered when deciding on management strategies.

RISK TOLERABILITY

27. The final QLRA does not determine whether the estimated risks are acceptable, tolerable or intolerable. It provides risk evaluation information for governance decision-making.

28. Council previously adopted an annual individual loss-of-life benchmark of 10^{-4} for the wider Mauao QLRA study area. Applying the same primary benchmark to the walkway network supports a consistent approach across Mauao.

29. The 10^{-4} benchmark should not be treated as a simple pass-or-fail threshold. Decisions should also consider cumulative route risk, the reliability and duration of controls, societal risk, cultural and environmental effects, visitor-access outcomes, operational feasibility, cost and whether risk has been reduced as low as reasonably practicable.

30. Return periods are statistical expressions of probability. A risk of 10^{-4} per year is equivalent to a one-in-10,000 annual probability for a defined individual exposure scenario. It does not mean that a fatal event will occur regularly every 10,000 years.

Annual probability	Approximate statistical return period
10^{-3}	1 in 1,000 years
10^{-4}	1 in 10,000 years
10^{-5}	1 in 100,000 years

ROUTE-LEVEL AND SOCIETAL RISK

31. Visitors generally use several track sections in a single journey. The risk from each section must therefore be combined. The modelled weekly summit traverse using Waikorire and Motukauri has an AIFR of approximately 1.91×10^{-4}, which is higher than any single section except the boundary result for Motukauri B.

32. The QLRA also includes simplified multiple-fatality examples. These indicate that societal risk may be material, particularly because Mauao can have high numbers of users on the network at the same time.

33. New Zealand does not have established societal-risk tolerability criteria for this context. The examples therefore support decision-making but do not determine whether societal risk is acceptable or tolerable. Societal risk should remain a material consideration when comparing options that redistribute or concentrate visitors.

SENSITIVITY, LIMITATIONS AND FURTHER ASSESSMENT

34. The final assessment includes sensitivity testing of key assumptions. The factors with the greatest potential to affect risk estimates include landslide runout assumptions, walking speed and exposure duration, vulnerability values, and the estimated number of boulders triggered in different earthquake-intensity bands.

Issue	Decision implication
Incomplete historical inventories	Frequency estimates are indicative and uncertainty should be reflected in option comparison.
Simplified rockfall modelling	Site-specific modelling may be required where access decisions depend on local rockfall risk.
Oruahine north-western section	Results may be understated because vegetation limits the boulder inventory.
Motukauri D and Connector 1	No final section-level risk result is available; separate assessment is required.
Worker and off-track exposure	Further data is required before worker risk and atypical use can be fully evaluated.
Pre-2026 terrain model	Local post-event changes may not be fully represented in network-scale runout modelling.

35. These limitations do not prevent use of the QLRA as the technical evidence base for network option development. They do mean that the level of investigation should increase as decisions move from strategic network configuration to site-specific reopening, engineering design or residual-risk acceptance.

RISK MANAGEMENT OPTIONS

36. The QLRA identifies a hierarchy of potential responses. Options are not mutually exclusive and the preferred network may use different treatments on different sections.

Response	Application and considerations
Avoidance	Permanent closure, retirement or relocation of track sections where exposure cannot be reliably reduced to the adopted benchmark.
Temporary closure	Rainfall-, earthquake- or observation-triggered closure under a documented Trigger Action Response Plan, with clear reopening criteria.
Exposure reduction	Reduce time spent in higher-risk areas, manage route direction, avoid stopping points, limit event use, or restrict access during higher-risk conditions.
Engineering treatment	Site-specific drainage, stabilisation, rock scaling, barriers, catch systems or realignment where technically feasible and culturally and environmentally appropriate.
Monitoring and inspection	Routine and post-event inspections, rainfall monitoring, incident reporting, asset condition checks and targeted movement monitoring.
Information and emergency planning	Clear visitor information, wayfinding, closure communication, evacuation arrangements and response responsibilities.
Residual-risk acceptance	Formal, documented acceptance only after options have been evaluated, controls defined and the remaining risk clearly understood.

STATUTORY AND POLICY CONTEXT

37. The QLRA is a technical risk assessment and is not itself a determination of compliance with the Health and Safety at Work Act 2015. Its findings are nevertheless relevant to Council's duties as a person conducting a business or undertaking in relation to staff, contractors, Council-controlled land and reasonably foreseeable natural-hazard risks.

38. Future track-access, asset and mitigation decisions will need to have regard to the Resource Management Act 1991, the Bay of Plenty Regional Policy Statement natural-hazard framework, the National Policy Statement for Natural Hazards 2025, the Reserves Act 1977 and the Mauao Historic Reserve Vesting Act 2008, together with other applicable approvals and statutory processes.

39. The QLRA supports a risk-based and proportionate approach. It does not remove the need for planning, reserve-management, heritage, archaeological, cultural or consenting assessments for particular options.

STRATEGIC ALIGNMENT

40. The report supports Council's responsibilities to protect community wellbeing, manage natural-hazard risk, make evidence-based asset and access decisions, build resilience, protect the environment, and work in partnership with mana whenua in matters relating to Mauao.

Community outcome	Contribution
We are an inclusive city	Supports safe and equitable access decisions.
We value, protect and enhance the environment	Integrates risk reduction with environmental and landscape values.
We are a well-planned city that is easy to move around	Provides an evidence base for a resilient and connected track network.
We are a city that supports business and education	Indirect contribution through long-term recovery and visitor confidence.
We are a vibrant city that embraces events	Requires event and group-use risks to be considered in future access planning.

FINANCIAL CONSIDERATIONS

41. No funding decision is sought through this report. The cost of the preferred response will depend on the network configuration, the extent of site-specific investigation and engineering works, the operating model for closures and inspections, and the required level of monitoring and assurance.

42. Option evaluation should consider whole-of-life costs, including investigation, design, consenting, construction, communications, security or access control, monitoring, inspection, maintenance, renewal, emergency response, and any decommissioning or reinstatement costs.

43. Avoidance or closure may reduce capital mitigation expenditure but can create costs associated with network redesign, enforcement, rehabilitation and loss of access. Engineering options may retain access but create long-term inspection, maintenance and renewal obligations.

RISKS AND LEGAL IMPLICATIONS

Risk	Management response
Public safety	Maintain closures or interim controls until evidence supports reopening; evaluate complete routes, not isolated sections.
Control failure	Define ownership, operating procedures, inspection frequency, escalation thresholds and assurance requirements.
Reputational and community confidence	Use transparent, evidence-based decision records and communicate that residual risk remains.
Cultural impact	Develop options with Mauao Trust, Ngā Poutiriao ō Mauao and mana whenua from the outset.
Environmental impact	Avoid disproportionate earthworks or vegetation effects and complete effects assessment before selecting engineering responses.
Financial exposure	Use staged investigation and option development; identify whole-of-life costs and contingencies.
Legal and governance	Document how technical evidence, statutory obligations, risk benchmarks and reasonably practicable controls were considered.

TE AO MĀORI APPROACH

44. Mauao is a tūpuna maunga and taonga of exceptional cultural, historical and spiritual significance. Future track-access, remediation and risk-management decisions must be developed in partnership with the Mauao Trust, Ngā Poutiriao ō Mauao and mana whenua.

45. The options process should give effect to Manaakitanga through protection of people; Rangatiratanga through informed mana whenua leadership and decision-making; Kaitiakitanga through stewardship of the maunga; Whanaungatanga through collaborative relationships; Wairuatanga through recognition of the mauri and spiritual significance of Mauao; and Tūmanako through a safe and sustainable pathway for future generations.

46. Cultural effects should not be treated as a late-stage mitigation matter. Cultural values and aspirations should inform the initial network options, the acceptability of engineering interventions, the design of access controls and the approach to public communication.

CLIMATE IMPACT

47. Intense rainfall is the dominant trigger for most mapped landslides on Mauao. Future management should therefore be adaptive and should account for the possibility that changing rainfall intensity and storm patterns could alter hazard frequency over the life of the track network and its controls.

CONSULTATION / ENGAGEMENT

48. This report seeks direction to progress option development and does not seek a final decision on track reopening, permanent closure, engineering works or funding. No broader community consultation is required before the technical and cultural option-development phase begins.

49. Targeted engagement should occur during option development with the Mauao Trust, Ngā Poutiriao ō Mauao, iwi representatives, track users, operational teams, emergency-management staff, technical advisors and other affected stakeholders. Broader engagement should be considered once a credible shortlist, impacts and indicative costs are available.

SIGNIFICANCE

50. The matter is considered to be of high significance because it concerns public safety, access to a highly valued reserve, the cultural and spiritual significance of Mauao, potential long-term changes to the walking-track network, and potentially material financial and environmental implications.

NEXT STEPS

51. **Complete health and safety assurance** - A visitor and worker health and safety risk assessment will be completed. This will consider the QLRA findings together with the proposed physical and operational controls and will undergo the identified review and legal assurance process. A public-facing version will also be developed to clearly explain the risks and how they will be managed.

52. **Confirm operational and visitor-management controls** – consider operational controls required to manage ongoing and changing risk, including TARPs, inspection and monitoring requirements, closure and reopening triggers, site management arrangements, potential opening hours and visitor management.

53. **Complete stakeholder engagement and communications** -Targeted engagement will be undertaken with emergency services, commercial operators, event organisers and other affected stakeholders. Communications will explain the proposed access arrangements, residual risks, visitor responsibilities and the circumstances in which access may be restricted or closed.

54. **Bring a potential reopening proposal forward for governance consideration** - The proposal will be considered through the agreed governance pathway (Mauao Trust/Council/Recovery Working Group), bringing together the technical evidence, H&S assessment, proposed controls, operational readiness and any matters requiring governance acceptance or approval. The current programme anticipates the reopening proposal progressing through the working group before Council consideration.

ATTACHMENTS

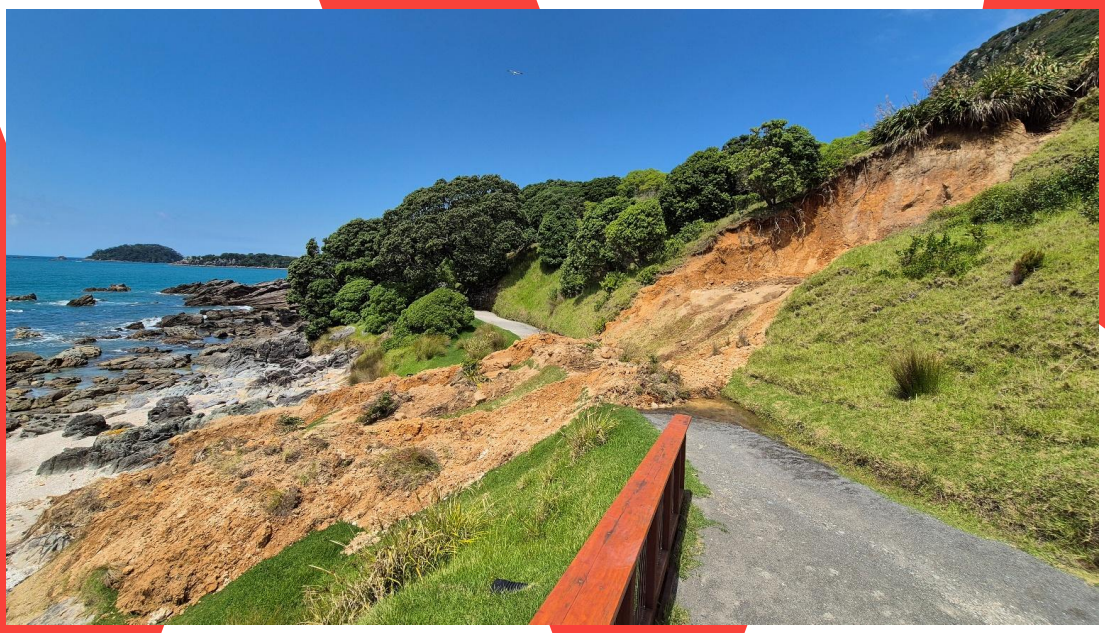
1. Mauao ara Hikoi QLRA - A21472708 ⇩

Tauranga City Council
Mauao ara hīkoi - Mauao walkways

Quantitative landslide risk analysis

16-11-2026

GER2026/09



Document distribution

Tauranga City Council

Mauao ara hīkoi - Mauao walkways

Quantitative landslide risk analysis

Prepared for

Tauranga City Council

Prepared by

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Approved by:	Gareth Francis, Principal Geotechnical Engineer, Project Director

Revisions

Rev	Date	Details
A	2026-10-09	Draft for external peer review
B	2026-11-09	Revised draft
C	2026-11-16	Final

Acknowledgement

We extend our deepest sympathy and condolences to the families, loved ones, and all those affected by the tragic loss of six lives in the Mauao landslide event of 22 January 2026. We acknowledge the consequences of the landslides on mana whenua as kaitiaki and owners of Mauao and recognise the significant impact this event has had on those directly affected as well as the Tauranga community and businesses.

Table of contents

Glossary **9**

Executive summary **11**

1. Introduction **13**

2. Scope of work **14**

2.1 Purpose and objectives 14
2.2 Scope 14
2.3 Structure of the report 16

3. Site Description **18**

3.1 Setting 18
3.2 Geology and geomorphology 19
3.3 Historical and recent slope failures on Mauao 21
3.4 Visitors and TCC staff/contractors 22
3.5 Previous track network-scale risk assessments 23

4. Methodology **25**

4.1 Overview 25
4.2 Risk metrics 25
4.3 Assessment methodology 26
4.3.1 Level of analysis 26
4.3.2 Risk analysis workflow 27
4.3.3 Sensitivity testing 28
4.3.4 Risk evaluation 29
4.4 Datasets 30

5. Hazard Assessment **32**

5.1 Landslide types 32
5.2 Probability of landslide occurrence $P_{(L)}$ 33
5.2.1 Inventory mapping 33
5.2.2 Landslide susceptibility 38
5.2.3 Landslide size 39
5.2.4 Locations of source areas 43
5.2.5 Landslide frequency and triggers 46
5.2.6 Rockfall frequency and triggers 50
5.3 Probability of spatial impact $P_{(T:L)}$ 55

5.3.1 Landslide runout 56
5.3.2 Slippage 59
5.3.3 Rockfall runout 60

6. Consequence Analysis 63
6.1 Probability of spatio-temporal exposure $P_{(S:T)}$ 63
6.1.1 User variability 63
6.1.2 Calculation of $P_{(S:T)}$ 63
6.2 Vulnerability $V_{(D:T)}$ 68

7. Risk Analysis Results 70
7.1 Risk calculations 70
7.2 Risk results 71
7.2.1 Visitors 71
7.2.2 Workers 78
7.3 Sensitivity testing 80

8. Risk Evaluation Information 82
8.1 Visitors 82
8.2 Workers 85
8.3 Summary 85

9. Multiple Fatality Risk Example 87
9.1 Group exposure probability 87
9.1.1 Track user data 87
9.1.2 Daily variability 88
9.1.3 Seasonal variability 89
9.1.4 Events 89
9.1.5 Weather variability 89
9.1.6 Estimation of $P_{(S:T)}$ 90
9.2 Vulnerability and minimum group numbers 91
9.3 Example Calculation – Waikorire Track 91
9.4 Example Calculation – Base Track 92

10. Risk Management 93
10.1 Risk tolerability and residual risk 93
10.2 Risk management options 94

11. Conclusions and recommendations 98

12. Methodological Assumptions, Limitations, and Future Improvements 101

13. Limitations Statement **104**

References **105**

List of Tables

Table 1. Alignment of this study's analysis with the Basic and Advanced levels of the NHRA 26
Table 2. Overview of risk analysis workflow for this study 27
Table 3. How risk metrics are reported 30
Table 4. Summary landslide numbers and total area affected in select imagery dates 36
Table 5. Area-Volume scaling relationship parameters 41
Table 6. AEPs from the Mauao landslide inventory 48
Table 7. Rainfall parameters and probabilities for lower frequency, higher intensity scenario 48
Table 8. Earthquake triggering scenarios from the National Seismic Hazard Model (NSHM) 50
Table 9. Example calculation of background annual landslide probability $P_{(L)}$ 50
Table 10. Observed rockfall incidents 52
Table 11. Return periods and number of rockfall not triggered by earthquakes 54
Table 12. Earthquake triggering scenarios and the additional annual probabilities of rockfall (Appendix D) 54
Table 13. Runout parameters for landslide volume scenarios considered in risk calculations 56
Table 14. Spatial impact probabilities for landslide debris reaching tracks 58
Table 15. Calculation of $P_{(S:T)}$ for Mauao tracks 65
Table 16. Assumptions and coefficients used to estimate $P_{(S:T)}$ for the most exposed 66
Table 17. Calculation of $P_{(S:T)}$ for the most exposed workers. 67
Table 18. Landslide vulnerability (probability of loss of life) values adopted for track users 68
Table 19. Rockfall vulnerability (probability of loss of life) values adopted for track users 69
Table 20. Example of risk analysis results for a summit track traverse 71
Table 21. LPR and AIFR results by track section 71
Table 22. Risk colour scheme 72
Table 23. AIFR results by contracted management area classification. 79
Table 24. Summary of sensitivity testing 80
Table 25. Track section 52-trip (most exposed visitor) AIFR classifications 82
Table 26. AIFR for most exposed individuals in different visitor user groups 84
Table 27. Worker AIFR for Mauao. 85
Table 28. Annual trips per track 88
Table 29. Visitors to all tracks between the hours of 7 am – 7 pm 88
Table 30. Seasonal variability in visitors between summer and winter months 89
Table 31. $P_{(S:T)}$ estimates for multiple fatality scenarios 90
Table 32. Minimum group sizes for different multiple-fatality scenarios 91
Table 33. Multiple fatality risk for the Waikorire track. 91
Table 34. Multiple fatality risk for Te Ara Tūtanga. 92

Table 35. Assumptions, limitations, and future improvements identified for the risk analysis 101
Table 36. Attributes recorded in the Mauao landslide inventory 110
Table 37. Landslide inventory 111
Table 38. Input variables used for landslide susceptibility assessment 118
Table 39. Landslide susceptibility classification summary 120

List of Figures

Figure 1. Mauao walkways QLRA study area 13
Figure 2. Risk management framework and scope of work for this study 15
Figure 3. The Mauao walkway network 18
Figure 4. Hillshade map of Mauao and key geomorphic elements 20
Figure 5: Landslides from the 2026 storm. 22
Figure 6. Risk tolerance thresholds in the Bay of Plenty Regional Policy Statement 29
Figure 7. Landslide on Mauao (January 2026) 32
Figure 8. Boulders downslope of Oruahine track 33
Figure 9. Landslide inventory of Mauao 35
Figure 10. Number of landslides in the inventory by year of occurrence 35
Figure 11. Boulder locations mapped at Mauao 38
Figure 12. Landslide susceptibility map for Mauao 39
Figure 13. Area-Volume scaling relationships for landslides in the Mauao inventory 41
Figure 14. Examples of c. 5-10 m^3 landslides on Mauao 42
Figure 15. Cumulative density function (CDF) of boulder diameters from the inventory 43
Figure 16. Geomorphic slope facets for Lower Frequency, Higher Impact scenario 44
Figure 17: 100 m^3 scenario source areas 45
Figure 18: 1,000 m^3 scenario source areas 45
Figure 19: 10,000 m^3 scenario source areas 46
Figure 20. Annual landslide frequency derived from the landslide inventory 47
Figure 21. Track sections and associated upslope areas 49
Figure 22. Boulders per year by size and imagery date in which it was identified 51
Figure 23. Estimated annual exceedance probabilities for boulders in inventory over historical period. 51
Figure 24. Landslide volume (as per Larsen et al., 2010) versus measured F-angle 57
Figure 25. Landslide volume (as per Larsen et al., 2010) versus slope-distance runout length 57
Figure 26. Example model output showing permissible runout area 58
Figure 27. Slippage hazard on a track (yellow arrows) at landslide WT1 59
Figure 28. Empirical runout approach from Massey et al. (2014) 60
Figure 29. Rockfall shadow angles derived from the boulder inventory 61
Figure 30. Rockfall source areas and shadow-angle contours derived from mapped bluff sources across Mauao. 61
Figure 31. Track segmentation and location of features included in track travel times 64

Figure 32. Worker zones classified by management area. 67
Figure 33. Map of track-section-scale AIFR 73
Figure 34. Map of track-section-scale LPR 74
Figure 35. Map of sub-track-section-scale rockfall AIFR 75
Figure 36. Map of sub-track-section-scale landslide AIFR 75
Figure 37. Map of sub-track-section-scale combined AIFR 76
Figure 38: Map of sub-track-section-scale rockfall LPR 77
Figure 39. Map of sub-track-section-scale landslide LPR 77
Figure 40. Map of sub-track-section-scale combined LPR 78
Figure 41. Map of worker zone combined AIFR. 79
Figure 42. BOP RPS risk evaluation criteria with AIFR uncertainty ranges by track section 83
Figure 43. Annual trips over time broken down by track 87
Figure 44. Variation of visitor numbers with rainfall 90
Figure 45. Individual loss of life risk criteria (Table C1, AGS, 2007). 93
Figure 46. Input variables for landslide susceptibility assessment. 119

Appendices

Appendix A Landslide inventory
Appendix B Landslide susceptibility analysis methodology
Appendix C Landslide triggering information
C.1 Rainfall
C.2 Earthquakes
Appendix D Rockfall Frequency
Appendix E $P_{(S:T)}$ Calculation

Glossary

Abbreviations

Abbreviation	Description
AGS	Australian Geomechanics Society
AIFR	Annualised Individual Fatality Risk
BOP	Bay of Plenty
BOPRC	Bay of Plenty Regional Council
DEM	Digital elevation model
DOC	Department of Conservation
DSM	Digital surface model
ESNZ	Earth Sciences New Zealand (formerly GNS Science)
F-Angle	Fahrböschung angle – the tangent of the ratio between the fall height of debris and the horizontal runout distance of a landslide, measured between the crest of the landslide source zone and the toe of the deposit
GIS	Geographic Information System – a mapping system to manage and analyse spatial data
HIRDS	High Intensity Rainfall Design System published by ESNZ (https://niwa.co.nz/climate-and-weather/high-intensity-rainfall-design-system-hirds)
IDC	Tauranga City Council Infrastructure Development Code
LiDAR	Light Detection and Ranging – a remote sensing method that uses lasers to measure the earth's surface
LPR	Local Personal Risk
Mapi	Tauranga City Council's publicly accessible online GIS mapping platform
NHRA	Natural hazard risk analysis
NPS-NH	National Policy Statement for Natural Hazards 2025
NSHM	National Seismic Hazard Model published by ESNZ (https://nshm.gns.cri.nz/)
QLRA	Quantitative Landslide Risk Assessment
TARP	Trigger Action Response Plan
TCC	Tauranga City Council
T+T	Tonkin + Taylor Limited
RPS	Regional Policy Statement

Abbreviation	Description
WSP	WSP New Zealand Limited

Terms

Terms	Description
Risk	The combination of the likelihood of a hazard occurring and the severity of its adverse effects on life, health, property or the environment.
Risk Assessment	The overall process of scoping, analysing and evaluating risk to support risk management decisions.
Risk Analysis	The estimation of the likelihood and consequences of a hazard.
Risk Evaluation	The judgement of whether an estimated risk is acceptable, tolerable or unacceptable.
Landslide	The downslope movement of soil, debris or rock under gravity.
Rockfall	The detachment of rock blocks from a steep slope or cliff, which then fall, bounce and roll downslope.
P_{LOL}	The annual probability that a person is killed.
P_L	The annual probability of a landslide or rockfall occurring.
$P_{T:L}$	The probability that a landslide or rockfall reaches the element at risk, such as a track.
$P_{S:T}$	The proportion of a year that a person is in the path of a landslide or rockfall when it reaches the element at risk.
$V_{D:T}$	The probability that a person is killed if impacted by a landslide or rockfall.
Local Personal Risk (LPR)	The annual probability of death for a person present at a location at all times.
Annual individual fatality risk (AIFR)	The annual probability of death for the individual(s) exposed to the hazard over one year.
Individual Risk Per Trip	The probability of death from a single one-way trip through the hazard area.

Executive summary

On 22 January 2026, an intense rainfall event associated with Tropical Disturbance 05F triggered 49 landslides across Mauao, which caused substantial damage to public walking tracks, affecting access to and around Mauao. The most significant landslide occurred within the Mount Maunganui Beachside Holiday Park, causing six fatalities and extensive damage to the Holiday Park and Mount Hot Pools complex.

Tauranga City Council engaged WSP New Zealand Ltd to undertake a quantitative landslide risk analysis (QLRA) of the Mauao walking track network. The purpose of the analysis is to provide an evidence base to support decisions on the remediation and reopening of the tracks, including track access and configuration, risk reduction and operational controls, and the long-term management of landslide and rockfall risk. The study was carried out concurrently with a separate QLRA by Tonkin + Taylor Ltd for the Beachside Holiday Park and surrounding area.

The risk analysis provides a track network-scale estimate of the annual individual fatality risk (AIFR) from landslides and rockfall for visitors and workers. The analysis follows the 2024 Department of Conservation Natural Hazard Risk Assessment Guidelines (de Vilder *et al.*, 2024) with reference to the Australian Geomechanics Society Landslide Risk Management guidelines (AGS, 2007). All risk estimated in this report relates to life safety and was calculated for individual track sections and sub-sections. This degree of granularity allows relative risk levels to be compared within track sections as well as between sections. The use cases, assumptions, and limitations of risk calculations at these different scales are discussed in the results, risk evaluation, and risk management sections.

The following points summarise the salient findings from the study:

- **Risk varies widely across the track network.** Combined landslide and rockfall AIFR for the most exposed visitor (52 trips per year) varies by several orders of magnitude between track sections, and between locations within a track section. Landslide risk generally decreases with elevation, where the slopes are less susceptible to landslides. Landslide is the larger hazard driver on most track sections and controls the highest combined risk values, whereas rockfall risk is greatest on the inland tracks below the bluffs and lowest on Te Ara Tūtanga around the base of the maunga.
- **Risk evaluation.** The risk estimates are compared to the Bay of Plenty Regional Policy Statement (BOP RPS) and the Department of Conservation Natural Hazards Risk Analysis (DOC NHRA) guidelines. Some track sections fall within the low range of the BOP RPS thresholds, some are in the medium range, and Motukauri-B is in the high range (extreme under the DOC NHRA classification). Some tracks or trips therefore have intolerable levels of AIFR at present, while others are in acceptable or tolerable ranges. However, this report does not judge whether risks are tolerable; that determination rests with the Mauao Trust and TCC.
- **The risk estimates carry substantial uncertainty**. Important sources of uncertainty include the incompleteness of the landslide and boulder inventories, estimated landslide and rockfall frequencies, runout modelling, visitor and worker exposure, and the vulnerability of a person if impacted. Sensitivity testing indicates that the uncertainty range for some track sections spans more



than one risk classification. The results should therefore be read as best estimates based on data-informed expert judgement, not as precise predictions.

We recommend that:

- Risk tolerability criteria are formally agreed before track reopening and long-term management decisions are made.
- Risk management be prioritised for the track sections with the highest estimated risk. Options that may be appropriate at the scale of the track network include temporary or permanent track closures, restrictions on particular types of use, trigger action response plans (TARPs) linked to rainfall, fencing and signage, and engineered slope stabilisation or protection measures.
- Site-specific geotechnical investigation, design and risk assessment should continue progressively to support remediation of individual landslide and rockfall sites. The results and recommendations of these site-specific investigations may supersede those of this report, and will be the subject of separate geotechnical reports.
- The key limitations identified in Section 12 should be addressed where they most influence the results, including obtaining data on worker and off-track behaviour and improving understanding of the subsurface conditions and groundwater regime on Mauao.
- The risk assessment should be reviewed once risk management measures have been implemented, to confirm the residual risk, and updated as new data become available.

1. Introduction

An intense rainfall event associated with Tropical Disturbance 05F caused widespread landsliding across the slopes of Mauao on 22 January 2026. The most significant landslide occurred within the Mount Maunganui Beachside Holiday Park, causing six fatalities and extensive damage to the Holiday Park and Mount Hot Pools complex. The storm event triggered 49 landslides across Mauao, which caused substantial damage to public walking tracks, affecting access to and around Mauao. The scale and impacts of the landslide damage led to the closure of the Beachside Holiday Park, the walkways on Mauao, and Adams Avenue and Pilot Quay.

Tauranga City Council (TCC) has engaged WSP New Zealand Ltd (WSP) to undertake a quantitative landslide risk analysis (QLRA) of the Mauao walking track network. This report presents the results. WSP is also providing geotechnical advice and design services for repairs to tracks significantly damaged by landslides. Separate site-specific geotechnical design reports will support the repair programme and assess life safety risks to track users.

Following the fatal landslide in the Holiday Park, TCC also engaged Tonkin + Taylor Ltd (T+T) to undertake a QLRA for the Beachside Holiday Park, Mount Hot Pools, Mount Surf Lifesaving Club, Pilot Bay boat ramp, and Adams Avenue (T+T, 2026). The two QLRA studies were carried out concurrently under the direction of Solvere Consulting, with independent peer review by Professor Tim Davies.

The study area for the present work consists of the walking track network on Mauao, as shown in Figure 1. The approximate extent of the T+T (2026) QLRA study area is also shown for reference.



Figure 1. Mauao walkways QLRA study area

2. Scope of work

2.1 Purpose and objectives

The risk assessment estimates and evaluates the level of landslide and rockfall[1] risk-to-life to people using the Mauao walking tracks. The purpose of the risk assessment is to provide an evidence base that will support decisions concerning the remediation and reopening of tracks following the 2026 severe-weather events:

Track access and configuration – determining whether the tracks can continue to operate safely, considering temporary or permanent tracks closures, or restricting particular types of visitor use.

Risk reduction and operational controls – helping define warning systems, response plans, monitoring and inspection requirements, and engineering measures suitable for mitigating natural hazards.

Long-term management - Establishing an enduring approach to managing landslide and rockfall risk on the Mauao tracks system.

For this study, the level of risk is assessed on the basis of the Department of Conservation Natural Hazards Risk Assessment (DOC NHRA) guidelines, the Bay of Plenty Regional Policy Statement (RPS), and the AGS (2007) guidelines. Where risks exceed acceptable or tolerable levels stated in these documents, the analysis provides a basis for identifying and evaluating risk management measures that could be implemented to reduce risk to a level that is as low as reasonably practicable and appropriate for different uses. Thus, the overarching purpose of the risk assessment is to provide an evidence base for decisions regarding landslide risk management.

2.2 Scope

In accordance with the consultant brief prepared by Solvere Consulting, this risk assessment provides a *track network-scale* characterisation of annualised *individual fatality risk* and a comparison against established risk tolerance thresholds. To support decision making, example calculations for *multiple fatality risk* are provided for a summit and base track trip; however these examples have not been evaluated due to a lack of established New Zealand-based risk tolerances, and widely varying international risk tolerances, for societal risk. The results provide the basis for identifying conceptual risk management options applicable at this scale.

The risk assessment has been carried out in accordance with the 2024 Guidelines for Natural Hazard Risk Analysis on Public Conservation Lands and Waters prepared by GNS Science for the Department of Conservation (the DOC 'NHRA Guidelines'; de Vilder *et al.*, 2024) and in reference to the Australian Geomechanics Society Guidelines for Landslide Risk Management (AGS, 2007). The overall landslide risk assessment framework for these guidelines is illustrated in Figure 2.

[1] Landslides are defined herein as mass movements involving sliding or flowing slope failure. Rockfall are excluded from this definition and distinguished separately in this report on the basis that they require a different approach to risk analysis. It is acknowledged that rockfall are considered landslides under some classification schemes.

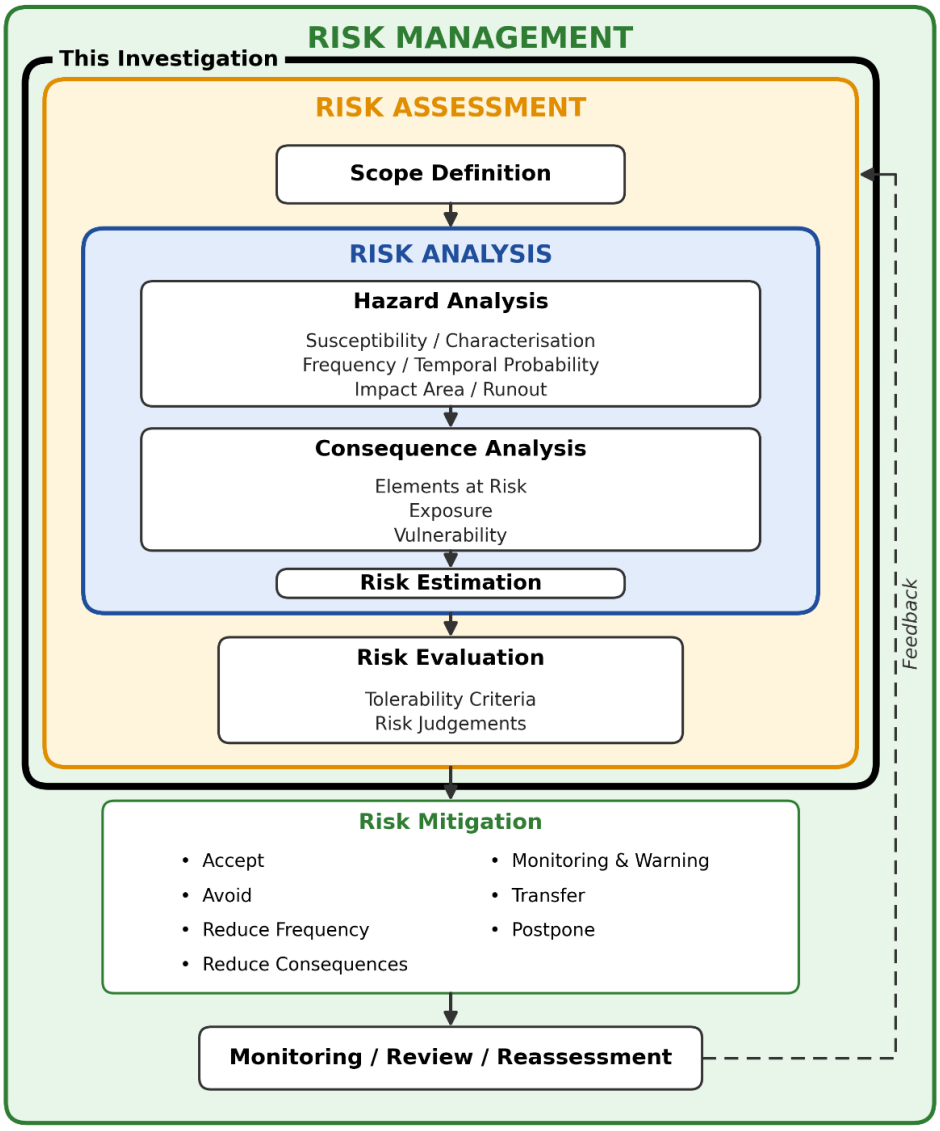

Figure 2. Risk management framework and scope of work for this study(adapted from AGS, 2007)

The scope of work included the following tasks:

- Alignment with established risk assessment policy and guidelines.
- Review of site conditions and geology.
- Brief review of previous track network risk assessments.
- Quantitative landslide risk analysis – methods, results, sensitivity testing, and discussion.

- Estimates of individual and multiple fatality (or societal) risk for visitors on the track network, as well as for the assumed *most exposed worker*.
- Risk evaluation – comparison against tolerability criteria and value judgements.
- Discussion of possible risk management options at a range of scales.

The following tasks were outside the scope of this study:

- Risk analysis for situations that are not justified by the data available at this time, including:
  - Site-specific investigations, slope stability analyses and risk assessments. These require detailed site mapping and investigations and are being carried out progressively to support remediation options at individual landslide sites. These analyses are not included in this report but will be the subject of subsequent geotechnical reports.
  - Hazards other than landslides and rockfall (e.g., sinkholes, track washouts, and tree fall).
  - Quantification of how landslide frequency may change over time in response to factors such as climate change, deforestation, and coastal erosion. The impacts of these factors are discussed qualitatively.
- Visitors deviating from established tracks, due to a lack of data to support calculation. However, this risk is discussed qualitatively in the results.
- Time-dependent hazard for retrogression of existing landslides.
- Recapitulation of background material and historical observation catalogue covered by HD Geo (2025).
- Consideration of all possible user groups; however, AIFR for individuals from different user groups and multiple fatality risk for the groups themselves have been considered.
- Societal risk *evaluation* – although societal risk is estimated, evaluation is not warranted because there are no universally accepted or nationally established risk tolerances (Section 9).
- Risk assessment for property damage to tracks or structures; all risk estimated herein concerns life safety and no financial loss due to physical track damage is considered.
- Site-specific risk management and mitigation options – instead, the discussion of risk management options in this report focuses on high-level options that may be appropriate at the scale of the track network, to guide decision making.

2.3 Structure of the report

This report presents the methodology and results of a quantitative analysis of life-safety risk from landslides and rockfall on Mauao. Risk is expressed as the product of hazard, exposure, and vulnerability. Hazard is the annual likelihood of a landslide or rockfall of a given size occurring and reaching the track section, $P_{(L)}$ x $P_{(T:L)}$. Exposure is the proportion of a year that a person is in the path of the hazard, $P_{(S:T)}$. Vulnerability is the probability that the person is killed if impacted, $V_{(D:T)}$. For clarity, the report is organised into 11 sections that follow the sequence of analysis in the DOC NHRA Guidelines:

- Sections 1 and 2: Introduction and background to this report

- Section 3: Site description
  - Geology and geomorphology, history of landsliding, visitor and worker numbers, relevant previous studies on Mauao
- Section 4: Risk assessment methodology
  - Approach for calculating risk metrics (risk analysis) and the available tolerability criteria and thresholds used for comparison (risk evaluation)
- Section 5: Hazard assessment
  - Landslide types, probability of landslide occurrence ($P_{(L)}$), probability of track section impact ($P_{(T:L)}$)
- Section 6: Consequence analysis
  - Probability of spatial-temporal exposure of an individual ($P_{(S:T)}$), vulnerability ($V_{(D:T)}$)
- Section 7: Risk estimation
  - Local Personal Risk, Annual Individual Fatality Risk, Individual visitor risk per trip
- Section 8: Discussion of results
  - Loss of life risk for visitors and workers, parameter sensitivity, and comparison with the Bay of Plenty Regional Policy Statement (BOP RPS) and AGS (2007) tolerability criteria.
- Section 9: Multiple fatality risk estimation
- Section 10: Risk management options
- Section 11: Conclusions and recommendations
- Section 12: Assumptions and limitations

3. Site Description

3.1 Setting

Mauao is located at the entrance to Tauranga Harbour at the northern end of the Mount Maunganui peninsula, rising approximately 232 m above sea level. It is one of the most recognisable natural landmarks in the Bay of Plenty and forms a backdrop to both the harbour and the Pacific coastline. Mauao was formed by volcanic activity approximately 2.35 million years ago and is characterised by steep upper slopes with rhyolitic bluffs and rock outcrops, and lower slopes currently covered by grass or native vegetation. In addition to outstanding landscape values, Mauao is of exceptional cultural and spiritual significance as the tūpuna maunga (ancestral mountain) of Ngāi Te Rangi, Ngāti Pūkenga, Ngāti Ranginui, and Waitaha iwi. The maunga is regarded as a taonga and an enduring symbol of identity, history, and connection to place for Tauranga Moana tangata whenua.

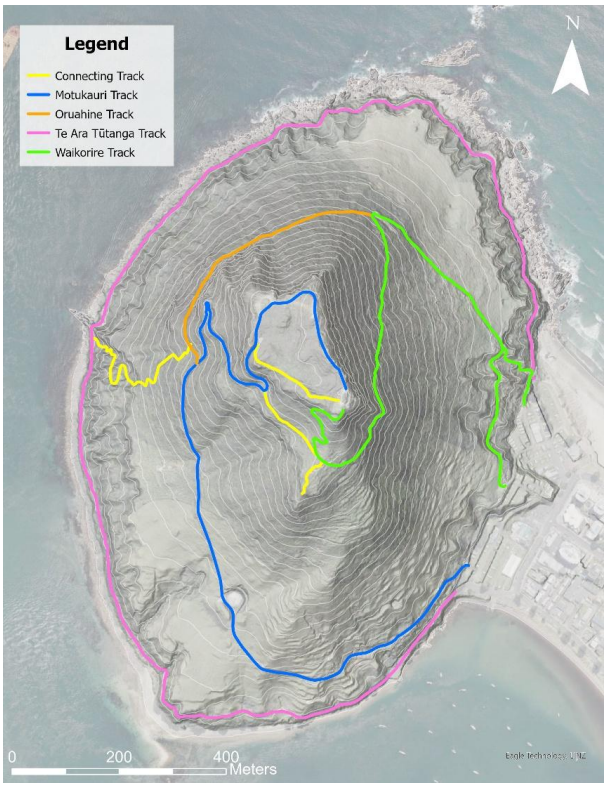

Figure 3. The Mauao walkway network

Mauao supports an extensive walking track network that attracts over one million users annually, making it one of New Zealand's most heavily visited recreation destinations. The track network is shown in Figure 3. The tracks consist of the c. 3 km Te Ara Tūtanga (base track), which circumnavigates the maunga at its lower slopes, together with a series of summit and connecting tracks that provide access to Te Tihi o Mauao (the summit).

The principal summit routes include Te Ara Waikorire, a relatively steep track on the eastern flank; Te Ara Oruahine, which traverses the upper northern and western slopes beneath prominent bluffs; and Te Ara Motukauri, a 4WD access track on the western side of Mauao from Pilot Bay to the summit (Figure 3). There are several shorter connecting tracks that provide access between the primary tracks.

Together, the tracks provide access to key viewpoints, cultural sites, and recreational destinations across the maunga. The tracks are used by walkers, runners, NZ and international tourists, tangata whenua, and maintenance personnel with an estimated 1.3–1.4 million visitors per year.

3.2 Geology and geomorphology

The geology of the Bay of Plenty region is described in the 1:250,000 QMap series of New Zealand (Leonard et al., 2010) and the 1:50,000 scale geological map for the Tauranga area (Briggs et al., 1996). These published maps describe the site as being composed of the following geological formations:

1. The lava dome of Mauao, described as Late Pleistocene-aged, Minden Rhyolite Subgroup (Whitianga Group) volcanics.
2. The sediments exposed below the terraces around the base of Mauao, described as Matua Subgroup deposits of variable terrestrial and estuarine reworked volcanic material.
3. The lower elevation beach areas below Mauao described as Holocene-aged beach deposits consisting of marine gravel, sand and mud. The geology of the coastline (harbour and beach) in this area is dominated by unconsolidated, dune sands which make up the tombolo landform that links Mauao with the mainland.

Mauao comprises a prominent rhyolitic lava dome belonging to the Minden Rhyolite Subgroup of the Whitianga Group, a suite of Late Pliocene to Early Pleistocene silicic volcanic centres developed within the Tauranga Volcanic Centre (Briggs et al., 1996; Leonard et al., 2010). Published geochronological data indicate emplacement at approximately 2.3 Ma, placing Mauao amongst the younger eruptive centres of the Minden Rhyolite Subgroup (Briggs et al., 2005). The dome is interpreted as an endogenous rhyolite lava dome formed by the extrusion of highly viscous, silica-rich magma.

Erosion has significantly modified the original volcanic edifice, leaving the steep-sided, flat-topped dome that rises to 232 m above sea level today. Five landscape elements can be distinguished from the summit to the shoreline (Figure 4). The summit is a flat plateau surrounded by steep to vertical rhyolite bluffs up to 50 m high, with only a thin mantle of colluvium and residual soil. Outcrops of the Mauao rhyolite typically occur as steep sub-vertically jointed columns of rock and are characterised by pale grey to pink-grey, highly devitrified, flow-banded and locally spherulitic rhyolite, with zones of autobreccia and welded breccia present along flow margins (Hall, 1994; Hollis, 1995; Briggs et al., 1996). The rock mass is generally strong to extremely strong where fresh, although weathering commonly occurs along discontinuities and flow-foliation partings, producing localised zones of weakened rock. Defects comprise a combination of cooling joints, dipping fractures, flow-foliation surfaces, and sheeting joints that reflect both emplacement-related fabrics and subsequent stress relief. Richards (1999) found that vertical joints are often up to 1 m wide and open or filled with colluvial material.

Below the bluffs, moderate to steeply sloping ground (10°–60°) is blanketed by talus, a variable mixture of volcanic ash deposits, colluvium and rhyolite debris shed from the bluffs above. The mantle is likely to be thin close to the bluffs and to thicken downslope as the depth to bedrock increases (T+T, 2026). Large numbers of rhyolite boulders are visible on the ground surface in this area and on the lower-lying terraces. Those recorded on the eastern and northern slopes range from gravel-size to blocks more than 6 m across (HD Geo, 2025). Shallow depressions on these slopes collect overland flow from small catchments during heavy rainfall (T+T, 2026).

Below the talus slopes, the ground eases into gently inclined coastal terraces and lower-angle slopes. This part of Mauao is much less steep than the slopes above and is used as pasture for sheep, while the lower slopes on the west are under dense native vegetation. The terraces are preserved around portions of the lower flanks and represent former shoreline and nearshore surfaces formed during fluctuations of relative sea level and/or tectonic uplift. The terrace deposits are composed of variably reworked

volcaniclastic sediments derived from erosion of the Mauao rhyolite dome, interbedded with primary and reworked airfall tephras, distal ignimbrite deposits, colluvial slope deposits, and localised rockfall accumulations sourced from the overlying rhyolite bluffs. The resulting stratigraphy is commonly heterogeneous over relatively short distances, reflecting the interplay between volcanic deposition, mass-movement processes, and coastal reworking.

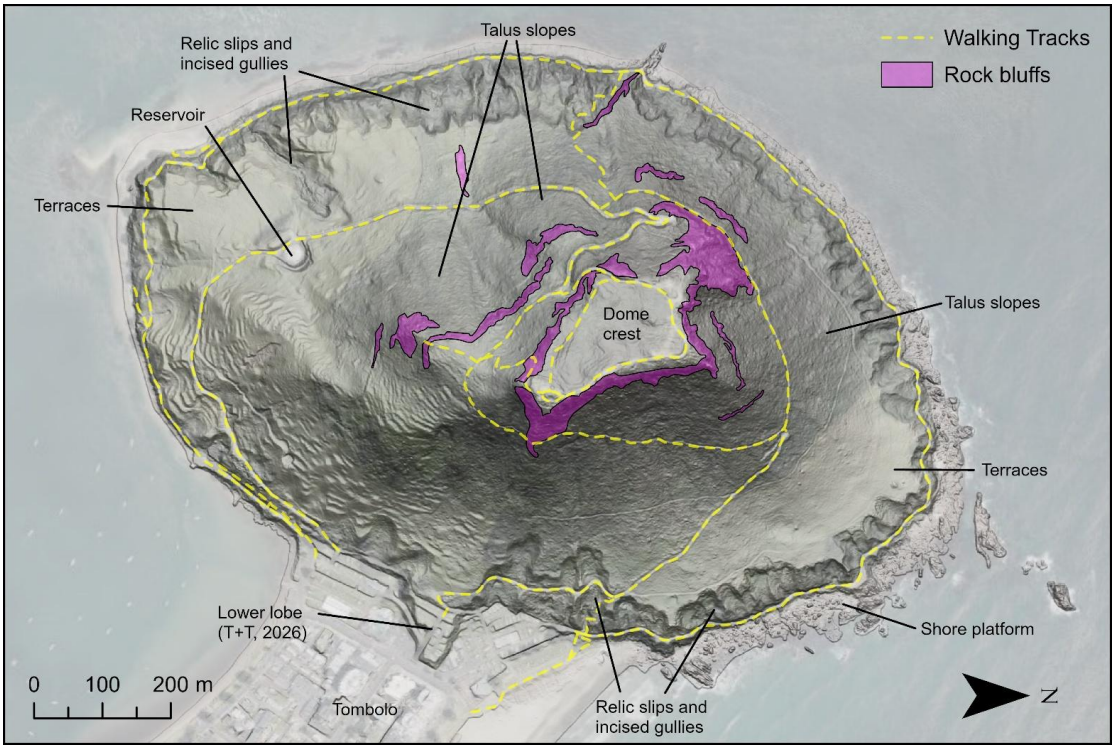

Figure 4. Hillshade map of Mauao and key geomorphic elements

Hall (1994) and Briggs et al. (1996) recorded the presence of Matua Subgroup sediments exposed in outcrops below the terraces around the base of Mauao, although these are not shown on the geological map. The Matua Subgroup deposits consist of highly variable terrestrial and estuarine sedimentary deposits derived from reworked volcanic materials. These materials are intercalated with ash fall deposits of the Pahoia Tephras, which are clay-rich, rhyolitic ash deposits. The Matua Subgroup and Pahoia Tephras are often significantly weathered and contain sensitive clay materials such as halloysite which make these deposits vulnerable to landsliding.

These deposits are commonly overlain by younger tephras of the Hamilton Ash Formation, Rotoehu Ash, and Younger Ashes, which together form a widespread regional mantling sequence. These tephras occur both as relatively undisturbed airfall deposits and as reworked materials within colluvial, landslide, and debris-flow deposits on Mauao's lower slopes. As a result, they may be preserved as distinct tephra horizons or intermixed with volcaniclastic and hillslope sediments within the coastal terrace sequences. The resulting stratigraphy commonly comprises a mixture of primary volcanic deposits and reworked hillslope materials rather than a simple succession of undisturbed tephra layers.

The outer edge of the terraces is fringed by a series of incised gullies and relic slip scarps that give the lower slopes their scalloped shape (Figure 4). Slopes in this zone vary from shallow to very steep or vertical, and the zone contains the highest concentration of mapped landslides in the inventory (see Section 5.2.1). This is consistent with the weathered, sensitive Matua Subgroup and Pahoia Tephra materials and the ash mantle described above. The scalloped morphology and numerous relict landslide features indicate that mass movement processes have played a significant role in shaping the present-day landform.

On the eastern side of Mauao, below the talus slopes, an unusual landform feature is present (termed the 'lower lobe' by T+T, 2026). This feature consists of a gently-dipping topographic surface that is inclined towards the east, with steeper slopes around its margin (Figure 4). The lower lobe extends beyond the margin of the talus slopes and lies at a lower elevation than the terraces, and is therefore an outlier in the principal geomorphic elements observed around the remainder of the maunga. The origin of this feature is unknown at present; T+T (2026) suggest its presence could be due to (i) an erosion-resistant lava flow from the rhyolitic dome, (ii) an uneroded mass of Matua Subgroup sediments, or (iii) debris from a rock-avalanche from the dome crest.

A rocky shore platform surrounds the maunga at its base. Rhyolite is exposed discontinuously across the platform and along the coastal margin, where it is locally onlapped by younger coastal and beach deposits. On the northern and western sides the platform comprises rhyolite bedrock outcrops with significant numbers of boulders, and the lower slopes are underlain by this platform (T+T, 2026). On the eastern and southern sides it gives way to sandy and shelly bays. The tombolo of unconsolidated dune sands then links Mauao to the mainland.

Significant overland and groundwater flow from the flanks of Mauao is produced during and/or immediately following heavy rainfall. Several permanent springs are present around the base of Mauao, and ephemeral springs, tomos/piping erosion and deposition of silt and sand debris are often observed following heavy rainfall. No boreholes have been drilled on the slopes of Mauao itself; investigation data from the Beachside Holiday Park at the base of the maunga (boreholes and test pits; HD Geo, 2025; T+T, 2026) provide some information on the stratigraphy at the base of the hillslopes. However, little is known about the subsurface stratigraphy and groundwater regime, including how long elevated flows persist after rainfall.

Forest cover and vegetation types have changed over the Holocene at Mauao. Before human arrival, native coastal forest vegetation would have predominated. Māori occupation and clearance via fire resulted in initial change; fern and manuka scrub were prevalent by the time of European observation (Wildland, 2015). European occupation is marked by the introduction of exotic species like pine, repeated fires, and varying vegetation cover and diversity from 1842 onward (Wildland, 2015). Mauao currently comprises multiple vegetation / habitat types including native forest, mixed exotic and native forest, scrub and grassland, and open rocky promontories (Wildland, 2015).

3.3 Historical and recent slope failures on Mauao

There have been many recorded observations of landslides and rockfall on Mauao, particularly from 2003 onward. HD Geo (2025) compiled these observations (primarily from previous Avalon geotechnical consulting reports and TCC records) and reported on failure dimensions, triggers (e.g. rainfall, seismicity, and human activity), and preconditioning factors (e.g., fires and erosion). Almost all landslide and rockfall events in the HD Geo catalogue were triggered by rainfall, with few recorded as being caused by human

activity and seismicity. Events with no apparent trigger were recorded as unknown or being causally linked to preconditioning factors, for example erosion or fire.

Previous investigations have identified a range of mass movement types on Mauao, including rotational landslides, debris flows, debris avalanches, and rock fall (e.g., Brideau and Martin, 2014). Historical observations indicate that most landslide runout distances, including debris flows, are less than approximately 100 m, although larger failures may travel further under extreme conditions. There have also been repeated observations of rockfall over at least the last 23 years on Mauao (e.g., HD Geo, 2025).

Rainfall-induced slope instability has continued to occur in recent years. An intense rainfall event in January 2011 resulted in 80 mass movement features across Mauao, including eight larger failures resulting in track closures (Tonkin & Taylor, 2011). More recently, the January 2026 storm generated 49 landslides across the maunga, affecting multiple sections of the track network (Figure 5). Most failures occurred along Te Ara Tūtanga Track. Failures were also recorded on the Motukauri, Waikorire, Oruahine and connecting tracks. Landslide dimensions ranged from small failures of less than 1.5 m² and less than 1 m³ through to large failures exceeding 1,500 m² and 13,000 m^3.

Available information on the location, occurrence and characteristics of slope failures on Mauao have been collated into separate inventories for landslides (Appendix A) and rockfalls (Appendix D), and these are discussed in Section 5.2.1.



Figure 5: Landslides from the 2026 storm.

3.4 Visitors and TCC staff/contractors

There are several types of user groups that access the track network, as well as workers who conduct pest control and maintenance both on and off the formed tracks. TCC indicates 1.3 – 1.4 million visitors per year to Mauao, the majority of which walk formed tracks on traverses or loops. In addition, organised events are held regularly (typically 8 to 12 sporting events per year, most including a loop of the base track, with up to c. 2,500 participants; Section 0), during which the total number of visitors can be significantly higher than the average. International visitors from cruise ships may traverse the track network in large groups or as individuals. It is important to consider local, national, and international visitor groups in both individual and societal risk calculations; user groups (regular walkers and runners, occasional visitors, organised groups such as international cruise ship parties, and event participants)

differ in how often they use the tracks and how they are grouped, so they have different levels of risk. The variable user behaviours and exposure are reflected in the number of trips per year scenarios (Section 6.1.2) and in the group exposure calculations (Section 9). Track count data have been provided by TCC, which show daily, seasonal, and weather-dependent variability in track use (refer to Section 9). Off-track usage is reported, but locations and durations are poorly constrained by the available data.

TCC staff and contractors include maintenance and pest control workers that manage off-track areas for controlling invasive plants and animals. Based on conversations with staff, pest plant control workers, operating in different contracted management areas, are assumed to be the *most exposed workers.*

3.5 Previous track network-scale risk assessments

Mauao has been the subject of several geotechnical investigations and risk assessments over the last two decades.

An early overview of slope stability, including rockfall modelling of the summit cliffs, was completed by Richards (1999). It was found that rockfall from the summit was infrequent and that boulders on the colluvial apron were deeply embedded, resulting in the risk to Mauao users to be considered acceptable at that time. It was also noted that frontal lobes of landslides along the Base Track were prone to failure where over-steepened.

The first detailed risk assessments were completed by Avalon Industrial Services Ltd between 2003 and 2006. These investigations identified widespread rockfall and small-scale landslide hazards on the volcanic slopes, highlighted several unstable rock masses, and developed the first quantitative estimates of rockfall risk for track users, the campground, and other public areas. Mauao was divided into six zones with similar geology and failure mechanisms, and rockfall was assessed for 0.15, 0.3 and 1 m diameter blocks. Electronic distance measurement (EDM) monitoring of at-risk blocks on the summit bluffs began in this period. The 2006 rockfall risk assessment concluded that different sections of track, as well as the campground, may have a fatality return period spanning 13 to c. 42,000 years depending on location. An overall rockfall-related fatality return period of 10 years was estimated (n.b., these values were calculated based on the number of trips across all visitors; an individual's annualised risk of fatality per trip is much lower, c. 10^{-7} for a Waikorire track trip). Triggering mechanisms identified included rainfall, earthquake shaking, erosion, fire, and human activity. Avalon's tolerability thresholds are less stringent than current DOC and AGS guidance, so results rated tolerable or acceptable in 2006 may not meet today's criteria.

Martin and Brideau (2014) mapped mass movements from aerial photographs between 1943 and 2011, including the c. 80 landslides triggered by the January 2011 storm. Most initiated on slopes of 18° to 32°, and also on lower slopes with sparse vegetation and a ready supply of colluvium, and many were interpreted to be associated with toe undercutting from track construction. Limit equilibrium analysis of a 2011 debris avalanche showed the slope to be stable when drained, but unstable under elevated pore pressures. Their rockfall modelling indicated shadow angles of 30–31° from the crest of the initiation zone and 27–28° from the talus crest.

WSP (2022) assessed slope stability risk along Te Ara Tūtanga (the Base Track) using a qualitative matrix adapted from the AGS (2007) property loss matrices. Likelihood and consequence of under-slips and over-slips were rated at 55 sites, based on a desk study and walkovers. The assessment covered damage to the track only; rockfall and risk to people were excluded. Medium to high ratings were

assigned along sections in the south, west, north and north-east, with the highest ratings near the 2017 landslide south of Pilot Bay. WSP recommended an updated quantitative assessment for track users, mapping of rockfall sources, and a GIS database of failures.

Subsequent work undertaken by HD Geo (2025) expanded the understanding of landslide and rockfall hazard at Mauao through detailed geomorphological mapping, landslide inventory development, hazard reviews, and compilation of historical records. HD Geo took over geohazard monitoring from Avalon and completed a desk study, walkover and drone survey of the track network and campground. The HD Geo review incorporated previous investigations including the Avalon reports, historical aerial photographs, TCC records, previous engineering geological assessments, and mapped evidence of historical landsliding and rockfall activity. This work demonstrated that landsliding and rockfall are recurring natural processes at Mauao and established an improved inventory of past events, which exceeded 100 recorded landslides and rockfalls since 1999. A semi-quantitative risk assessment identified several tracks with 'high' rockfall risk (e.g., the Oruahine, Te Ara Tūtanga, and Waikorire tracks) and at worst 'moderate' landslide risk. The methodology was modified from AGS (2007), and the high-risk sections were the western side of Te Ara Tūtanga, most of the Waikorire and Oruahine tracks, and the west end of Te Ara o Tūtauaroa. No injuries or deaths from geohazards had been recorded in the preceding 20 years, but six rockfall near misses had occurred. HD Geo recommended a quantitative assessment under the DOC Natural Hazard Risk Analysis guidelines, noting that no detailed assessment had been completed in 20 years.

The Beachside Holiday Park, Hot Pools and surrounding area were assessed separately after the January 2026 landslide (T+T, 2026) and are not covered here. The present assessment applies the NHRA approach recommended by HD Geo to the walking track network.

4. Methodology

4.1 Overview

Natural hazard risk can be defined as the product of the probability and the severity of an adverse effect on life, health, property, or the environment. For natural hazard risk assessment, risk is a combination of hazard likelihood per annum, exposure (the time spent by an individual or group in a hazard-prone area), and vulnerability (the probability of fatality if a given hazard was to occur) and.

For landslide and rockfall hazards at Mauao, quantitative analysis of fatality risk has been completed following the procedure in the DOC NHRA Guidelines Part 3 (de Vilder & Massey, 2024a). The DOC guidelines are themselves based on the Australian Geomechanics Society landslide risk management guidelines (AGS, 2007) and the JTC-1 guidelines (Fell et al., 2008), modified for a New Zealand context and for points and linear sites on public conservation land (de Vilder & Massey, 2024a).

Four risk metrics have been used in this assessment to quantify landslide risk to visitors, workers, and groups. Risk metrics have been compared to existing risk tolerance criteria for sites in similar contexts. The risk metrics and comparison against risk evaluation thresholds are outlined in the following sections.

Risk is reported as annual risk of fatality for a person exposed to landslides and rockfall whilst using the track system. For visitors, combined risk from landslide and rockfall is presented at different positions along the track network at three spatial scales: for whole tracks, track sections, and track sub-sections. For workers, risk is presented for individual contracted management areas and at the maunga scale. The risk estimates are then compared against the tolerability thresholds in relevant policy statements. The NPS-NH (Ministry for the Environment, 2025) directs that natural hazard risk, including from landslips, be managed using a risk-based and proportionate approach. It assesses risk using a likelihood–consequence matrix but does not set numerical thresholds for individual fatality risk. It is therefore treated as the national framework for risk evaluation, with numerical comparisons made against the BOP RPS, DOC NHRA guidelines and AGS (2007). No judgement is made herein as to whether risks are tolerable or not; the Mauao Trust and TCC will determine how the risk evaluation information provided in this report falls into different tolerability classifications and how to action them, taking into account the levels of tolerability specified in the BOP RPS and AGS (2007). Instead, the results of the analysis have been used to (i) discuss areas of significant risk and (ii) identify potential risk mitigation strategies for further consideration.

4.2 Risk metrics

The risk analysis adopts the following equation to define and calculate the annual probability that a specific person may lose their life (de Vilder *et al.*, 2024):

$$P_{(LOL)} = P_{(L)} \, x \, P_{(T:L)} \, x \, P_{(S:T)} \, x \, V_{(D:T)} \qquad \textbf{Equation 1}$$

Where:

- $\mathbf{P}_{(LOL)}$ is the annual probability that the person will be killed (*probability of loss of life*);

$P_{(L)}$ is the annual probability of a landslide or rockfall occurring (*probability of landsliding*);

$P_{(T:L)}$ is the probability of the debris from a landslide or rockfall affecting the element at risk (e.g. a person occupying a location on the track – if present);

$P_{(S:T)}$ is the spatiotemporal probability of the person being present (the proportion of a year that the person is in the path of the landslide when it reaches or passes the element at risk); and

$V_{(D:T)}$ is the vulnerability of the person to the landslide or rockfall event (the probability that the person will be killed if impacted by the landslide).

This study quantifies individual risk using three metrics:

1. **Local personal risk (LPR)** – the annual probability of death for a theoretical imaginary person present at a particular location for 100% of the time (24 hours per day and 365 days per year).
2. **Annual individual fatality risk (AIFR)** – the annual probability of fatality for a representative individual exposed to the hazard. As per guidelines, this is usually the most exposed individual of a particular user class or group.
3. **Individual risk per trip** for visitors – the probability of death resulting from one, one-way trip along specific tracks within the study area.

Multiple fatality risk is quantified as the annual probability of landslides causing 5, 10, or 30 or more deaths. The details of multiple fatality risk calculations are provided in Sections 7 and 9.

4.3 Assessment methodology

4.3.1 Level of analysis

The risk analysis generally corresponds to an Advanced level of analysis under the NHRA Guidelines, with some aspects limited to a Basic level (Table 1). Where methods deviate from established guidance, they have been explained and supported with information specific to the Mauao context. High-level alignment is specified below.

Table 1. Alignment of this study's analysis with the Basic and Advanced levels of the NHRA Guidelines

NHRA Guideline component		Assessment level	Basis / limitation
Data compilation	Pre-disposing factors; Topographic analysis	Advanced	Detailed site-specific datasets and analysis
	Engineering geology mapping	Basic → Advanced	Will become more advanced following detailed UAV survey and assessment of Oruahine rock bluffs
	Landslide inventory	Basic / developing	Incomplete before 2005
	Triggering factors	Basic	Uses regional and national datasets
Data analysis	Landslide source susceptibility	Advanced	Detailed site-specific analysis
	Landslide size	Advanced, limited confidence	Incomplete inventory pre-2005

NHRA Guideline component		Assessment level	Basis / limitation
	Landslide frequency	Basic	Incomplete pre-2005 inventory and very limited earthquake-triggered landslide data
	Landslide impact area	Basic → Advanced	Detailed geospatial analysis of landslide runout undertaken; rockfall runout takes simplified empirical approach
Consequence	Elements at risk	Advanced	Detailed data available for track users
	Exposure	Basic → Advanced	Travel-time and group size assumptions are needed
	Vulnerability	Basic	Uses published empirical values (Finlay et al., 1999, via de Vilder & Massey, 2024b)

4.3.2 Risk analysis workflow

The risk analysis method developed for this study consisted of a series of steps to quantify each term in the general risk equation (Equation 1). The datasets and analyses required to estimate the value(s) of each term are listed in Table 2, and are described in detail in the relevant report sections that follow.

Table 2. Overview of risk analysis workflow for this study

Assessment step	Datasets	Analysis
1. Determine the range of possible landslide volumes.	Landslide inventory, field observations, geomorphic mapping.	Landslide and boulder inventory analysis.
2. Consider the locations where landslides and rockfalls are most likely to source from.	Landslide inventory, rock bluff mapping and boulder inventory, predisposing factors (LiDAR DEM and terrain data, overland flow paths, geomorphic mapping).	Landslide susceptibility analysis; Area-volume relationships; Representative volumes for different volume classes.
3. Consider the possible range of triggering events.	Landslide triggers (HIRDS rainfall data, NSHM earthquake ground shaking data).	Analysis of predisposing factors and triggers; Indicative landslide and rockfall frequencies and area densities from inventories and professional judgement.
Output: Identification of landslide source areas and annual probability of landsliding ($P_{(L)}$)		
4. Define the areas that could be inundated by landslides or rockfalls.	LiDAR DEM, Fahrböschung angle (for landslides) and shadow angle (for boulders) vs volume from inventories, walking track maps, field observations.	Geomorphic domain mapping for largest landslide scenario Runout analysis for different scenarios Representative landslide widths for each volume class Spatial probability of impact calculation for landslides (Hayes *et al*., 2025) and rockfall (Massey *et al*., 2013, 2014)
Output: Probability of a location being exposed to landsliding or rockfall ($P_{(T:L)}$)		

Assessment step	Datasets	Analysis
5. Consider the probability that a person is present at a location at the time a landslide or rockfall moves through it.	Visitor trip data; worker types and behaviour in discussion with rangers.	Walking speeds using Tobler's hiking function; Stoppage times based on cultural features and judgement; Hourly user numbers (visitors) per track; consideration of dynamic exposure.
Output: Spatio-temporal probability that a person is present at the location exposed to landsliding or rockfall ($P_{(S:T)}$)		
6. Consider the probability that a person is killed if present and in the path of debris.	Literature review and professional judgement.	Consider impact and asphyxiation for different volume classes; Consider different probabilities of fatality (Finlay *et al.*, 1999; Taig and Massey, 2014).
Output: Probability that a person will be killed if impacted by landsliding or rockfall ($V_{(D:T)}$)		
7. Calculate the annual probability of fatality.		Local Personal Risk; Individual Risk Per Trip and Annual Individual Fatality Risk for visitors and workers.
Output: Annual probability of loss of life ($P_{(LOL)}$)		

4.3.3 Sensitivity testing

All inputs into landslide risk analyses are subject to aleatoric and epistemic uncertainties related to natural variability and imperfect knowledge, respectively. Sensitivity testing can help quantify the impact of these uncertainties on the reliability of output risk calculations. In this investigation, sensitivity tests were performed for the following variables:

- Probability of landsliding – conditional probability of failure for different PGA triggering thresholds
- Probability of rockfall and impact to track – number of rockfalls in different PGA bands
- Runout and probability of impact to track – use of median versus 95th percentile F-angles
- Spatiotemporal probability (AIFR) – variability in times taken to traverse different track sections
- Spatiotemporal probability (AIFR) – variability in number of trips per year
- Spatiotemporal probability (AIFR) – variability in number of working days per year
- Vulnerability – likelihood that a landslide or rockfall impact causes a fatality

Additionally, we trialled separate approaches to account for the following sources of epistemic uncertainty:

- Probability of landsliding – separate approach accounting for risk from multiple earthquake-induced landslide events
- Runout and probability of impact to track – separate approach using a spatial buffer to account for uncertainty in runout model

The ranges considered for each of these factors are described in the relevant sections of the report. Sensitivity tests were not undertaken on other variables; however, the potential impacts of climate change are discussed in Appendix C. Additional assumptions and limitations are provided in Section 12.

4.3.4 Risk evaluation

A key component of landslide risk management is the evaluation of whether an estimated risk is considered acceptable, tolerable, or intolerable/unacceptable. It is the responsibility of Mauao Trust and TCC to confirm the risk tolerance levels for the community and workers. These risk tolerance levels will inform the actions required to ensure that risks to the public and workers are managed appropriately.

Estimated risk levels in this study are compared to the following frameworks:

- Bay of Plenty Regional Policy Statement (BOP RPS)
- DOC NHRA Guidelines
- AGS (2007) Guidelines

And refer to the following additional frameworks:

- National Policy Statement for Natural Hazards (NPS-NH)

The risk tolerance thresholds in the BOP RPS are shown in Figure 6 as an example. The BOP RPS Appendix I and Policies NH 2B and 3B provide definitions of risk ratings and tolerances. Some policies, such as NH 4B, apply these principles specifically to land subject to development. Under Policy NH 3B, *High* natural hazard risk (Figure 6) should not be tolerated at the natural hazard zone scale and requires risk reduction; *Medium* risk should be reduced to as low as reasonably practicable. Policy NH 2B indicates that *Low* risk is generally acceptable. It is noted that there are exemptions for activities with social, economic, environmental, or cultural benefits to communities in Policy NH 6. Although individual risk tolerances vary across disciplines, countries, and organisations, the threshold between tolerable *Medium* risk and intolerable *High* risk is consistent with AGS (2007) for landslide risk. To comply with the RPS, Mauao Trust and TCC can set thresholds that are more risk-averse but not higher-risk.

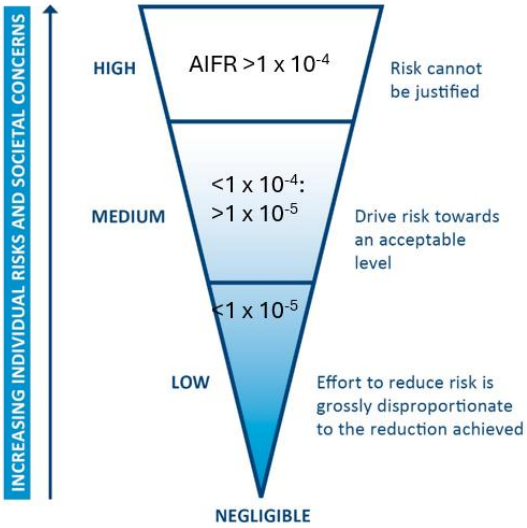

Figure 6. Risk tolerance thresholds in the Bay of Plenty Regional Policy Statement (image credit: J. Farrell, Solvere Consulting).

Throughout this report, all risk metrics are reported in terms of annualised probability of fatality. Table 3 shows the relationship between this notation and other ways of expressing and interpreting these numbers.

Table 3. How risk metrics are reported

Annualised Probability of Fatality	Annualised Probability of Fatality (Scientific Notation)	How to Read	Is similar, but not equivalent, to a loss of life…
0.01 or 1% per year	1E-02 or 1 x 10^{-2} per year	There is a 1% probability of loss of life per year	Once in 100 years on average
0.001 or 0.1% per year	1E-03 or 1 x 10^{-3} per year	There is a 0.1% probability of loss of life per year	Once in 1,000 years on average
0.0001 or 0.01% per year	1E-04 or 1 x 10^{-4} per year	There is a 0.01% probability of loss of life per year	Once in 10,000 years on average
0.00001 or 0.001% per year	1E-05 or 1 x 10^{-5} per year	There is a 0.001% probability of loss of life per year	Once in 100,000 years on average
0.000001 or 0.0001%	1E-06 or 1 x 10^{-6}	There is a 0.0001% probability of loss of life per year	Once in 1,000,000 years on average

4.4 Datasets

The following datasets and reports were used in this study:

- Historical landslide and rockfall inventories derived from previous investigations, monitoring records, and documented hazard events on Mauao (Avalon, 2003; Avalon, 2004; Avalon, 2006).
- Previous geological, geotechnical and hazard assessment reports, including studies undertaken by Laurie Richards, Avalon, HD Geo, Tonkin & Taylor, and Terrane (Richards, 1999; Avalon, 2003-2006).
- Geological and geomorphological mapping and site characterisation data describing the rhyolitic dome, rock bluffs, colluvial slopes and geomorphic processes (Briggs *et al*., 1996; Leonard et al., 2010).
- Field investigations, engineering geological mapping, slope inspections, rockfall scaling works, and long-term monitoring observations collected between 2003 and 2026 (Avalon, 2003-2006; WSP, 2026).
- Rockfall runout paths and travel-distance observations obtained from rock scaling operations, controlled blasting, and natural rockfall events (Avalon, 2003; Avalon, 2004; Avalon, 2006).

- Topographic, terrain, and orthophotography datasets sourced from LINZ, Retrolens, and TCC to develop landslide and boulder inventories, landslide susceptibility models, define landslide source areas, and assess landslide and rockfall runout.
- Walking track alignment datasets for Te Ara Tūtanga, Motukauri, Waikorire, Oruahine, and connecting tracks from TCC, together with track asset information (Avalon, 2006; HD Geo, 2025).
- Visitor-use and track-counter data provided by TCC and used to estimate track occupancy and exposure probabilities (Avalon, 2006; WSP, 2026).
- Historical rainfall, storm, earthquake, fire and erosion event information used to assess landslide and rockfall triggering mechanisms, including the 2003 fire, 2004 earthquake swarm, 2005 storm event, 2011 storm event and 2026 storm event (Avalon, 2004; Avalon, 2006; WSP, 2026; T+T, 2011). Rainfall records were provided by Tauranga City Council (TCC) from a gauge located approximately 5.3 km southeast of Mauao, with 15-minute gauge data available from 1998.
- Modelled rainfall and earthquake annual exceedance probabilities and intensities from the High Intensity Rainfall Design System (HIRDS) and the National Seismic Hazard Model (NSHM), respectively.
- Vegetation, land-use and environmental data used to assess erosion, slope stability and rockfall processes (Avalon, 2006).
- Additional literature, datasets, and methods as referenced in the relevant sections of the report.

5. Hazard Assessment

5.1 Landslide types

Two dominant slope failure types were identified at Mauao that required separate approaches to estimate risk: (i) debris slides and flows (Figure 7) (termed “landslides” for brevity in the remainder of the report), and (ii) rockfalls (Figure 8).



Figure 7. Landslide on Mauao (January 2026)

Landslides on Mauao are mostly translational and rotational slides in the colluvium and volcanic ash soils that mantle the slopes below the bluffs (HD Geo, 2025). Where the failed material is saturated, it can mobilise as a debris flow, which is a very rapid surging flow of loosened soil and debris driven by intense surface water flow on steep slopes (NZGS, 2024). Failures are concentrated in the gullies and relic slip scarps, as well as in the cut slopes above and below the tracks. Almost all recorded landslides were triggered by rainfall. Other than the 22 January 2026 landslide in the Harbourside Holiday Park (the “CG1” landslide), there are no clearly-defined, unambiguous landslide deposits that can be traced back to large source areas; however, it is possible that further field mapping and/or intrusive geotechnical investigations of older landforms and deposits could identify them or rule them out. For example, there is the possibility that the ‘lower lobe’ represents the deposit of a large prehistoric landslide or rock avalanche from the crest of Mauao (see Section 3.2), but this feature lacks sufficient geomorphic evidence to confidently interpret it as a landslide deposit, and alternative geological and erosional explanations remain plausible (T+T, 2026).



Figure 8. Boulders downslope of Oruahine track

Rockfalls originate from the rhyolite bluffs around the summit, where cooling joints, flow-foliation partings and sheeting joints allow blocks to detach and then fall, slide, bounce and roll downslope (NZGS, 2024). Individual falls usually involve a few blocks, but they move rapidly and can travel well beyond the base of the bluffs. Boulders from past events are scattered across the eastern and northern slopes (and are probably hidden in vegetation elsewhere) and range from gravel to blocks several metres across, many partly embedded in the ground (Figure 8). Embedded boulders may also be remobilised due to localised erosion around or beneath the boulders.

5.2 Probability of landslide occurrence $P_{(L)}$

5.2.1 Inventory mapping

Preparation of a landslide inventory is essential for assessment of landslide risk (AGS, 2007). Separate inventories were compiled in this study for (i) landslides, and (ii) rockfalls (boulders). The inventories were compiled from mapping undertaken by WSP during this study and from several existing data sources. An overview of the data compiled, the mapping undertaken, and the limitations of the landslide and boulder inventories are provided below.

Landslide inventory

This study used several existing data sources on landslide occurrence (Avalon, 2006; T+T, 2011; HD Geo, 2025). Spatial landslide data from these studies were compiled in ArcGIS Pro, supplemented or updated by mapping using orthorectified aerial photographs and the regional 1 m-resolution LiDAR DEM sourced from LINZ. The existing catalogue of landslides was extended by targeted mapping in this study, using historical aerial photographs from Retrolens and post-January 2026 orthorectified aerial photographs and digital surface models (DSMs) created using photogrammetry.

The mapped features consist of:

- Landslide source areas: Polygon features delineating the area of the slope that failed and displaced, each with a unique identifier.
- Debris trails: Polygon features defining the area of deposition of debris derived from the failure source area. These polygons also show the travel path for long runout failures such as debris flows where little or no debris may have been deposited over much of that runout length. The unique identifiers of all the contributing source areas are recorded for each debris area.
- Runout path: Line features from the crest of the landslide source area to the toe of the landslide debris, showing the observed or estimated runout path of the debris. These were used to calculate the Fahrböschung angles.

Appendix A describes the attributes recorded for each landslide in the GIS database (Table 36) and provides the complete set of attributes for each landslide in the inventory (Table 37).

The full inventory includes 221 failures in total (Figure 9). The failures consist of 87% debris slides and flows, with the remainder consisting of rockfalls, rock slides, slope displacements, and scour or piping failures. Rockfall is treated as a separate hazard and these records are not used in the landslide susceptibility modelling or debris-slide frequency analysis described below. The rockfall records referred to here consist of observations compiled from previous investigations (e.g. HD Geo, 2025) rather than mapped boulders; for risk analysis, rockfall frequency is estimated using the boulder inventory and historical observations (Section 5.2.6).

Two quality attributes were recorded for each failure. Spatial accuracy, which reflects dataset resolution and mapped location error, was rated 'Accurate' for approximately 52% of failures and 'Approximate' for c. 30%, with fewer 'Inferred' and other values. Confidence, which is the mapper's confidence in attributing the observation to an interpreted mass movement, was rated 'High' for approximately 80% of failures. A failure can therefore be confidently identified but have an approximate location. The inventory is considered relatively complete for debris slides, debris flows, and rock slides. There are fewer scours, scarps, and piping failures, however the impact of these features on life safety is ambiguous. For the purposes of landslide susceptibility modelling and further processing, the inventory was filtered to only include debris slides/flows.

The inventory spans the period 1943 to 2026. As shown in Figure 10, the majority of the inventory consists of landslides that occurred in the period 2005 to 2026 and is dominated by landslides that occurred in major storms in 2005, 2011, and 2026 (highlighted in Table 4). The pre-2005 inventory was considered incomplete and less reliable due to lower-resolution imagery used to map the earlier landslides and uncertainty in the exact date of landsliding due to significant time gaps between imagery datasets. Therefore, only debris slide landslides over the 21-year period 2005-2026 are used for frequency analysis.

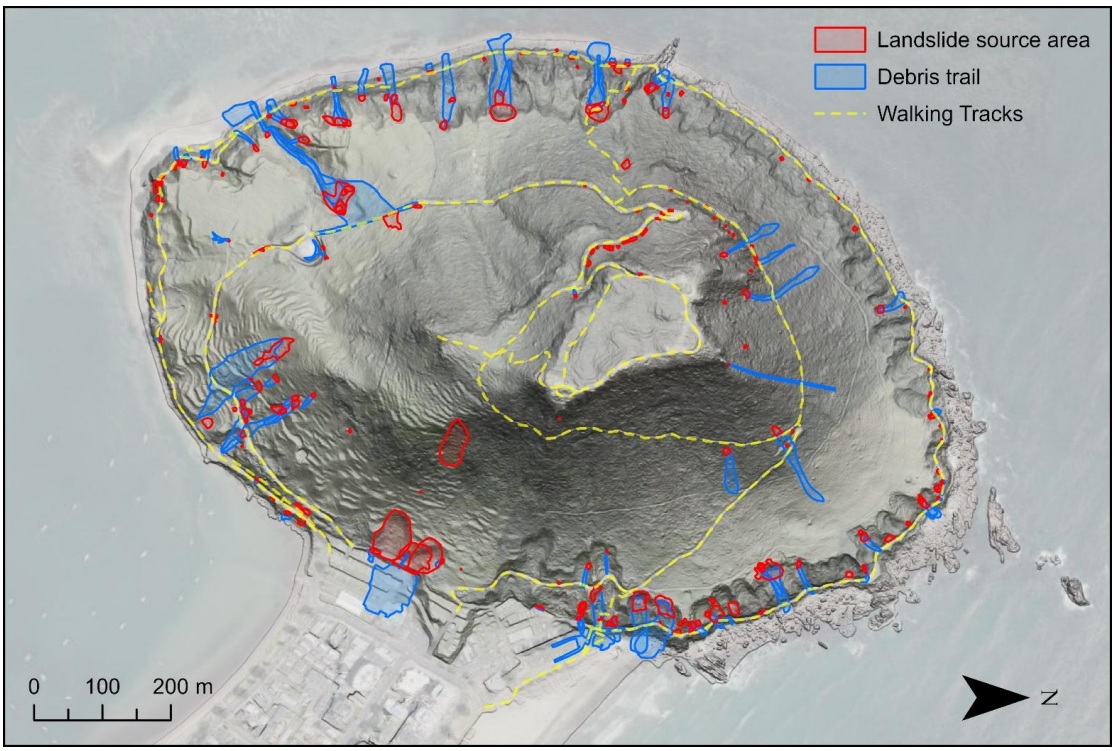

Figure 9. Landslide inventory of Mauao

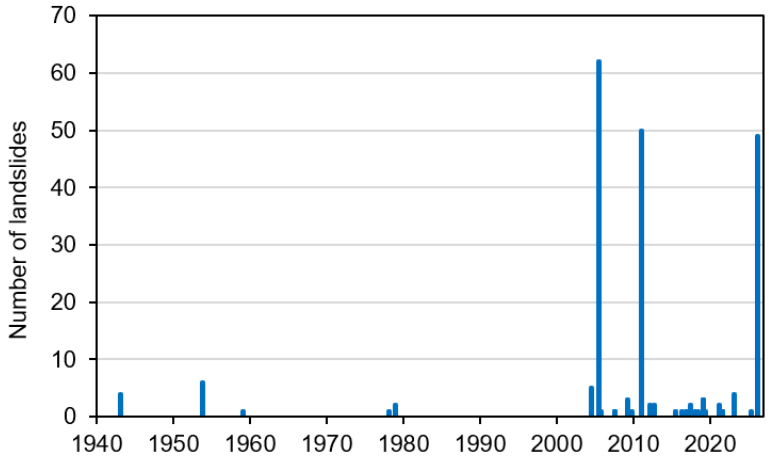

Figure 10. Number of landslides in the inventory by year of occurrence

Table 4. Summary landslide numbers and total area affected in select imagery dates (pre-1978) and known events

Event/Imagery Date	Number of Landslides	Total Area (m²)	Event/Imagery Date	Number of Landslides	Total Area (m²)
09/02/1943	4	291.6	11/03/2016	1	160.0
21/10/1953	6	788.0	25/10/2016	1	1.8
16/01/1959	1	96.8	09/03/2017	1	2.8
01/01/1978	1	37.6	03/04/2017	1	99.7
07/11/1978	2	120.1	02/05/2017	2	81.9
01/07/2004	5	76.3	20/12/2017	1	111.9
18/05/2005	**62**	**3,563.7**	17/04/2018	1	2.4
22/06/2005	1	2.3	01/01/2019	3	114.5
01/09/2005	1	3.4	05/01/2019	3	209.7
01/07/2007	1	7.4	01/05/2019	1	3.8
30/07/2007	1	81.0	01/03/2021	2	15.4
17/03/2009	3	50.1	01/08/2021	1	104.2
06/10/2009	1	9.8	02/08/2021	1	1.9
29/01/2011	**50**	**2,706.4**	27/01/2023	2	162.3
27/01/2012	2	245.3	02/05/2025	1	18.7
11/09/2012	2	210.0	**22/01/2026**	**49**	**6,367.2**
01/06/2015	1	6.5			

Boulder inventory

An inventory of boulders visible on the ground surface across Mauao was compiled through manual interpretation of historical and recent aerial imagery to support rockfall hazard assessment, source area attribution, and runout analysis. The inventory was compiled through a desktop review of aerial imagery sourced from Land Information New Zealand and Retrolens. Aerial orthophotographs from 1978, 2011, 2017, 2018, 2020, 2022, 2023, and 2026 were used for the mapping. The boulder inventory was developed to characterise the spatial distribution of boulders across Mauao. Importantly, the mapped boulders are not considered a record of individual rockfall events: the presence of a boulder on the lower slopes of Mauao does not mean it was definitely a product of rock fall from the upper bluffs, the date a boulder first appears in aerial imagery does not establish its age, and the inventory does not determine whether individual boulders originated from rockfall, landslide-related exhumation, remobilisation, or other processes. However, the inventory provides a useful empirical basis to assist the risk analysis.

Boulders were identified based on their morphology, distribution patterns, and location relevant to nearby rock bluffs. These were mapped where image resolution and contrast were sufficient to allow confident

identification and where vegetation did not obscure the ground surface. Mapping was undertaken through manual interpretation at scales approximately between 1:100 and 1:250; features smaller than approximately 0.1 m × 0.1 m could not be reliably identified due to the resolution of the available aerial photographs. Together with boulders concealed by vegetation, which could not be identified at the scale of this risk assessment, means the total number of boulders is very likely to be underestimated. Field mapping of selected areas of the boulder inventory was carried out to validate the mapped boulder distribution. Some boulders that were not visible in the imagery were observed in vegetated terrain during field mapping were captured using hand-held GPS.

Imagery from multiple years was used, and additional boulders in each imagery layer were mapped to provide the incremental number of boulders accumulated per aerial photograph epoch. Approximately 13,000 boulders were mapped as centroids with associated circular plan-view footprints representing the visible extent of each boulder. The inventory is shown in Figure 11, and the GIS data include the following attributes:

- First imagery date on which the boulder was identifiable (n.b. this is not necessarily the date of rockfall occurrence);
- Centroid location;
- Plan-view diameter (circular representation to encompass the maximum visible length);
- Plan-view area (using the area of the circle as representation of the area of the boulder).

Boulder identification is subject to interpretation uncertainty resulting from image resolution, colour, scale, contrast, and orthorectification accuracy. Spatial uncertainty resulting from differences in orthorectification between imagery datasets has also not been quantified but may be present.

To support rock fall analysis for quantitative risk assessment of walking tracks on Mauao, hypothetical trajectory lines were created for each boulder in the boulder inventory (shown in the inset in Figure 11). These lines are not inferred, modelled, or observed rockfall paths; they are simple, geometric projections from each mapped boulder to the nearest bluff. They were created by identifying the aspect azimuth from each boulder to the crest of Mauao, then constructing a trajectory line from the boulder to the closest point on the nearest rock bluff within a ±10° aspect window. The elevation difference and plan view distance between each boulder and its source point were used to define the inferred shadow angle between the rock bluff and the boulder. These shadow angles were used to check and calibrate the modelled shadow angle contours used to estimate rockfall runout (Section 5.3.3). The process does not interpret whether the mapped boulders derived from rockfalls, does not assume that the line define the origin or travel path of any boulder, and does not assess the age or potential sources of each boulder. The inventory also does not account for the potential influence of landslide-related exhumation, post-depositional remobilisation, or more distant source areas.

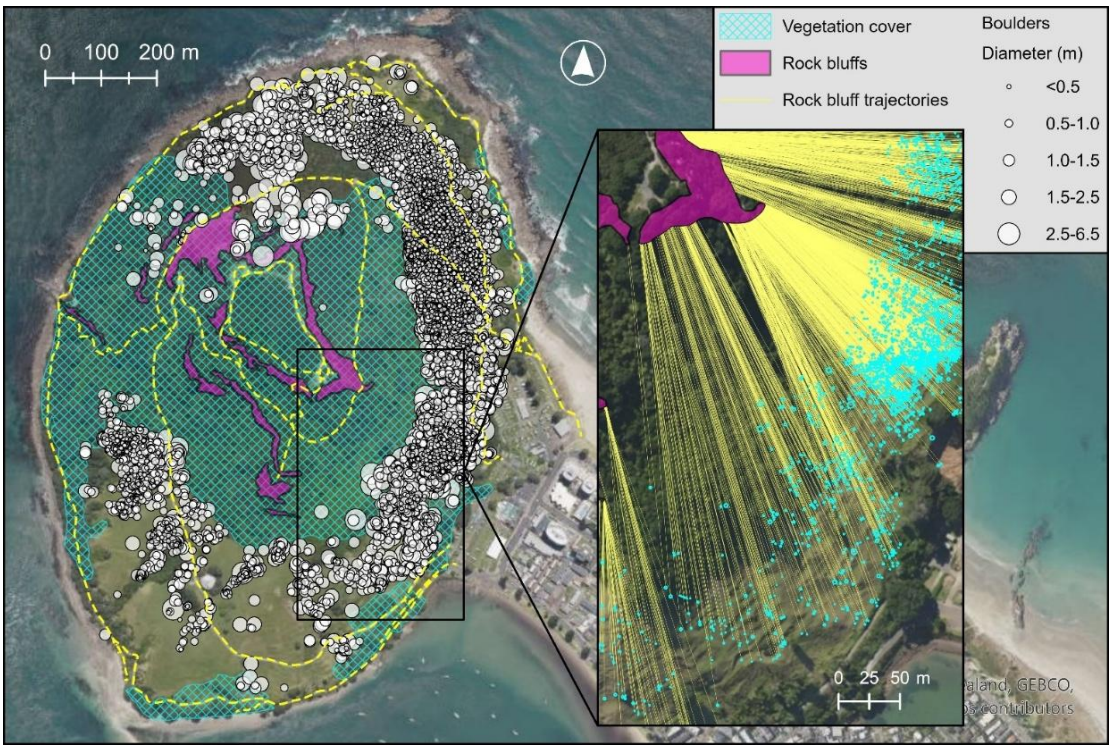

Figure 11. Boulder locations mapped at Mauao

5.2.2 Landslide susceptibility

A 1-m resolution landslide source susceptibility model was created to identify areas of Mauao that are more likely to generate future landslides under similar environmental conditions. The model utilised the existing Mauao landslide inventory, high-resolution LiDAR-derived terrain attributes, geological and geomorphological mapping, and field observations. To generate the susceptibility map, lasso penalised logistic regression was used to evaluate the relationship between mapped landslide source areas and factors such as slope angle, landform, material type, drainage characteristics and evidence of previous instability. The specific methodology followed in this analysis is described in Appendix B. Probabilities were classified into five susceptibility classes (Very Low, Low, Moderate, High, and Very High, as shown in Figure 12) to use for determining landslide source areas for the hazard and risk analysis in this study. It is important to note that classified landslide susceptibility models represent relative, not absolute, likelihood of failure.

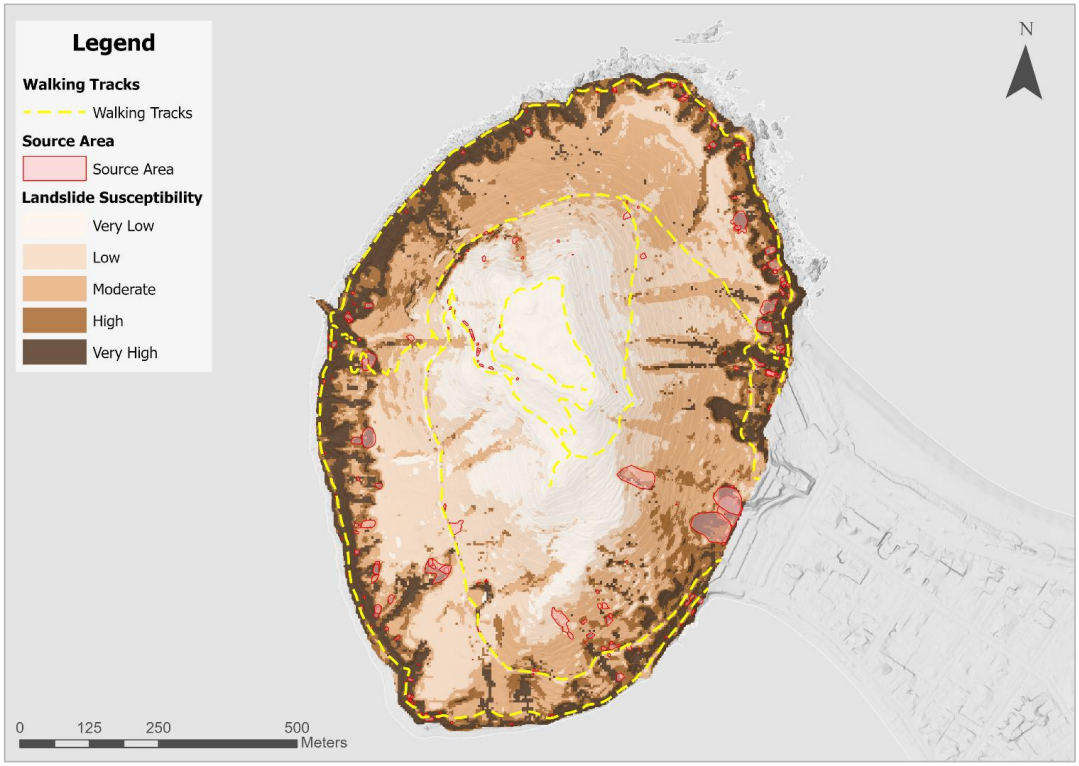

Figure 12. Landslide susceptibility map for Mauao

5.2.3 Landslide size

Landslide risk analysis requires consideration of different landslide sizes. For basic analysis, the NHRA Guidelines refer to using *Most Likely* and *Maximum Credible* landslide volumes. For advanced analysis, a wider range of credible volume scenarios can be used.

The classes adopted in this risk analysis are *Higher Frequency/Lower Impact and Lower Frequency/Higher Impact,* with *Intermediate* values between these two end cases. These labels were applied to volume scenarios but will also be applied to other variables, such as triggering scenarios, with sufficient data to justify their designation. The rationale for using different (quantitative) probability estimates has been provided where relevant. Uncertainties and assumptions are indicated throughout, particularly where simplified and/or conservative approaches have been made to reduce complexity. A list of key limitations, assumptions and future improvements is provided in Section 12.

Landslide area-volume scaling

To construct valid landslide size scenarios for Mauao, and to be able to relate these scenarios to the susceptibility map, an appropriate area-volume scaling relationship was required. Literature review, field

observations, and high-resolution pre- and post-January 2026 LiDAR-derived elevation products (e.g. hillshade and slope maps) were used in determining a suitable relationship for this study.

Landslide area is defined as the 2D plan view area of the source scar in the inventory. Volumes for some 2026 landslides were estimated from desktop-mapped areas combined with average depth estimates in the field. A pre-event LiDAR DEM and post-event photogrammetry-derived DSM were also used to measure volumes according to the following procedure:

1. Pre-event elevations were subtracted from post-event elevations to produce a 1x1 m 'difference' raster
2. The sum of elevation loss within landslide source polygons was multiplied by pixel dimensions (1x1 m) to obtain volume loss in the source
3. Positive volumes were omitted to remove source areas influenced by the presence of vegetation in the DSM that is absent in the pre-event DEM
4. Source area and volume were regressed in log-log space to derive power-law fitting parameters α and γ (intercept and scaling exponent, respectively).

Elevation differences between post-event DSM and pre-event LiDAR in stable, unvegetated terrain are minor (σ = 0.18 m) and showed no systematic variation with position around Mauao. This amount of measurement error is considered negligible compared to the uncertainty associated with curve-fitting and empirical scaling law parameters, and it is not considered further.

Due to the low number of landslides in the inventory suitable for differencing (n = c. 20), we used the power law fitting parameters and judgement to select the most appropriate area-volume relationship from the literature, rather than use the Mauao-specific relationship. The relationship of Larsen *et al*. (2010) for New Zealand (n = c. 400), undifferentiated between landslide type and material, was selected. The results are shown in Figure 13 and listed in Table 5.

It is worth noting here that there are trade-offs between dataset size, site-specificity, and confidence when selecting a scaling relationship. For example, differencing is site-specific and moderate to high confidence but is based on a small dataset size, and the fitting parameters are therefore uncertain. Field-estimated volumes have more data, but higher uncertainty in the values themselves. The Larsen *et al*. (2010) relationship for New Zealand was considered to have a reasonable balance of these factors. Uncertainties in fitting parameters from the literature were not considered.

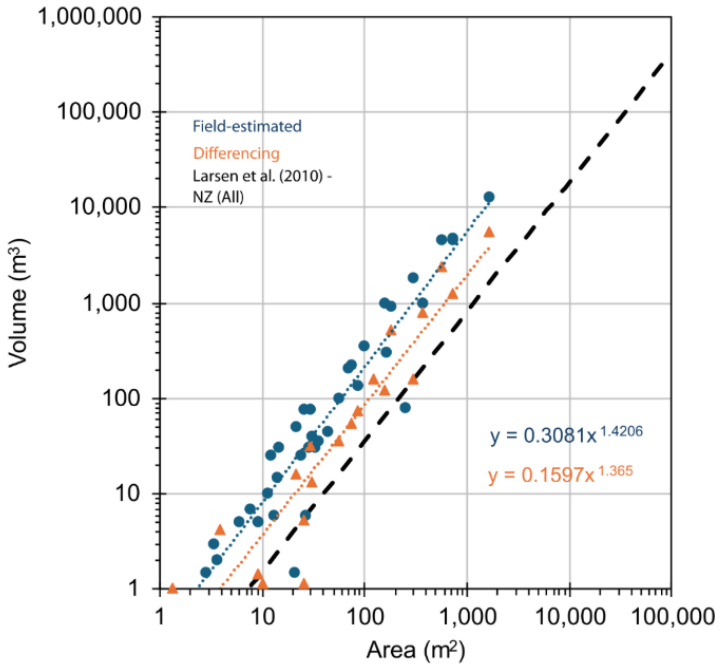

Figure 13. Area-Volume scaling relationships for landslides in the Mauao inventory, using field estimates (blue circles) and DEM-DSM differencing-derived estimates (orange triangles) of landslide volume

Table 5. Area-Volume scaling relationship parameters

Data Source	α	γ	N
Field estimated -- Mauao	0.3081	1.42	39
Differencing -- Mauao	0.1597	1.37	21
Larsen et al (2010) – NZ All	0.1380	1.36	389
Larsen et al. (2010) – NZ Soil	0.4266	1.13	237
Larsen et al. (2010) – NZ Bedrock	0.0251	1.49	140
Larsen et al. (2010) – Global All	0.1458	1.33	4231
Guzzetti et al. (2009) – Global Slides	0.0740	1.45	677

Subsequent determination of landslide locations, runout distances, and frequencies require selection of representative volume scenarios. The hazard and risk posed across these volumes are summed in subsequent steps for calculation of overall risk. Four representative volume bins were selected from the Area-Volume relationship: 10–100, 100–1,000, 1,000–10,000, and 10,000–50,000 m^3. For brevity through the remainder of the report, these are referred to by the upper value from each bin. These volumes correspond to scenarios determined to be capable of causing fatalities under the categories 'Higher Frequency – Lower Impact', 'Intermediate', 'Intermediate', and 'Lower Frequency-Higher Impact'. The larger volume scenarios were selected in consideration that (i) the campground CG1 landslide

volume (c. 13,000 m^3) is at the high end of short historical period of observation; and (ii) larger landslides are possible but unlikely to exceed 50,000 m^3 based on hillslope dimensions and geometry.

Smaller landslide sizes were also considered but not included. A 1 m^3 landslide scenario is generally not capable of causing fatality and the risk posed by slope failures this size is otherwise covered by rockfall. In the decision-making process, a separate 10 m^3 scenario was excluded on the following grounds:

- Debris slides of this size are only marginally capable of causing fatality on Mauao tracks. Examples from the 2026 storm show that these are primarily shallow failures adjacent the tracks that would not usually be capable of causing asphyxiation or impact trauma leading to loss of life (Figure 14).
- Most failures of this size come specifically from cut slopes, which we have not mapped or assessed independently for susceptibility (aside from the steeper slope angles on cuttings, which are captured by the susceptibility analysis).
- There are limited locations where 10 m^3 landslides could run out and transition to debris falls (i.e. where they are potentially capable of causing fatality). The hazard at these locations, and observations of failures in 2026, are dominated by larger failures.



Figure 14. Examples of c. 5-10 m^3 landslides on Mauao

Boulder size characteristics

The distribution of boulder sizes from the boulder inventory was used to define the design boulder dimensions for risk analysis. For the purposes of all calculations in subsequent sections, boulders are assumed to be spherical with the diameter of boulder plan area equal to diameter of the sphere. Natural variability in shape, for example rectangular slabs versus ellipsoids or spheres, introduces uncertainty in diameter calculation which likely has a minor effect on selection of the design boulder and risk calculations. Of the mapped boulders, the average diameter is c. 0.9 m and the 95th percentile is c. 2 m (Figure 15). For the purposes of this study, a design boulder diameter of 1 m (c. 80th percentile) was selected.

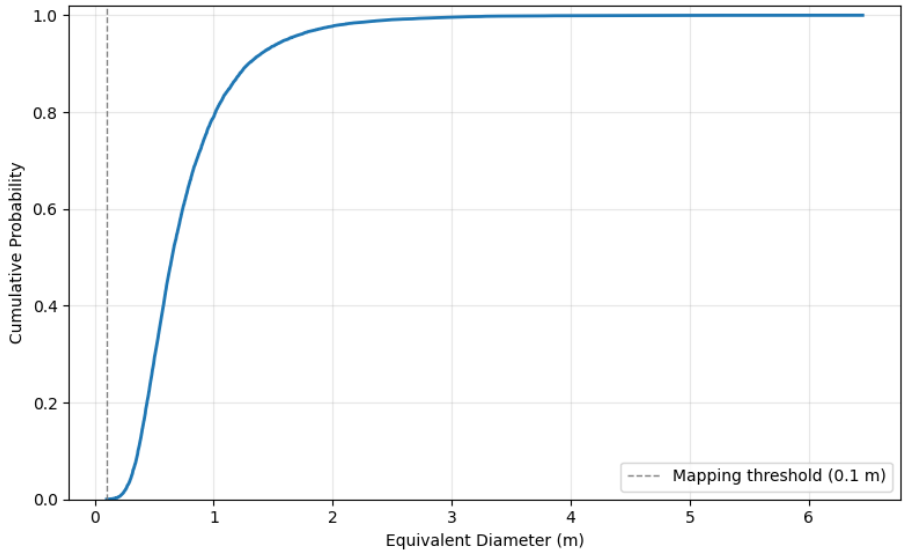

Figure 15. Cumulative density function (CDF) of boulder diameters from the inventory

5.2.4 Locations of source areas

Landslides

Potential landslide source areas were required to determine runout extents and subsequent probability calculations. The dimensions of the source areas are constrained by the volume scenarios and Area-Volume relationship above. The positions of potential landslide source area locations were determined from the landslide susceptibility map (Figure 12), with susceptibility classes of moderate, high, and very high being captured with the following procedure.

1. For all volumes except 50,000 m^3, volumes were converted to corresponding circular source areas and iteratively superimposed on the landslide susceptibility model.
2. A sliding window circular area can act as a source if a certain percentage (99% or 100%, below) of underlying cells in the landslide susceptibility model are 'Moderate' or higher susceptibility. Based on trialling different thresholds, a value of 99% was selected for the 10,000 m^3 scenario; other scenarios used a 100% requirement. This value reliably reproduced the input Area-Frequency distribution and density, as well as producing reasonable landslide sizes compared to the hillslope relief.
3. For the Lower Frequency, Higher Impact scenario (i.e. 50,000 m^3), the inventory is considered incomplete and unsuitable for identifying potential source areas, and a geomorphological approach was instead followed:

- A representative hazard footprint of large landslide runout, based on expert geomorphological judgement, was mapped (Figure 16). This is considered to provide constraints on the spatial footprint of slope failure and runout combined.

- This area includes some likelihood of larger landslides not observed in the historical record and only partially indicated in the landscape. Potential source areas have been demarcated, and a large landslide origin has been considered for the Lower Lobe (Section 3.2); however, the available geomorphic evidence does not allow it to be unambiguously interpreted as an old, large landslide deposit.

Runout modelling is then carried out from the source areas for volumes up to 10,000 m^3 (described in Section 5.3.1). For the 50,000 m^3 scenario, runout is included in the combined hazard footprint.

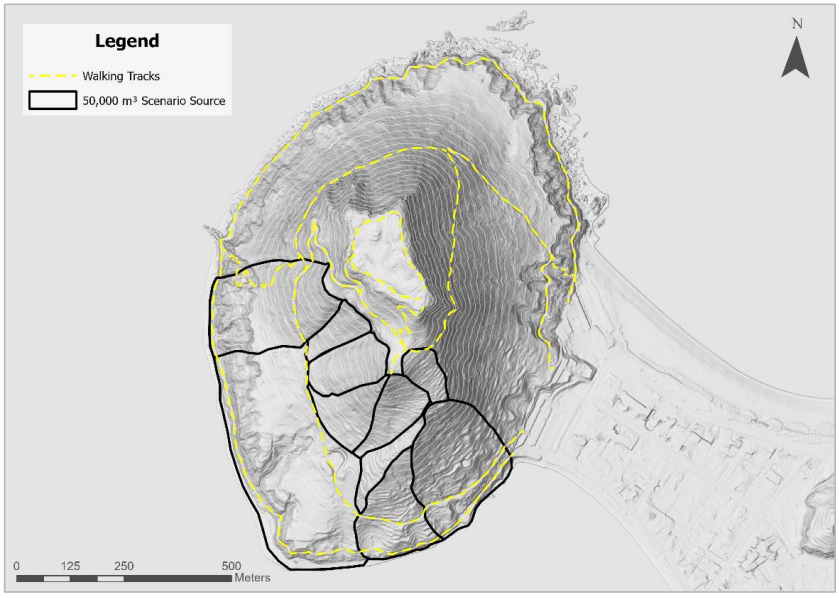

Figure 16. Geomorphic slope facets for Lower Frequency, Higher Impact scenario , corresponding to potential areas that may be susceptible to large landslides not observed in the historical record

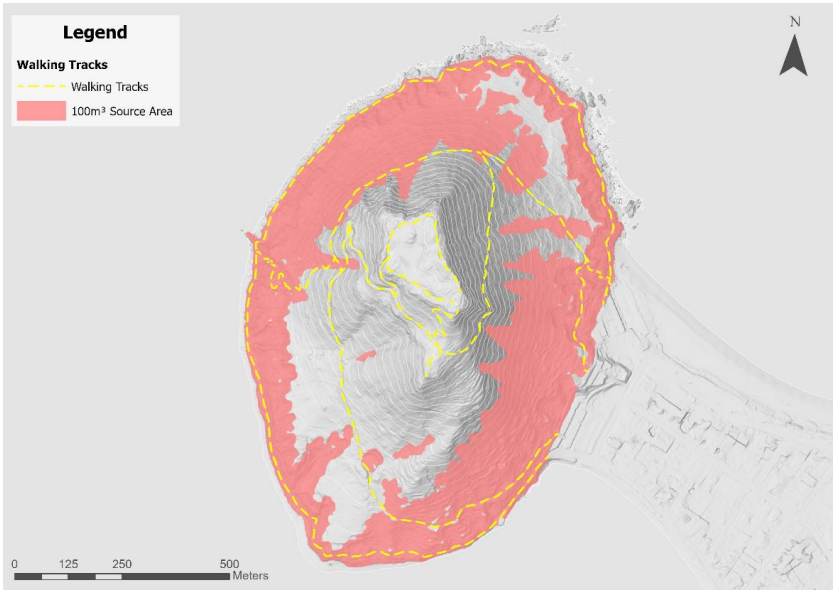

Figure 17: 100 m³ scenario source areas

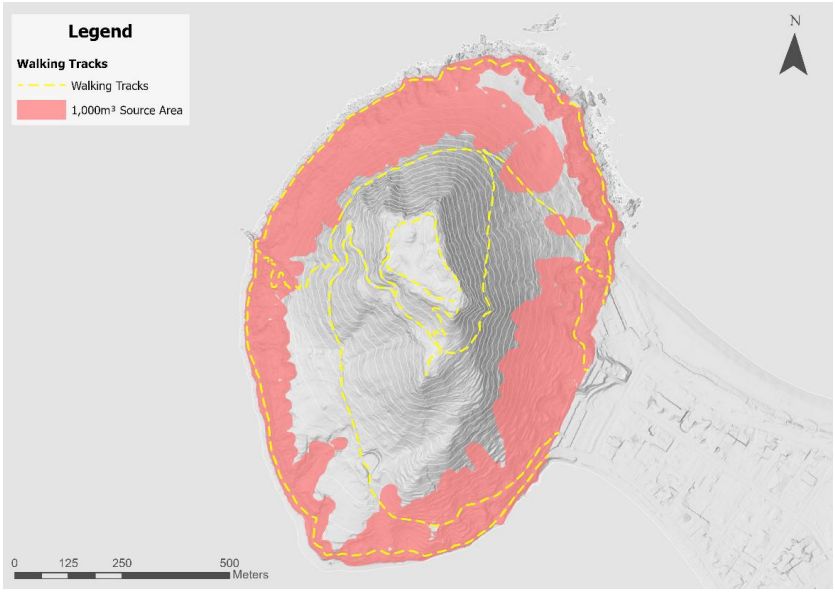

Figure 18: 1,000 m³ scenario source areas

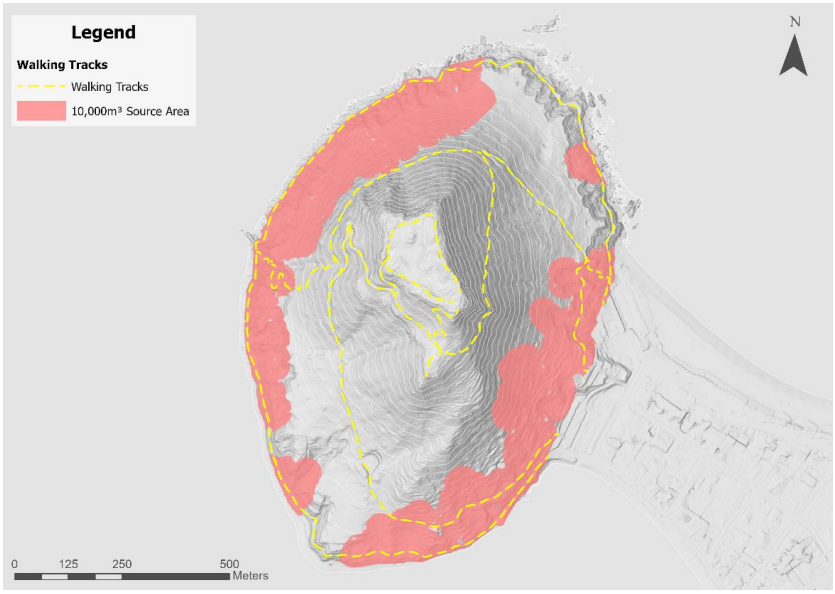

Figure 19: 10,000 m³ scenario source areas

Rockfall

For rockfall hazard assessment, rock bluffs were mapped around Mauao (refer to Figure 11) and these were used to define potential rockfall source areas.

5.2.5 Landslide frequency and triggers

‘Natural background’ rate and triggers

Rainfall and earthquake ground motions are the most frequent landslide triggers in New Zealand (Rosser et al., 2017) and were considered as part of this analysis (see Appendix C for more discussion). Although volcanism may be relevant for the site, the earthquake ground motions accompanying seismic unrest associated with eruptions elsewhere are the most plausible triggering mechanism, and there are insufficient data to be able to estimate their probabilities.

Although landslides with no apparent trigger are likely over the long-term, there are limited historical observations of landslides unrelated to rainfall. Landslides with no trigger likely have occurred on Mauao, however the geomorphic record of such failures is incomplete due to gully and wave erosion around its base. Because there is (i) little evidence of landslide *deposits* preserved in the landscape and (ii) no site-specific measure of long-term erosion rate, there are no data to constrain an independent, background landslide rate in the absence of rainfall. Rather than estimate a separate natural background rate of failure and treat rainfall as a trigger, the frequency of rainfall-induced landslides is instead considered to be representative of the long-term background rate. Calculations therefore consider the annual probability of one landslide for each representative class over time, rather than multiple landslides

triggered by the same event. This assumption adds uncertainty to the hazard and risk calculations. Additional information, including consideration of the effects of climate change, is included in Appendix C.

BOX 1

Landslide risk is calculated following a simplified approach wherein the landslide hazards are assumed to be independent of each other. The long-term rate of rainfall-induced landsliding is considered to be the natural background rate rather than treating rainfall as an explicit trigger. This means that the risk equation is evaluated for the exposure and vulnerability to *individual landslides within different volume classes* rather than multiple landslides occurring during the same trigger following the theory of unimodal bounds (de Vilder and Massey, 2024).

Consideration of rainfall as an explicit trigger would require specifying the number of landslides of different volumes that occur at different rainfall AEPs. This is possible, but introduces many more assumptions, given the limited data from the historical events on Mauao.

Landslide frequency

The annual exceedance probabilities of the different volume scenarios up to our Intermediate scenario were estimated from the inventory. Figure 20 presents the annual frequency of landslides by volume, derived from the landslide inventory for the period from 2005 onwards. Volumes were estimated from mapped landslide areas using an area-volume relationship and grouped into logarithmic bins rounded to the nearest order of magnitude.

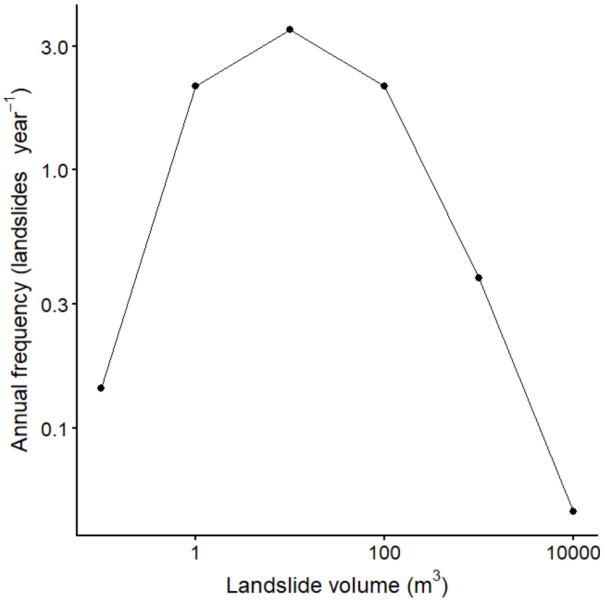

Figure 20. Annual landslide frequency derived from the landslide inventory

The inventory provides only an indicative basis for estimating landslide frequencies because of its limited spatial and temporal extent. In addition, a significant proportion of the inventory was mapped from aerial

imagery, which is less effective at identifying small landslides and especially those in vegetated areas. This introduces a bias towards landslides in grassed areas and larger failures in vegetated areas and likely contributes to the rollover observed at the smaller-volume end of the frequency-magnitude distribution in Figure 20. The reduction in frequency for small landslides is therefore considered to reflect inventory spatial incompleteness rather than a true reduction in occurrence rate.

Despite these limitations, the results demonstrate the expected trend of decreasing annual frequency with increasing landslide volume and provide a reasonable basis for estimating the relative occurrence rates of different landslide sizes within the study area. The rates are broadly consistent with previous estimates.

Table 6. AEPs from the Mauao landslide inventory

Volume Class	Number of Landslides	Years	ARI	AEP (Landslide – All Mauao)
100	44	21	0.48	0.88
1,000	8	21	2.63	0.32
10,000	1	21	21	0.05

There are no inventoried landslides that correspond to the Lower Frequency, Higher Impact scenario of 50,000 m^3. For this scenario, data from the High Intensity Rainfall Design System (HIRDS) were used to estimate an attendant Lower Frequency, Higher Impact rainfall event potentially capable of triggering this large landslide volume (Table 7, and Appendix C). This was done because we have assumed a background natural rate of landsliding from the inventory based on rainfall-induced landsliding. A tentative conditional probability of failure, given rainfall of at least this amount, has been estimated at 5%. This is likely a conservative estimate because (i) there is limited evidence of such a failure occurring in the geomorphic record of Mauao, which could represent a c. 10 ka period, and (ii) it is not clear that the designated geomorphic areas are capable of such large volume landslides under rainfall triggering.

Table 7. Rainfall parameters and probabilities for lower frequency, higher intensity scenario

Volume Class	average rainfall recurrence interval (ARI, years)	24-hour Rainfall (mm)	24-hour Rainfall AEP	Conditional probability of landslide failure	Probability of at least one landslide of largest volume class
50,000	250	303	0.004	0.05	0.0002 in areas designated using geomorphic approach

Track sections and scaling factors

For tracks, annual landslide frequencies across Mauao are scaled by the upslope area available for failure by track section. Tracks were discretised into different sections based on having similar geology and geomorphological terrain (sometimes referred to as hazard zones or landscape units) and calculations performed over the length of those sections (Figure 21). Uphill areas available for failure were manually digitised for each track section. For scenarios under 50,000 m^3, the areas were manually defined based on slope, elevation, and aspect. For the 50,000 m^3 scenario, the extents were defined by

the discrete areas. Off-track diversions (e.g. down to the beach) were not considered. Landslide probability scaling for worker calculations is proportional to the size of the management areas supplied by TCC.

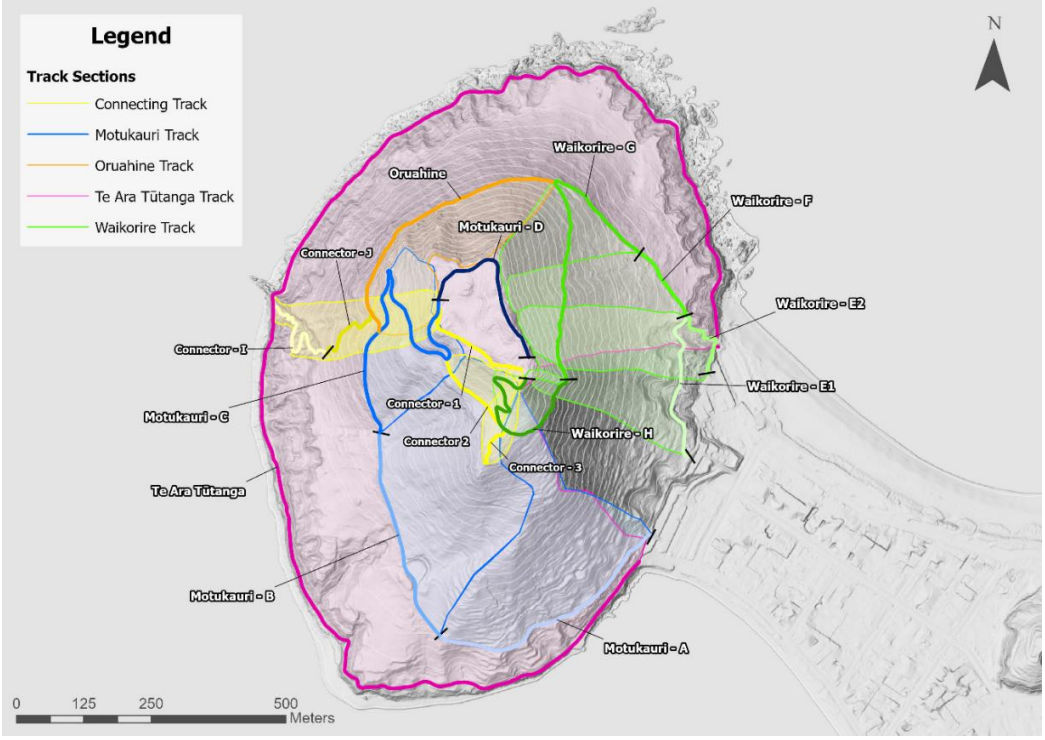

Figure 21. Track sections and associated upslope areas

Seismic triggering

Earthquake-induced landslides (EIL) are an important consideration. Because Mauao is located within a relatively low seismic hazard region of New Zealand, and data on earthquake-triggered landslides here are sparse, we took a simplified approach to estimating EIL probabilities. The National Seismic Hazard Model (NSHM) was used to estimate the return interval of representative peak ground accelerations (PGAs) potentially capable of triggering landslides (Appendix C.2; Table 8). Conditional probabilities of failure were assigned based on qualitative descriptions of earthquake triggered landslides in historical NZ events (Hancox et al, 2002). These conditional probabilities were varied in sensitivity testing to account for varied hydrological conditions as well as site, path, and source characteristics that are known to affect slope stability. The values have also been scaled to rockfall zones.

Table 8. Earthquake triggering scenarios from the National Seismic Hazard Model (NSHM) and the additional annual probabilities of landsliding

Landslide scenario	ARI	AEP	Intensity statistic	Representative intensity (PGA)	EIL Opportunity (for given PGA[1])	Conditional probability of landslide in class [Low, High]	Additional annual probability of failure
HFLI[2]	50	1.98%	Mean	0.05	Very Low	0.2 [0.1, 0.5]	0.00396
Intermediate	475	0.21%	Mean	0.2	Low to Moderate	0.4 [0.2,0.8]	0.00084
LFHI[3]	2475	0.04%	95th percentile	0.55	High	0.6 [0.3,1]	0.00024

1. As described in Hancox *et al*. (2002)
2. Higher frequency, lower impact
3. Lower frequency, higher impact

Example Calculation

The calculations in Table 9 contain input and outputs of $P_{(L)}$ without the addition of earthquake-induced landslides. For simplicity, and because the accuracy is acceptable given the small probability values, $P_{(L)}$ is summed for background and earthquake-triggered landslides prior to subsequent risk calculations.

Table 9. Example calculation of background annual landslide probability $P_{(L)}$ for track section Motukauri-A, excluding earthquake-induced landslides

Landslide volume scenario (m^3)	Background annual frequency	Study area (km^2)#	Annual frequency per km^2	Viable uphill source area (km^2)	Area-scaled background $P_{(L)}$
100	0.88	0.80	1.10	0.073	0.080300
1,000	0.32	0.80	0.40	0.073	0.029200
10,000	0.05	0.80	0.063	0.073	0.004599
50,000	0.0002	0.80	0.0003	0.073	0.000018

The mapping area over Mauao can reasonably be measured as 0.77 to 0.86 km^2. A value of 0.8 km^2 was selected.

5.2.6 Rockfall frequency and triggers

Rockfall triggers from boulder inventory

There is comparatively little information about rockfall triggers on Mauao from the boulder inventory. Notwithstanding the fundamental uncertainty that mapped boulders may not represent all past rockfalls, the time window between aerial imagery collection dates is too long to confirm triggers for any individual boulder. There is also a detection bias for more recent years with higher resolution images, particularly 2026 (Figure 22) and data gaps are likely due to vegetation cover in certain areas.

Nonetheless, historical observations of rockfalls (c. 2004 to present) and crude annualised probabilities using the available dates in the inventory (Figure 23) provide some constraints for expert judgement-derived rockfall rates.

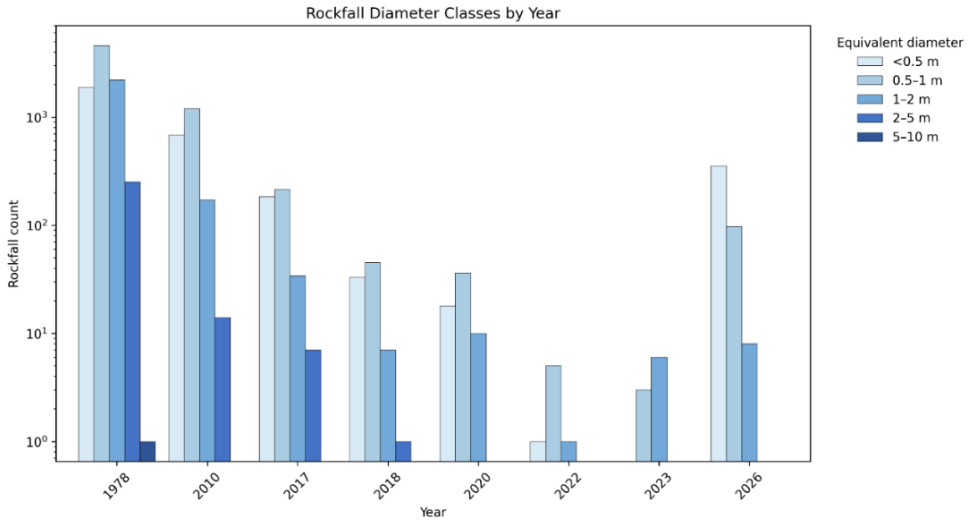

Figure 22. Boulders per year by size and imagery date in which it was identified

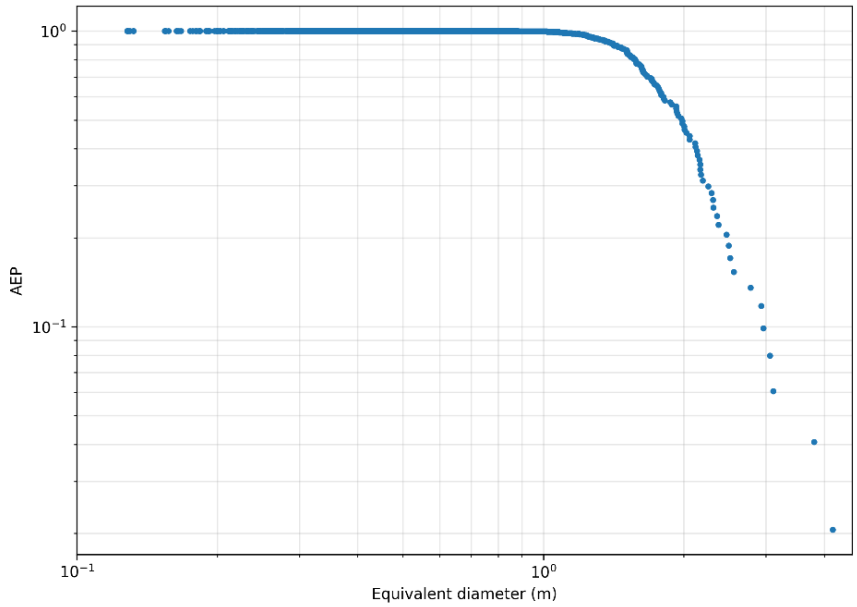

Figure 23. Estimated annual exceedance probabilities for boulders in inventory over historical period. Note short time period considered and multi-year durations between imagery capture

Historical record – rainfall

There are limited data to constrain the rate of rockfall triggered by rainfall at present. Avalon (2006) report rockfall incidents associated with rainfall-induced slips between May-September 2005. They also consider other pre-conditioning and triggering factors such as scaling, animal activity, trampers off-track, and fire. HD Geo (2025) list rainfall as a possible trigger for c. 45% of rockfall; this figure also includes combined seismic and rainfall triggering. It is noted that a further c. 45% of rockfall are listed as being possibly 'triggered' by 'erosion' in the HD Geo report, which is considered herein to be a general preconditioning of rock, exposed by gradual and/or episodic erosive processes, to rockfall (e.g., in coastal cliffs).

Historical record – earthquake

There are limited data on earthquake triggering for rockfall on Mauao. A few boulders (c. 0.15–0.6 m^3) were recorded as falling during the 2004 M_W 5.4 Rotoehu earthquake: 'This slip released one boulder of around 0.6 m^3, a few around 0.3 m^3 and a few around 0.15 m^3, in addition to a quantity of soil and smaller rocks' (Avalon, 2004).

Historical record – near misses and observations

Several rockfall near misses and observations on Mauao walking tracks have been observed by Avalon (Avalon 2009, 2017, 2018, 2021). Although this covers a limited period, and requires near misses to be reported, it indicates that rockfall has presented (and therefore continues to present) a threat to walkers.

Table 10. Observed rockfall incidents

Date	Location	Event type	Event description	Outcome
07/2005	Campground boundary / hot pools	Rockfall near miss	A large boulder rolled approximately 25 m downslope following heavy rain and stopped at the campground boundary fence.	No reported injury
09/2005	Eastern slope above campground	Animal impact	A boulder moved during rainfall and struck two sheltering lambs.	Two lambs killed
06/2007	Northern slopes / Base Track	Public near miss	About 7.5 tonnes of boulders were released due to natural erosion from an outcrop and travelled to the shoreline, narrowly missing a walker.	No reported injury
25/10/2016	Te Ara Oruahine	Public near miss	A member of the public reported a dinner-plate-sized rock passing directly in front of their head, presumed to be released due to natural erosion.	No reported injury
09/03/2017	Te Ara Oruahine	Public exposure event	A rock approximately 900 x 700 x 500 mm crossed the track at speed and continued downslope, presumed to be released due to natural erosion.	No reported injury
17/04/2018	Te Ara Oruahine	Public exposure event	A rockfall block was found on the track during an inspection, presumed to be released due to natural erosion.	No reported injury

Date	Location	Event type	Event description	Outcome
17/04/2018	Te Ara Waikorire	Public exposure event	A rockfall block was found on the track during an inspection, presumed to be released due to natural erosion.	No reported injury
07/2018	Te Ara Waikorire	Public exposure event	Multiple rock pieces up to approximately 300 mm crossed the track. No trigger is given.	No reported injury
02/08/2021	Te Ara Waikorire	Public exposure event	An approximately 100 kg rock crossed the track. The report identified it as large enough to present a fatality risk to a person in its path, presumed to be released due to natural erosion.	No reported injury

Frequency calculations

The approach of Massey et al. (2013) and Massey et al. (2014) was followed, with some modification for Mauao-specific context. Two broad contributors to rockfall rates were assumed: (i) earthquake-triggered and (ii) not triggered by earthquakes. Combined rates from both causes were scaled to the surface area of sources (i.e. bluff or coastal cliff).

For events not triggered by earthquakes, the process for estimating rates included consideration of historical observations and the rockfall inventory. We used the following workflow:

1. Four representative time periods were selected for analysis: 1-20 years, 20-100 years, 100-1000 years, and 1,000-10,000 years. These time bands roughly correspond to the period of historical records of rockfall (1-20 years) out to the period represented by the boulder inventory (assumed to be 1,000-10,000 years; Appendix D).
2. Total numbers of boulders accumulated over those different time periods were estimated from historical observations, the inventory, and geomorphology judgement.
3. Annual accumulation rates over each time period were estimated following from Steps 1 and 2.
4. An assumed number of design boulders per triggering event in each time band (e.g. different numbers in 20-year ARI storm versus 250-year; Appendix D). Longer time periods are associated, for example, with larger ARI storms capable of triggering more boulders.
5. A representative event frequency was calculated for each time period so as to conserve the annual accumulation rate.

Table 11 lists the values used to calculate rockfall frequency. Appendix D discusses some of the evidence and logic used to estimate the values for each parameter.

Table 11. Return periods and number of rockfall not triggered by earthquakes. See Appendix D for logic, assumptions, and sense checks on these values.

Parameter	1-20 years	20-100 years	100-1000 years	1000-10000 years	Totals
Estimate of accumulated boulders over time	100	250	800	1250	2400
Number of boulders per year from all source areas	5	2.5	0.8	0.125	8.4 per year from all sources (10.5 per year per km^2)
Number of boulders leaving all source areas per representative event	2	10	100	500	--
Effective event annual frequency (all Mauao)	2.5	0.25	0.008	0.00025	

For earthquake-triggered rockfall, the same AEP and PGA bands were used as described above for landslides. To calculate annual rockfall rates for different PGA bands, the following observations were considered:

- Qualitative descriptions of New Zealand earthquake-triggered landslides at different intensities by Hancox et al. (2002).
- A 'sense check' using the empirical relationship of Massey et al. (2014) relating expected number of boulders to PGA. Their equation is run on a suburb-by-suburb basis for the Christchurch Port Hills.
- The single observation of an earthquake-triggered boulder on Mauao in 2004 at an estimated PGA of 0.05-0.15.
- Observations of limited rockfall in volcanic hills from the 1987 M_W 6.5 Edgecumbe earthquake (Franks, 1988).

The results are summarised in Table 12.

Table 12. Earthquake triggering scenarios and the additional annual probabilities of rockfall (Appendix D). Earthquake scenarios follow Appendix C.2; background rockfall rate from Table 11.

Triggering scenario (consistent with landslides)	NSHM Probability of Exceedance	AEP	Repre-sentative Intensity (PGA)	Corresponding EIL Opportunity	Estimated # of boulders leaving all source areas	EQ-triggered rockfall rate per year (preferred)
Higher Frequency, Lower Impact	63% in 50 years	1.98%	0.05	Very Low	1	0.0198
Intermediate	10% in 50 years	0.21%	0.2	Low to Moderate	36 [10,138]	0.0756
Lower Frequency, Higher Impact	2% in 50 years	0.04%	0.55	High	62 [16, 236]	0.0248
TOTAL + BACKGROUND 1 m boulders per year			8.5 per year (10.7 per year per km^2)			

The annual probabilities for earthquake triggering are shown in Table 12. For the low PGA band of 0.05g, 1 boulder is estimated to be produced based on the 2004 event. For the other bands, the total volume of rockfall produced was informed by using the Rockfall Activity Rate System (RoARS) (Olsen et al. 2019; Massey et al., 2022) and divided by the volume of the design boulder to estimate number of boulders. The uncertainty in the total rockfall volume from RoARS is large and dependent on which inputs are selected for average slope and slope height. A representative slope of 60° and slope height of 10 m were used as inputs with fixed PGAs and total surface areas. Low, mean, and high values are based on -1σ, mean, and +1σ output volumes from the tool.

In frequency calculations, all probabilities for rockfall are scaled to the area of the runout zones (defined below). That is, annual frequencies have been estimated for all available source areas on Mauao, and lower rates were estimated on a source-by-source basis, based on the proportion each individual source represents of the whole.

5.3 Probability of spatial impact $P_{(T:L)}$

The probability that one landslide, if it occurs, will impact an element at risk (in this context this represents a given location on a track or grid line that could be occupied by a person). The probability is estimated with the following equation:

$$P_{(T:L)} = \frac{W+d}{L} \qquad \textbf{Equation 2}$$

Where W is the representative width of a landslide in each volume class, d is the diameter of a person (here assumed to be 1 m), and L is the length of track along which a landslide could occur. The person's diameter is added to the landslide width because a person is impacted if the debris overlaps any part of their body, so a landslide of width W affects a person at any position within a band of width $W + d$ along a track. For workers, it was assumed that a landslide could impact any location along a 10 x 10 m hypothetical patrol grid within each management area, including the length of the areas' boundaries. This assumption was necessary to avoid applying large $P_{(T:L)}$ associated with small overlapping hazard footprints (i.e., runout zones) to entire management areas. Within management areas, grid lines with an average slope >45 degrees were excluded as these are generally not traversed (J. Clark, pers. comm.).

For landslides, representative widths (W) of each landslide volume class were taken as 1.5x the corresponding circular source area width. This value was found to be suitable given the need to balance (i) a mixture of narrow debris trails for most landslides in the inventory and (ii) larger coherent slides with wider deposits than source areas. L was determined using the volume-specific source and runout area modelling described below. For rockfall, a design boulder diameter of 1 m was selected.

5.3.1 Landslide runout

Landslide runout model

Landslide runout zones for different volume bins and attendant source areas were determined using an empirical model and checked against runout distances in the landslide inventory. Runout was simulated from each potential landslide source area on the LiDAR DEM within GIS based on an empirical approach from Brideau et al. (2020) and Brideau et al. (2021). The DEM is searched progressively outward from each pixel in the source area, with cells considered reachable where their elevation lies below the trajectory defined by the specified F-angle (Table 13). Runout is constrained to the downslope direction using the hillslope aspect with an allowable aspect buffer. A user-specified maximum travel distance limits the overall extent (Table 13). The model also accounts for the potential to pass over local terrain obstacles using the specified obstacle height and progressively explores neighbouring cells until no additional reachable terrain is identified. To allow the runout code to override minor surface roughness and local topographic impediments, an allowable obstacle height of 1 m was incorporated into the modelling. The resulting runout polygons (e.g., Figure 26) were combined with the corresponding source areas to define the total hazard spatial footprint used in the subsequent exposure and risk calculations.

Table 13. Runout parameters for landslide volume scenarios considered in risk calculations

Volume Scenario (m^3)	Description	Susceptibility Classes Affected	Corresponding Area of Source (Larsen et al., 2010)	Corresponding Slope Distance Runout (95th percentile; Figure 25)	F-Angle (Median; from inventory; Figure 24)
100	Higher Frequency, Lower Impact	Moderate to Very High	127	156 m	27°
1,000	Intermediate	Moderate to Very High	689	460 m	21°
10,000	Intermediate	Moderate to Very High	3746	1354 m	18°
50,000	Lower Frequency, Higher Impact	N/A – Geomorphological Approach	N/A	N/A	N/A

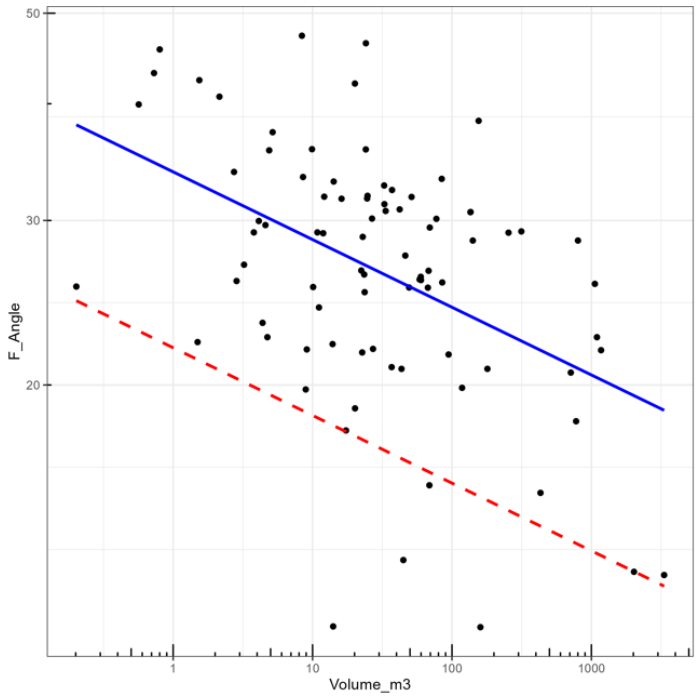

Figure 24. Landslide volume (as per Larsen et al., 2010) versus measured F-angle for the Mauao inventory

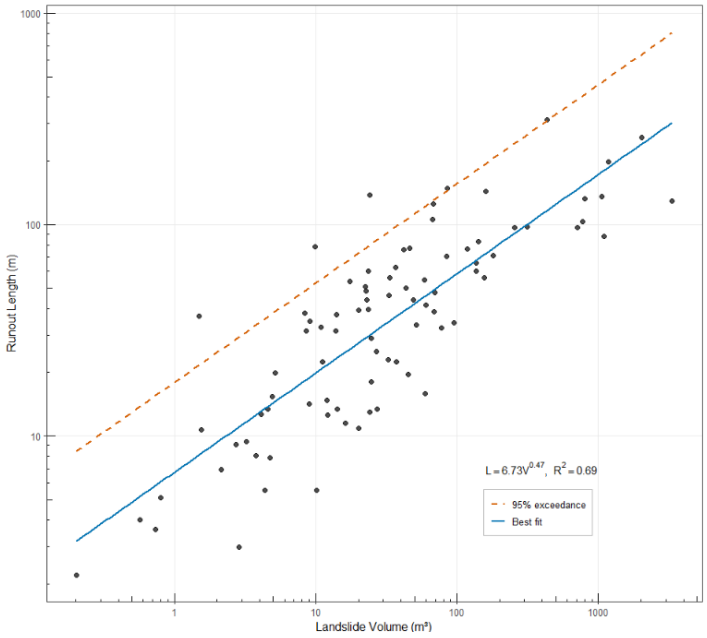

Figure 25. Landslide volume (as per Larsen et al., 2010) versus slope-distance runout length for the Mauao inventory

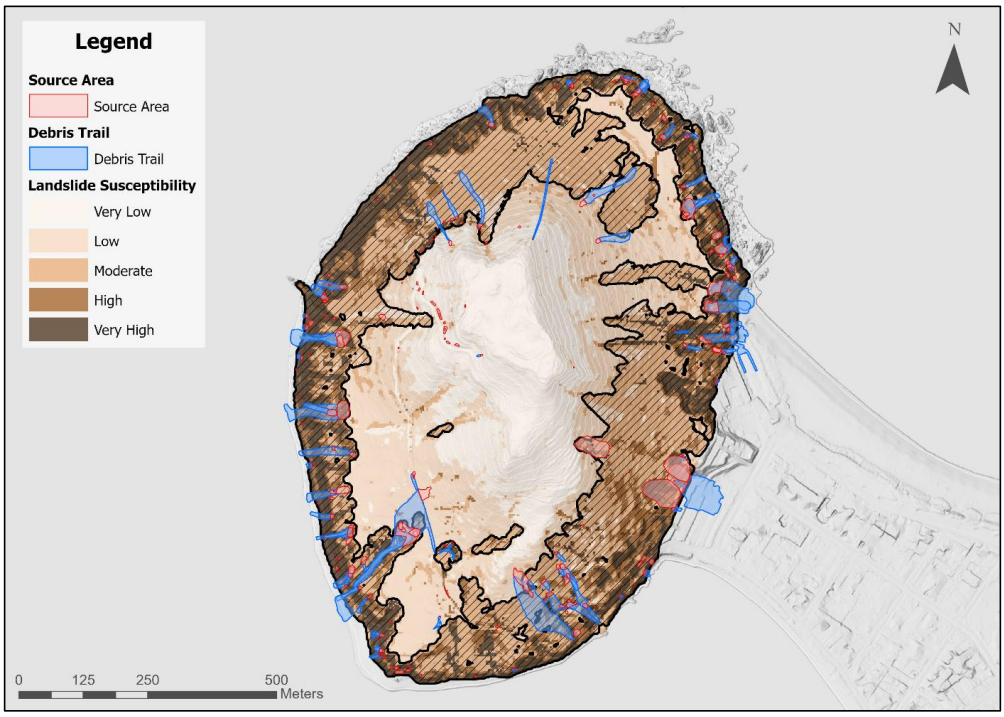

Figure 26. Example model output showing permissible runout area (black hatch) overlain over the landslide susceptibility map. Modelled runout has been clipped to the study area. For clarity, individual landslide runout scenarios are not shown – the hatch area is the extent of all landslide runout.

Spatial impact probability

Although landslide runout can be directly compared against track location, there is some additional probability that adjacent sections of track would be impacted. This uncertainty can arise from, for example, (i) local terrain complexity not captured well in pre-2026 LiDAR DEM, (ii) downslope bulking during landslide motion, and/or (iii) a small amount of landslide material transitioning between failure modes with different runout. As a sensitivity test, the spatial impact probabilities of Hayes et al. (2025) were adapted for tracks and incorporated in calculations as per Table 14. Spatial buffers of 10 m around the base track centreline and 5 m for all other tracks were selected based on topographic profiles showing this value encompassed the majority of slope breaks adjacent to the tracks.

Table 14. Spatial impact probabilities for landslide debris reaching tracks (adapted from Hayes et al., 2025)

Landslide runout position relative to track	Spatial impact probability	Description
Intersects track line and/or travels beyond track	1	Landslide debris reaches the location on the track.
Is located within 5 or 10 m of track centreline	0.5	Landslide debris may impact the track in some events.

Landslide runout position relative to track	Spatial impact probability	Description
Is located >10 m from track centreline upslope	0.0001	There is a small but non-zero chance that landslide debris reaches track.

5.3.2 Slippage

Landslide source areas that fail rapidly downslope of a track, resulting in the loss of ground from the track, pose *slippage* hazard. This threat to life is separate to the impact trauma and asphyxiation, or the debris impact on structures, associated with landslide runout. Slippage is primarily associated with fast-moving, intact blocks of material and/or scarp retrogression (de Vilder and Massey, 2014a). Slippage is considered a credible but relatively small threat to life safety on Mauao tracks for the following reasons:

- Most of the modelled landslide source area terrain coincides with landslide runout zones – adding the impact area of slippage does not materially influence track exposure probability. An example of this can be seen at landslide WT1 in Figure 27. There, the source area of the landslide undermined the track, which constitutes slippage hazard. However, the area of slippage is entirely contained within the area of modelled runout for all possible source areas.
- The predominant mode of failure, debris slides, involves initial translation over a shallow failure plane followed by flowing of soils on hillslopes. For life safety of individuals outside of buildings and structures, it is more likely that a person would be injured by entrainment within the flow, or being swept over a cliff by debris, rather than by the initial failure. An exception would be track sections along cliffs with steep drop offs such as along Te Ara Tūtanga; however, these areas are all already within hazard footprints of landslide runout (Figure 27).

Therefore, no additional hazard footprint has been added for slippage. The additional probability of failure associated with slippage should be assessed on a site-specific basis.

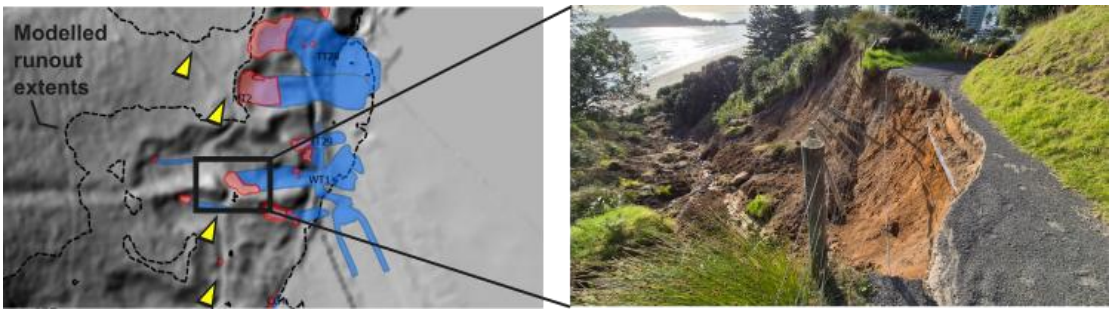

Figure 27. Slippage hazard on a track (yellow arrows) at landslide WT1 . The hazard footprint of slippage is entirely contained within the modelled runout (black dashed lines)

5.3.3 Rockfall runout

Rockfall runout model

The empirical runout approach of Massey et al. (2014) and Massey et al. (2013) was followed to quantify the probability of impacting a person located on a track, by defining rockfall proportions and numbers reaching or passing shadow angle contours (Figure 28).

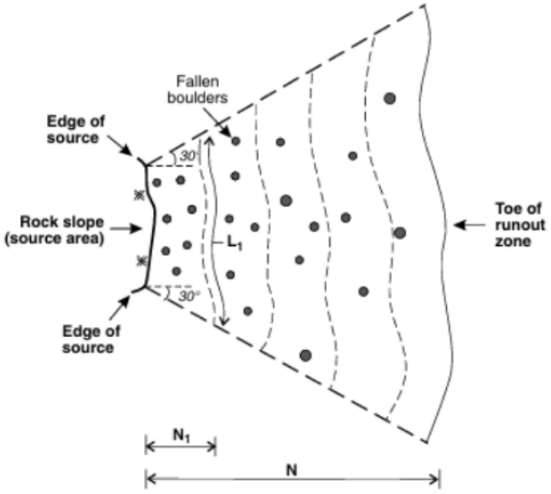

Figure 28. Empirical runout approach from Massey et al. (2014)

First, the source point for each mapped boulder was taken as the toe of the nearest mapped rock bluff, found by projecting a line upslope from the boulder (Section 5.2.1; Figure 11). These lines locate the source point only and do not represent boulder travel paths. Then, shadow angles were estimated for each boulder by (i) extracting the elevations for the boulder and source area from the LiDAR DEM and (ii) calculating the angle from the elevation difference and the plan-view distance between them. Measuring to the bluff toe rather than the crest gives a lower shadow angle, and therefore a longer runout. These shadow angles were found to be comparable to modelled shadow angle contours produced from the DEM and source area toes alone: the minimum modelled shadow angle is 20°, which corresponds to the 3rd percentile of those calculated from the boulder inventory (Figure 29), so about 3% of mapped boulders lie beyond this extent. This threshold was used to define the maximum extent of runout, although it is possible, given the limitations of our dataset, that rockfall can exceed this extent. For example, Massey et al., (2013) modelled an additional c. 0.1-5% of boulders passing measured rockfall shadow angles in the Canterbury earthquake sequence.

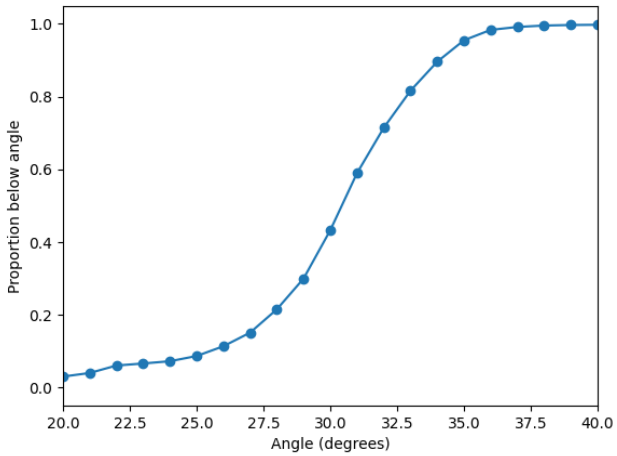

Figure 29. Rockfall shadow angles derived from the boulder inventory

Shadow angle contours were then generated based on representative rockfall source areas (Figure 30). Runout zones were defined based on similar source area and slope morphology. The numbers of boulders reaching or passing a unit length of slope were determined for different shadow angles projected outward from representative sources. The numbers and proportions of boulders reaching or passing shadow angle contours were determined from the full inventory (Figure 29). For Zone 4 (Figure 30), where the inventory is incomplete due to vegetation, the numbers and proportions for each contour were distributed based on an adjacent, vegetation-free representative mapping area and scaled to the runout zone area.

The contours are in most instances perpendicular to local runout, but deviations such as their waviness extend the length of the line within the runout zone. This is a known limitation of the approach (Massey et al., 2014) but is considered to have a minor effect on the results.

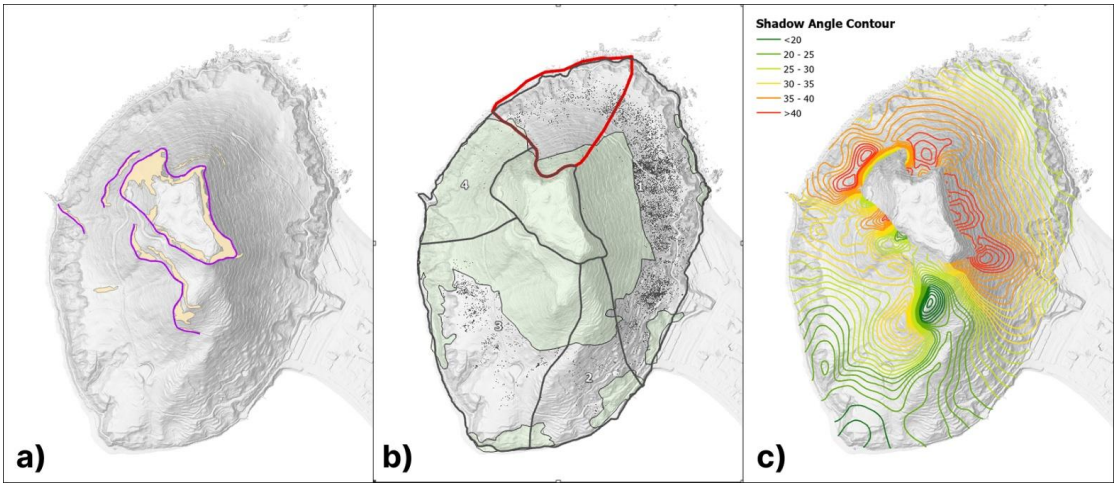

Figure 30. Rockfall source areas and shadow-angle contours derived from mapped bluff sources across Mauao. (a) Mapped rock bluffs (cream) and the simplified bluff-toe source lines (purple)

derived from them, used as input to the shadow-angle model. (b) The four defined rockfall zones (1–4), with vegetation cover (green polygon) and the design-boulder inventory (black points); the red area denotes the representative mapping area used to define rockfall proportions and numbers reaching or passing shadow-angle contours. (c) Shadow-angle contours generated from the representative source areas shown in (a).

Probability of being in the path of a boulder

The probability of one design boulder impacting a person (if present) when passing through a section of track or worker grid line, $P1_{(T:L)}$, is calculated using Equation 2, where *W* is the design boulder diameter of 1.0 m, *d* is a representative diameter of the person (1.0 m), *L* is the length of track per shadow angle contour (assumed to be perpendicular to the runout path).

The probability of hitting the person (if present) at that location increases with additional boulders:

$$P_{N(T:L)} = 1 - \left(1 - P_{1(T:L)}\right)^{N} \qquad \textbf{Equation 3}$$

Where N is the total population of boulders minus the upslope population of mapped boulders stopping before *L* (per representative event) calculated per shadow angle contour, and $P_{N(T:L)}$ is the probability of one boulder of the total number N boulders passing through that portion of slope. These values were then summed for individual track sections.

6. Consequence Analysis

6.1 Probability of spatio-temporal exposure $P_{(S:T)}$

Risk to life depends on the probability that a person is present on the track at the time a landslide occurs. This probability depends on several other factors, including:

- Visitor and worker types and their walking behaviour (e.g., one-way tramping trips without backtracking, diversions to the beach, or pest control workers in different management areas)
- Walking speed and stoppage times
- Specific track sections visited and their lengths
- Total trip durations for visitors and workers
- Number of visits per year for individuals

In general, this initial analysis takes a simplified approach to exposure and can incorporate additional complexity (e.g. effect of weather on different user types) in societal risk calculations (Section 9) and subsequent analyses. Exposure is considered for one-way, uphill tramping trips per track section accounting for rests and terrain type.

6.1.1 User variability

Two user classes have been defined for risk to individuals: workers and visitors. In this initial analysis, all visitors are assumed to be spatially constrained to the tracks. We have included additional coefficients to calculate *most exposed visitors* across different visitor groups.

6.1.2 Calculation of $P_{(S:T)}$

The spatio-temporal probability represents the proportion of a year than an individual is present within a landslide footprint and is therefore exposed to a potential landslide. This is calculated as:

$$P_{S:T} = N \times \frac{travel\ time}{seconds\ per\ year} \qquad \textbf{Equation 4}$$

where *N* is the number of trips per year and *travel time* is the number of seconds it takes to complete the track section, which depends on length, walking speed in different terrain, and time for stops. Average walking speeds were determined on a track-section basis using Tobler's hiking function, an empirical exponential function that estimates hiking speed as a function of slope angle:

$$W = \frac{6}{3.6} e^{-3.5\left|\frac{dh}{dx}\right|+0.05} \qquad \textbf{Equation 5}$$

$$\frac{dh}{dx} = S = tan\theta \qquad \textbf{Equation 6}$$

Where W is the walking velocity (m/s), dh is the elevation difference (m) and dx is the horizontal distance (m) between two points, such that their ratio gives the slope S, expressed here as the tangent of the

slope angle θ. The coefficient 6/3.6 converts Tobler's original output (km/h) to m/s. The hiking function is asymmetrical, where negative slopes have an increased walking speed; for this assessment, the slower uphill walking speed is preferred for its conservatism.

Walking speed for each track section was calculated from the hiking function. Sections of the track with stairs were treated separately and assumed to have a speed of 0.5 m/s. The stair lengths were removed from the track lines used in the hiking function calculation, so that stair sections are not counted twice in the length and slope units. Average rest times for visitors have been estimated to account for stair breaks and stops at benches and lookouts in each section (Appendix E). For visitors, $P_{(S:T)}$ was calculated for 1 (single), 12 (monthly), and 52 (weekly) visits per year. For Local Personal Risk (LPR), the spatio-temporal probability is equal to 1 (de Vilder & Massey, 2024a).

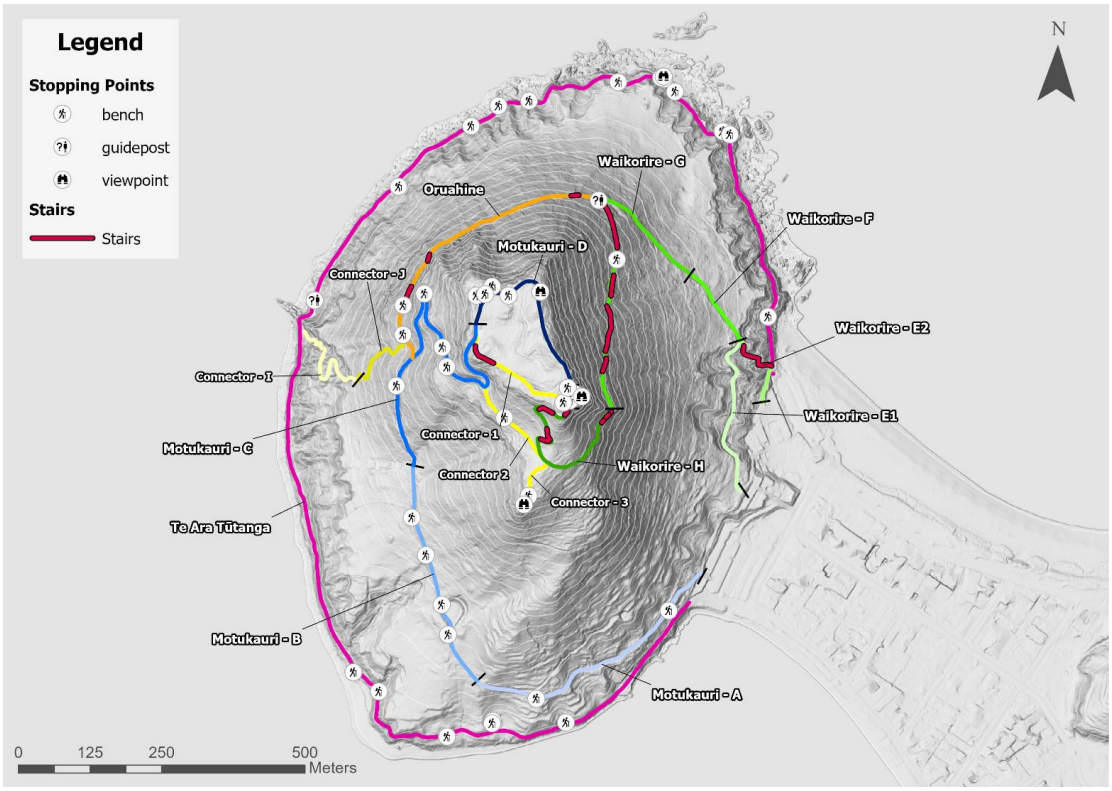

Figure 31. Track segmentation and location of features included in track travel times

Table 15. Calculation of $P_{(S:T)}$ for Mauao tracks . See Appendix E for all inputs and assumptions used to derive travel times and $P_{(S:T)}$

Track	Section	One-way time (sec)	$P_{(S:T)}$ — 1 visit	$P_{(S:T)}$ — 12 visits	$P_{(S:T)}$ — 52 visits
Connecting Tracks	C1	592	1.88E-05	2.25E-04	9.76E-04
	C2	759	2.41E-05	2.89E-04	1.25E-03
	C3	975	3.09E-05	3.71E-04	1.61E-03
	CI	3109	9.86E-05	1.21E-03	5.26E-03
	CJ	1007	3.19E-05	3.83E-04	1.66E-03
Motukauri	MA	1039	3.29E-05	3.95E-04	1.71E-03
	MB	1055	3.34E-05	4.01E-04	1.74E-03
	MC	1544	4.90E-05	5.88E-04	2.55E-03
	MD	1530	4.85E-05	5.82E-04	2.52E-03
Waikorire	WE1	271	8.59E-06	1.03E-04	4.47E-04
	WE2	537	1.70E-05	2.04E-04	8.85E-04
	WF	171	5.42E-06	6.50E-05	2.82E-04
	WG	1835	5.82E-05	6.98E-04	3.02E-03
	WH	1849	5.86E-05	7.03E-04	3.05E-03
Oruahine	O	1576	5.00E-05	6.00E-04	2.60E-03
Te Ara Tūtanga	T	4736	1.50E-04	1.80E-03	7.81E-03

Because most guidance refers to calculating risk for the *most exposed* individual, the preferred values of $P_{(S:T)}$ for visitors are presented in Table 15. However, it may be relevant to consider the most exposed individuals across different visitor user groups when their exposure is greater than the typical walker (n.b., the risk to groups themselves is considered under societal risk, and off-track usage has not been quantified due to lack of data). For simplicity, we have applied the coefficients in Table 16 to estimate additional values of $P_{(S:T)}$. Although literature exists and was consulted regarding appropriate coefficients (c.f. Giannoulaki and Christoforou, 2024), these values are subject to the listed assumptions and carry significant amounts of uncertainty because there are no data on Mauao to constrain the coefficient values.

Table 16. Assumptions and coefficients used to estimate $P_{(S:T)}$ for the most exposed individuals in different user groups

User group	Most exposed individual	Description / Assumption	Coefficient / Multiplier
Family group	Any individual of a family group with young children that walks the track once a week	Families with young children **may move 2 times slower** as a result of more frequent stops and decreased mobility.	2
Older or mobility-limited visitors	Any individual who walks the tracks, on a weekly basis, more slowly due to physical constraints	Elderly visitors or those requiring mobility assistance **may move 2.5 times slower** as a result of more frequent stops and slow average travel speed.	2.5

A simplified method was used to calculate $P_{(S:T)}$ for workers using the following assumptions and information from TCC's Mauao and Heritage Specialist:

- A worker conducts pest control in contracted management areas during 8-hour workdays, 5 days a week, for 225 workdays per year (accounting for annual leave, public holidays, and some sick leave).
- The time spent within each contracted management area is proportional to the size of the area, with weightings for importance classes (Table 17).
- Contracted management areas have three importance classes which determine how the total amount of time is spent in each:
    - E1: Highest Importance, weighting of 1.5
    - E2: Moderate Importance, weighting of 1
    - E3: Lower Importance, weighting of 0.8
- The total time per management area is distributed evenly along the 10 x 10 m patrol grid used for $P_{(T:L)}$ calculation (Figure 32).
- Grid segments greater than 45 degrees slope are assumed to be inaccessible and removed.

The limitations associated with this approach include the following:

- Management areas outside of contract are not regularly visited by the most exposed worker(s) and are excluded from the analysis.
- The existing management areas are a snapshot in time: boundaries and importance classes may change through time.
- Weightings for importance classes account for how working time is spent in theory; however, in practice, decreasing durations may be spent in higher importance classes as pest species are controlled over time.

- Workers may use the track network for access to maintenance areas; however, this is difficult to characterise (J. Clark, pers. Comm.) and additional time has not been included in the risk calculations.

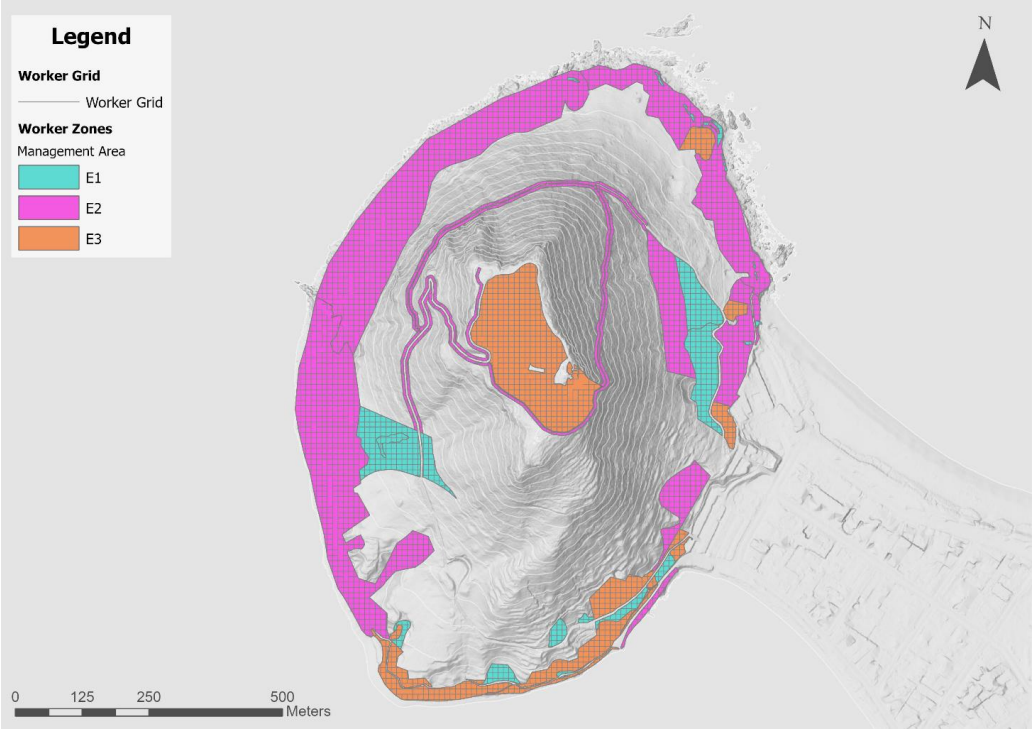

Figure 32. Worker zones classified by management area.

Table 17. Calculation of $P_{(S:T)}$ for the most exposed workers.

Worker Zone	Area (m^2)	Working Time Proportion	Total $P_{(S:T)}$
E1	34,817	17.8%	3.64E-02
E2	187,677	63.8%	1.31E-01
E3	67,586	18.4%	3.77E-02

6.2 Vulnerability $V_{(D:T)}$

Vulnerability to landslides

The consequences of people being impacted by landslide debris can vary and datasets for characterising the probabilities of fatalities are limited (Table 18). Vulnerabilities of pedestrians on open hillslopes also depend on landslide velocity and depth, and therefore positions on the hillslope relative to the event-specific landslide source areas. This information is difficult to ascertain for all possible source areas, and epistemic uncertainties related to survival odds are high regardless of event-specific velocity and depth.

Data from Finlay et al. (1999) were used to determine probability of loss of life. Because there is a wide range of values, and determining whether a track user would be buried by debris is challenging, we used values in Table 18. The Finlay et al. (1999) values are also the basis of the example vulnerability values in AGS (2007c, Appendix F), so the two sources are not independent. The adopted values (0.5 to 1) lie at or between the Finlay et al. recommended values for a person hit by debris (0.1) and buried by debris (1). The values were guided by the following considerations:

- The average height of an adult in New Zealand is c. 1.7 m Only 10% of average landslide debris depths recorded in the landslide inventory exceed this value; The 86th percentile of landslide depth based on differencing is only c. 1 m.
- A conservative approach should be considered that average landslide depths are not representative of all volume scenarios or maximum landslide depths within any individual scenario.
- The approach should consider the potential for large woody debris and high landslide velocities to impact and/or entrain (rather than inundate) a track user.
- A conservative approach should consider that track users may be toppled over by debris (i.e., entrained) and subject to asphyxiation.
- A conservative approach should consider that the available vulnerability functions only consider death due to asphyxiation; and should include crush, fall, or blunt force trauma, e.g., associated with being swept over a cliff, which is more likely in Mauao context than in the original Finlay et al. (1999) dataset.
- Some balancing should be considered to account for possibility that an evasive manoeuvre reduces the impact of debris on the person.

Thus, the values in Table 18 were estimated in consideration of Mauao landslide properties and different causes of death.

Table 18. Landslide vulnerability (probability of loss of life) values adopted for track users

Description	Range in Finlay et al. (1999)	Recommended in Finlay et al., (1999)	Higher Frequency, Lower Impact Scenario	Intermediate Scenario	Lower Frequency, Higher Impact Scenario
Buried by debris	0.8-1.0	1 – death by asphyxia	0.5	0.8	1

Description	Range in Finlay et al. (1999)	Recommended in Finlay et al., (1999)	Higher Frequency, Lower Impact Scenario	Intermediate Scenario	Lower Frequency, Higher Impact Scenario
Hit by debris	0.1-0.5	0.1 – High chance of survival	[0.1,0.8]	[0.5, 1]	

Vulnerability to rockfall

The vulnerability of track users to rockfall depends on several factors and is subject to a wide range of uncertainty. Rockfall kinetic energy, a function of mass and velocity, is the primary consideration but is difficult to estimate for all possible source areas and boulder trajectories. The volume(s) and total number of boulders reaching the location affect both exposure and vulnerability. The track user's mode of travel and whether effective evasive action was taken can also affect vulnerability. At this stage, the analysis assumes that both visitors and workers are pedestrians and that evasive manoeuvres do not affect vulnerability (i.e. that if a rockfall strikes a pedestrian, prior attempt to move out of the way does not alter the odds of survival).

Simplified estimates for pedestrian vulnerability to rockfall are provided by Taig and Massey (2014) for the Port Hills (0.5 to 0.75) and are larger than the wide range provided by Finlay et al (1999) for Hong Kong (0.1-0.7). It is noted that the Finlay et al (1999) values assume it is possible to avoid the rockfall, which can appear elsewhere in the risk equation. The values in Table 19 have been adopted in this analysis, which considers these values from the literature.

The values in Table 19 are general estimates of pedestrian vulnerability to rockfall (Taig and Massey, 2014; Finlay et al., 1999) and are not specific to boulder size.

Table 19. Rockfall vulnerability (probability of loss of life) values adopted for track users

Travel Mode	Low	Preferred	High
Walking	0.5	0.65	0.75

7. Risk Analysis Results

7.1 Risk calculations

Risk metrics are presented in the following sections. Refer to Figure 6 and Section 8 for information related to risk evaluation. The values are generally presented in tables in scientific notation with two significant figures as annualised probability of a fatality.

Local Personal Risk (LPR) and Annual Individual Fatality Risk (AIFR) are calculated as per Equation 1. For LPR, a hypothetical person is considered to be present 100% of the time and $P_{(S:T)} = 1$. For visitor AIFR, $P_{(S:T)}$ is calculated on a track section basis as described in Section 6.1.2. The results can be aggregated to entire tracks or traverses comprising multiple track sections by summing the AIFR for each segment. For worker AIFR, the results are aggregated from all management areas and presented at the maunga scale.

The following steps are taken to calculate $AIFR_{Landslide}$ at track section and sub-section resolutions:

1. For each landslide volume, calculate the combined background and earthquake-induced $P_{(L)}$ (see Section 5.2.5, Box 1).
2. For each landslide volume, calculate the $P_{(T:L)}$ based on the length of track within the runout zone of each volume scenario and representative widths of those scenarios.
3. For each track section, calculate the $P_{(S:T)}$ (see Section 6.1.2). The calculation has been performed for what we considered to be the most exposed visitor, i.e. a walker capable of regularly walking a track once a week under different user group scenarios.
4. For each landslide volume, select the appropriate value of vulnerability based on varying likelihoods of fatality when exposed to different landslide sizes.
5. For each landslide volume and track section, multiply the probability terms from the previous steps to estimate AIFR. Sum the AIFR for different volumes for each track section.
6. For each landslide volume and track section, divide the total AIFR equally amongst 1-m-spaced points within runout zones as required to show relative risk within and between track sections. For clarity, this approach concentrates the risk for the track section to points within runout zones only; points outside runout zones have zero exposure.

The following steps are taken to calculate the $AIFR_{Rockfall}$ at track section and sub-section resolutions:

1. For each rockfall triggering event, calculate the combined background and earthquake-induced $P_{(L)}$.
   a. This includes representative rockfall-triggering event frequencies and numbers of boulders per event, scaled for each runout zone
2. For each rockfall triggering event impacting a sub-section of track (i.e., segments bounded by shadow angle contours) within a runout zone, calculate the $P_{(T:L)}$ following Equations 2 and 3.
3. For each of those rockfall triggering events impacting track subsections, estimate the $P_{(S:T)}$ for sub-section length using the $P_{(S:T)}$ values in Section 6.1.2.

4. Use a representative vulnerability for the design boulder size of 1 m (Table 19).
5. For each rockfall triggering event, multiply the probability terms from the previous steps to estimate AIFR on a track sub-section basis.
6. Track sub-section AIFR values can be summed at the track section level to calculate $AIFR_{Rockfall}$.

$AIFR_{Total}$ for each track section can then be summed by adding $AIFR_{Rockfall}$ and $AIFR_{Landslide}$. Multiple products can then be presented:

- LPR per track section(s)
- AIFR per track section(s)
- AIFR at a point
- AIFR per traverse (or 'risk per trip')
- AIFR over the contracted management areas (for workers only)

7.2 Risk results

7.2.1 Visitors

Table 20 provides an example of LPR and AIFR for tracks, track sections, and a traverse connecting the Waikorire and Motukauri tracks. The example is for a 52-trip per year walker under a median runout scenario with preferred values of trigger conditional probability and vulnerability.

Table 20. Example of risk analysis results for a summit track traverse , disaggregated by track and track section. Numbers are for median runout, 52-trip per year scenario, with preferred values of vulnerability and trigger conditional probabilities

Trip	Tracks	Track Sections	LPR	$AIFR_{Section}$	$AIFR_{Track}$	$AIFR_{Trip}$	Risk per Trip
Summit Track Traverse	Motukauri	A	5.4E-01	9.4E-06	1.4E-04	1.9E-04	3.7E-06
		B	5.9E-02	1.0E-04			
		C	2.2E-02	3.2E-05			
		D	N/A	N/A			
	Waikorire	E1	9.7E-03	3.2E-06	5.0E-05		
		E2	8.6E-03	7.3E-06			
		F	1.1E-02	2.9E-06			
		G	2.7E-02	3.3E-05			
		H	7.0E-01	3.6E-06			

Table 21 lists LPR, 52-trip AIFR and Risk per Trip for each track section.

Table 21. LPR and AIFR results by track section

Track Section	LPR	AIFR	Risk Per Trip	Larger Hazard Driver
Motukauri - A	5.4E-01	9.4E-06	1.8E-07	Landslide
MotuKauri - B	5.9E-02	1.0E-04	1.9E-06	Landslide
Motukauri - C	2.2E-02	3.2E-05	6.2E-07	Landslide
MotuKauri - D	—	—	—	Not assessed
Oruahine	2.9E-02	4.7E-05	9.0E-07	Landslide*
Te Ara Tutanga	1.7E-02	6.1E-05	1.2E-06	Landslide
Waikorire - E1	9.7E-03	3.2E-06	6.2E-08	Landslide
Waikorire - E2	8.6E-03	7.3E-06	1.4E-07	Landslide
Waikorire - F	1.1E-02	2.9E-06	5.6E-08	Landslide
Waikorire - G	2.7E-02	3.3E-05	6.3E-07	Landslide / Both
Waikorire - H	7.0E-01	3.6E-06	6.9E-08	Rockfall
Connector 1	—	—	—	Not assessed
Connector 2	3.1E-03	6.3E-07	1.2E-08	Rockfall
Connector 3	1.2E-05	1.2E-09	2.3E-11	Rockfall
Connector 4 - I	3.8E-03	2.0E-05	3.8E-07	Landslide
Connector 4 – J	2.9E-03	4.8E-06	9.3E-08	Landslide

* It is noted that the rockfall risk on the Oruahine track may be underestimated and site-specific assessment is currently in progress.

Table 22. Risk colour scheme

Colour	Risk – Annualised Probability of Fatality
	$\leq 1\times10^{-9}$
	$1\times10^{-9} – 1\times10^{-8}$
	$1\times10^{-8} – 1\times10^{-7}$
	$1\times10^{-7} – 1\times10^{-6}$
	$1\times10^{-6} – 1\times10^{-5}$
	$1\times10^{-5} – 1\times10^{-4}$
	$1\times10^{-4} – 1\times10^{-3}$
	$1\times10^{-3} – 1\times10^{-2}$
	$1\times10^{-2} – 1\times10^{-1}$
	$1\times10^{-1} – 1\times10^{0}$

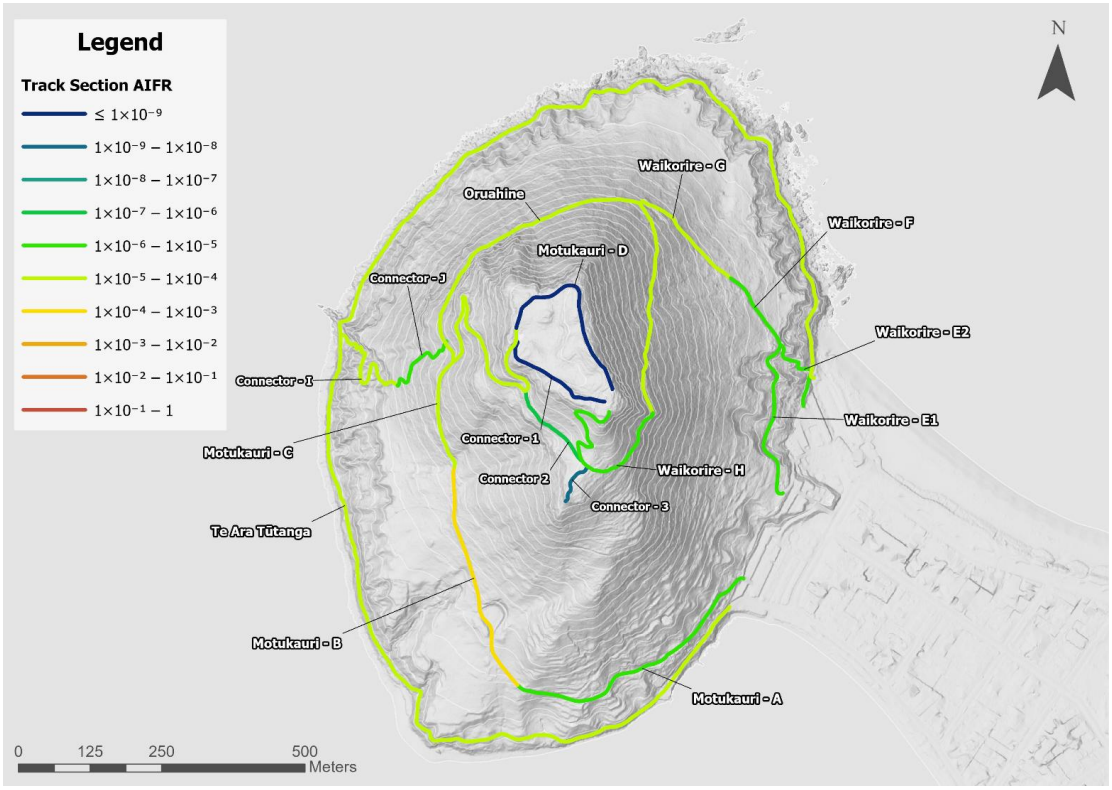

Figure 33. Map of track-section-scale AIFR

The results show that the AIFR and largest contributor to risk (i.e. rockfall or landsliding) vary by track section (Figure 33). In general, the hazard drivers are consistent with expectations from the geology and geomorphology. Lower slope track sections in higher landslide susceptibility classes, and at lower rockfall shadow angles, are at more risk from landsliding. Locations above landslide runout but have upslope rock bluffs, are at more risk from rockfall. Sections such as Waikorire – G track have approximately equal contributions from both hazards.

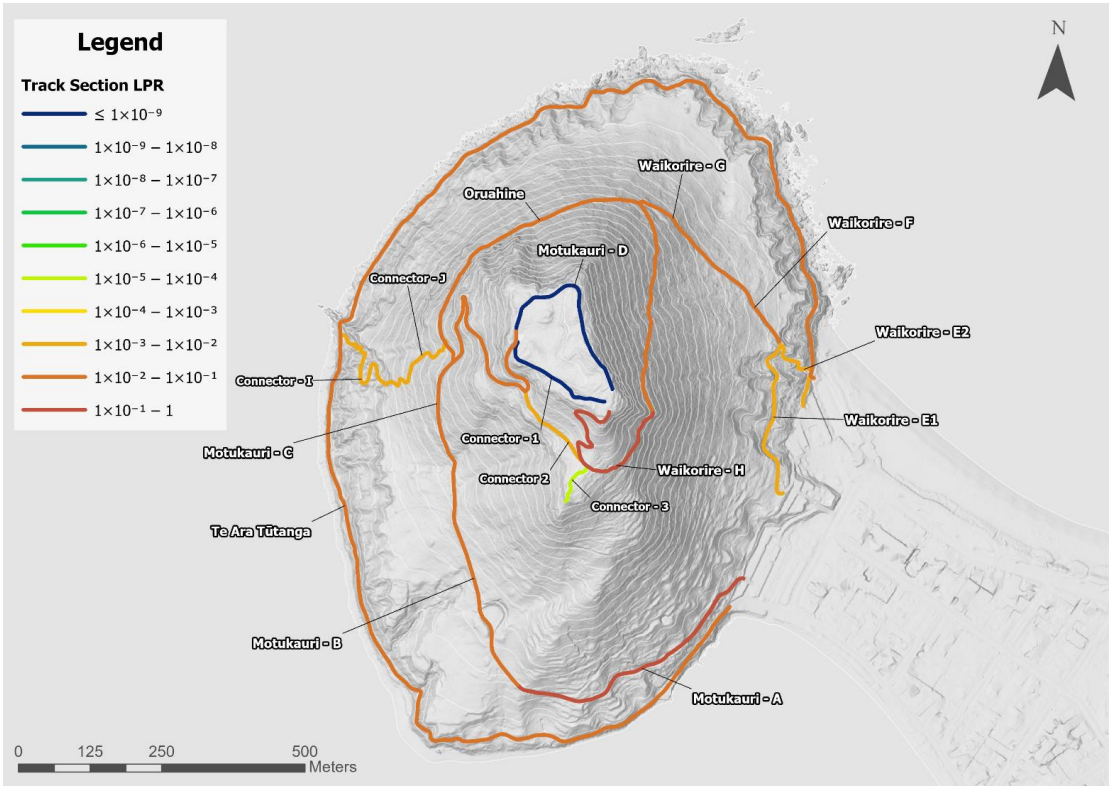

Figure 34. Map of track-section-scale LPR

Point-by-point AIFR for rockfall, landslides and combined hazards are shown in Figure 35 to Figure 37, and the corresponding LPR maps are shown in Figure 38 to Figure 40. Risk for each track section has been distributed equally across 1-m-spaced points within runout zones, which allows relative risk to be compared within a section as well as between sections. Both measures are classified by order of magnitude, so each colour step is a tenfold change in risk.

The rockfall results generally conform to expectations, except the NW leg of the Oruahine track where the estimated risks appear lower than expected based on site visits and previous reporting. This may be a result of the incomplete boulder inventory at this location and the approach used to interpolate boulder numbers from adjacent areas. Site-specific investigation and risk analysis for this section of the Oruahine track is currently in progress and will be reported separately.

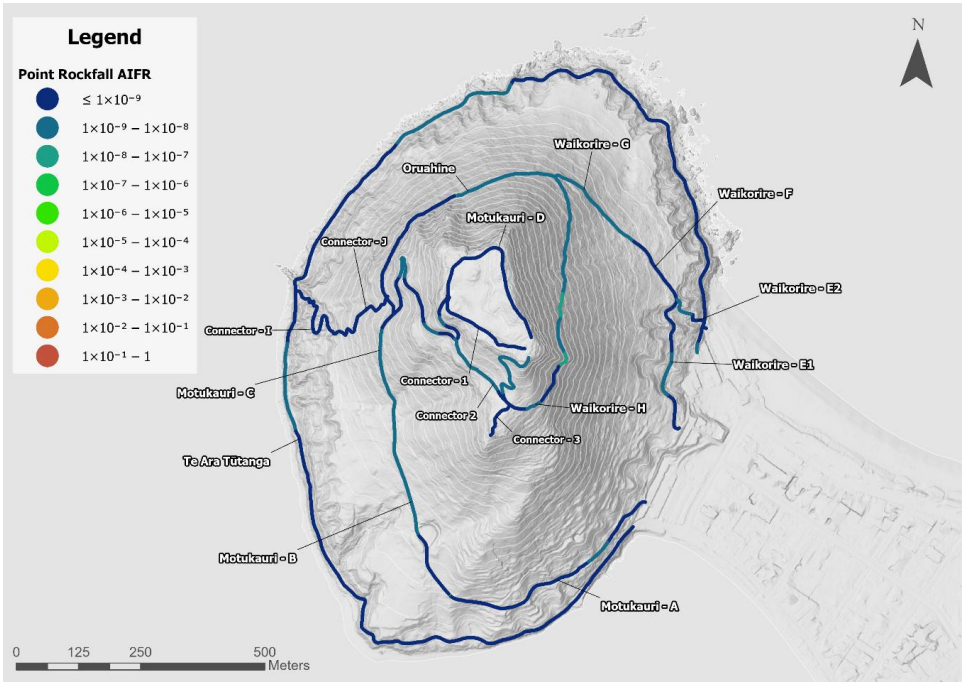

Figure 35. Map of sub-track-section-scale rockfall AIFR

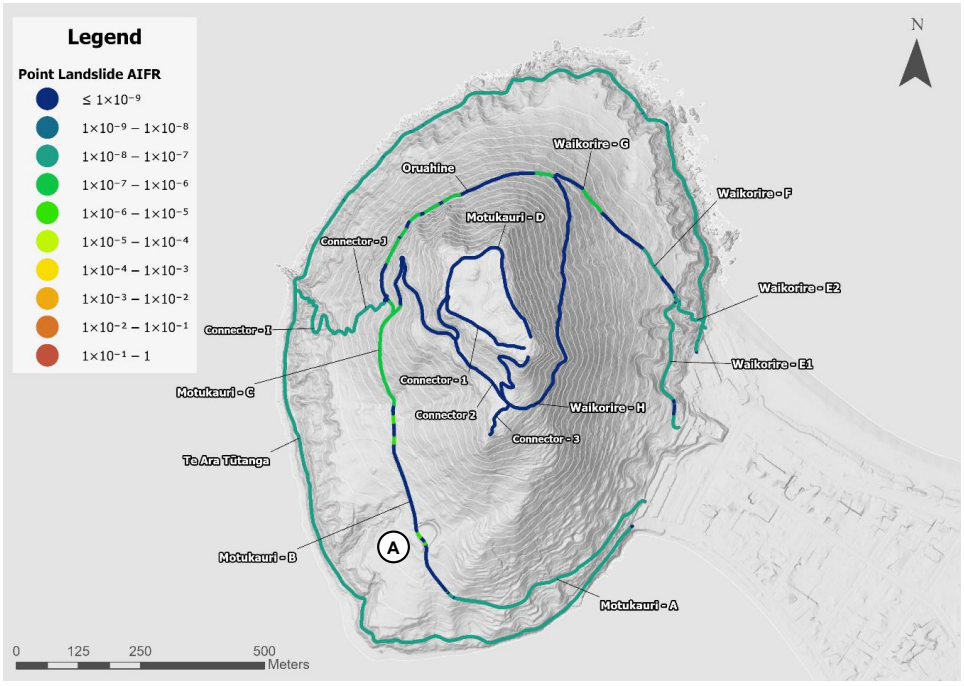

Figure 36. Map of sub-track-section-scale landslide AIFR

The results for landslide risk show decreasing AIFR with increasing elevation (Figure 36). Point-by-point risk is generally greatest in mid-slope positions where slope is higher, several runout scenarios are possible, and the uphill area available for failure is also large. This level of granularity shows that the landslide risk on some track sections is driven primarily by a few locations. Site-specific investigations should be conducted at these locations to inform risk evaluation and mitigation.

The risk at the sub-section points on the Motukauri track marked "A" in Figure 36 does not take into account the upslope water reservoir (which is not represented in the LiDAR DEM) and the runout scenarios therefore ignore it. The presence of the reservoir will decrease the hazard where it impedes or arrests landslide runout (such as the higher frequency, lower impact scenarios) but could increase the hazard if landslide impact causes failure of the reservoir structure. The likelihood and consequences of this scenario have not been estimated as part of this study.

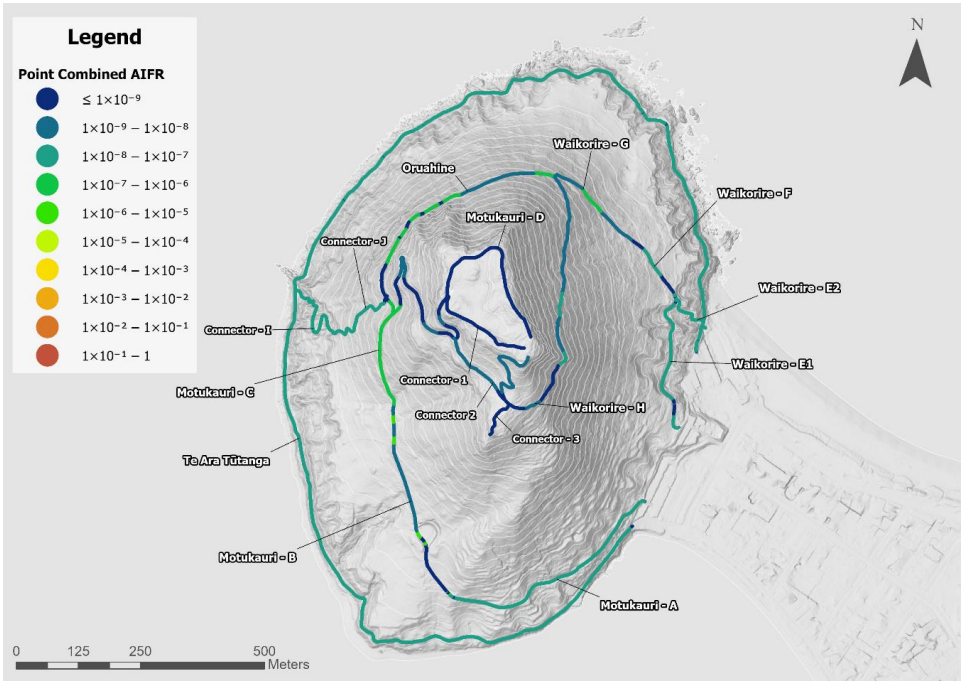

Figure 37. Map of sub-track-section-scale combined AIFR

Overall, the combined results provide a network-wide view of landslide and rockfall AIFR. They should be interpreted in the context of site-specific factors, not considered here, that may not be captured by the scale of the risk analysis.

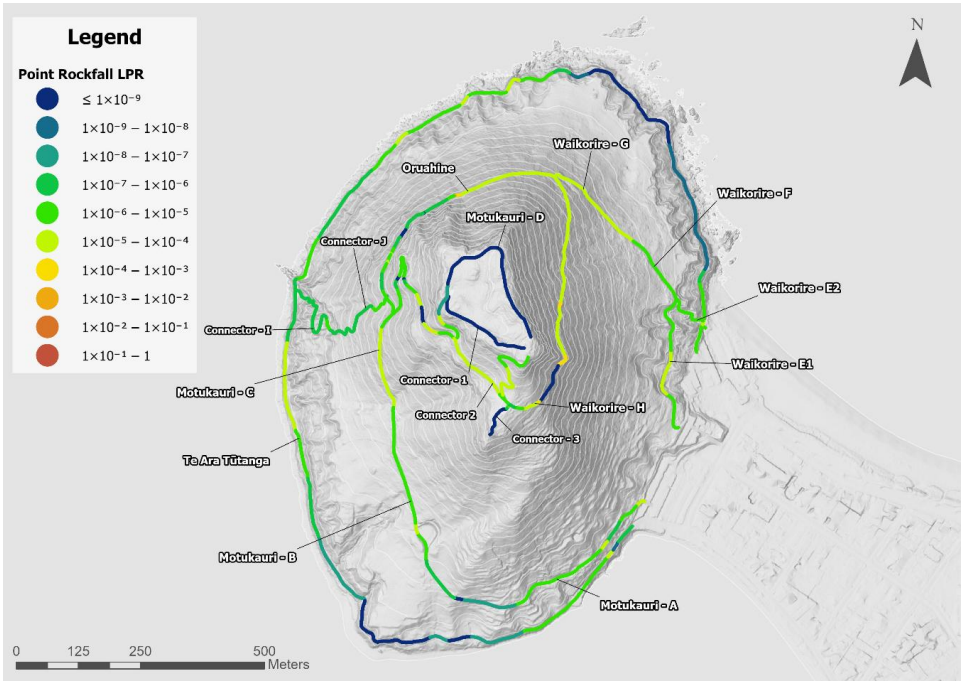

Figure 38: Map of sub-track-section-scale rockfall LPR

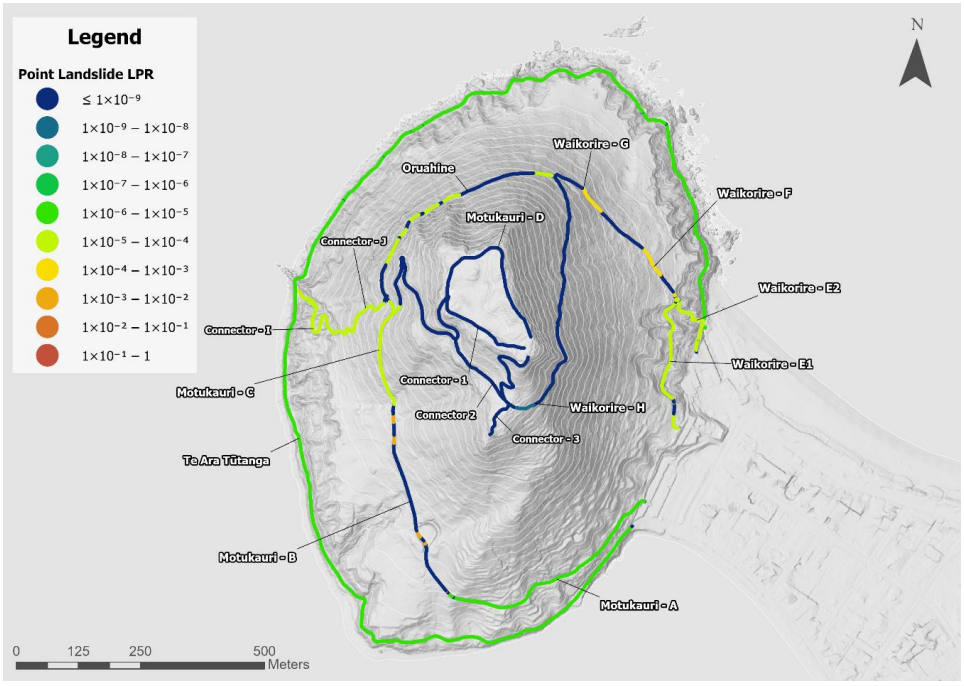

Figure 39. Map of sub-track-section-scale landslide LPR

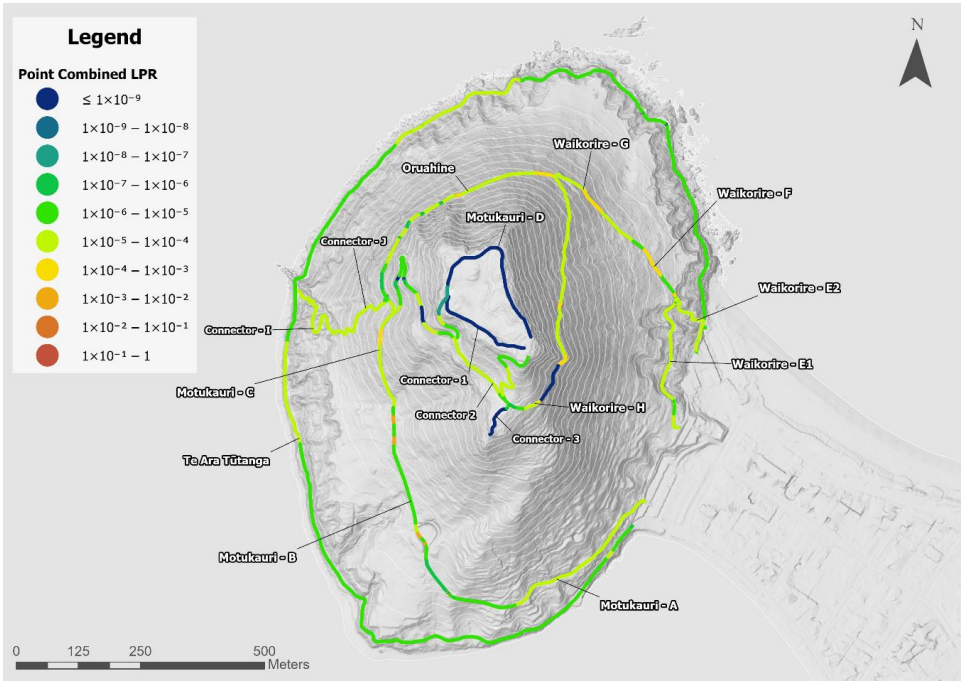

Figure 40. Map of sub-track-section-scale combined LPR

The LPR results follow the same spatial pattern as AIFR. LPR assumes a person is present at a point at all times, so it does not depend on the duration or number of visits and is higher than AIFR. Rockfall LPR is highest on the inland tracks below the bluffs and lowest on the perimeter track, Te Ara Tūtanga. Landslide LPR is low across most of the tracks and is concentrated in a small number of mid-slope locations. The combined LPR map shows the same locations, which indicates that landslide risk controls the highest values (Figure 40). As with AIFR, these locations should be the focus of site-specific investigation.

One important point to take away from the results presented at different scales is that track section aggregate risk can be, but is not always, driven by the risk values at specific locations (e.g., Motukauri – B). This is particularly true where only small sections of track intersect runout zones of one or more volume scenarios; this effect is due to having the same landslide probability over a short length of track that can be impacted. At the resolution of individual points, this is balanced by points lying outside the runout zone of landslides having effectively zero landslide risk; however, this effect is not obvious when considering the results at the scale of entire track sections or tracks.

7.2.2 Workers

AIFR for the most exposed worker is shown for each contracted management area in Figure 41. Aggregated across Mauao, the total worker AIFR is 1.1E-04, of which rockfall contributes more to risk than landsliding (Table 23). This aggregated value is classified as High under the BOP RPS evaluation criteria (Table 25).

Table 23. AIFR results by contracted management area classification.

Area	AIFR	Largest Hazard Driver
E3	9.6E-06	Rockfall
E2	7.3E-05	Rockfall
E1	2.4E-05	Rockfall
Total	**1.1E-04**	Rockfall

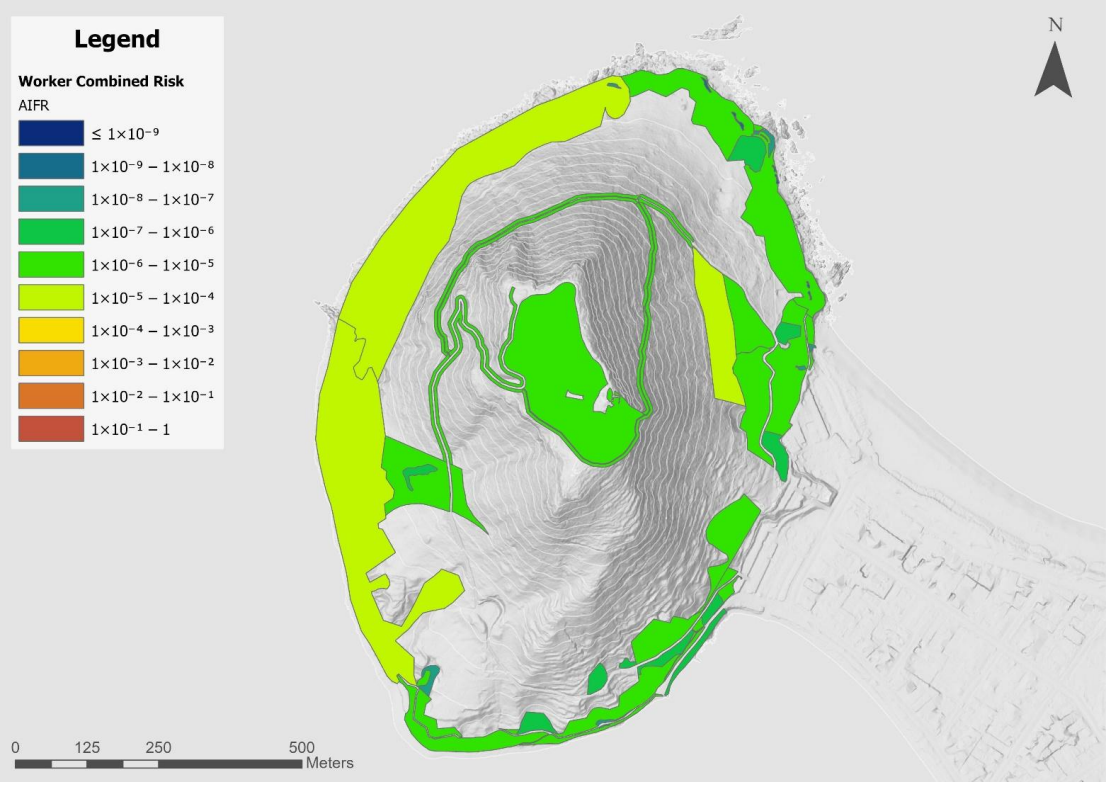

Figure 41. Map of worker zone combined AIFR.

At the scale of individual contracted management areas, total AIFR ranges from 2.4E-05 to 3.0E-09 (Figure 41). The highest values occur in the eastern and western lower flanks.

7.3 Sensitivity testing

We have conducted preliminary sensitivity testing to document the impact of different model decisions on the results. The different scenarios have been benchmarked against the preferred model which uses median runout distances, as well as preferred values of vulnerability and walking speeds.

Table 24. Summary of sensitivity testing

Issue / Uncertainty	Direction and Scale of Uncertainty	Implications for Risk
Under-prediction of runout in using median runout distances versus 95th percentile	Extent of landslide runout may be under-predicted – e.g., some areas may be inundated in 95th percentile runout but not in median runout. Larger lengths of track impacted affect $P_{(T:L)}$.	Minimal impact in most cases but can reduce risk by a factor of c. 0.5 for Motukauri-B and -C track sections.
Zero probability of landslides occurring outside modelled runout zone	Risk could be underpredicted by excluding points outside of, but adjacent to, the hazard footprint defined by runout modelling. Unclear if this logic and additional risk is justified.	**Not included in calculations -** Initial modelling indicates inclusion of additional risk at these points has an order of magnitude (i.e. factor of 10) or larger impact on aggregate risk.
Over- or under-prediction of vulnerability to landsliding	The likelihood of fatality given a landslide impact is highly event and context-specific; actual vulnerability can vary widely.	A factor of 0.5-1.6 impact on aggregate risk.
Over- or under-prediction of vulnerability to rockfall	The likelihood of fatality given a rockfall impact is highly event and context-specific; actual vulnerability can vary widely.	Minimal impact on aggregate risk.
Walking / running speeds can vary with track users	Scales linearly with aggregate risk; a doubling or halving of walking speed results in a doubling or halving of risk.	A factor of c. 0.5 to 2 impact on aggregate risk.
Under- or over-prediction of conditional probabilities for seismic triggering of landslides.	Conditional probabilities that have been assigned are based on professional judgement and site history in limited events.	Negligible impact on aggregate risk due to relatively small probabilities compared to rainfall-induced landsliding.
Number of rockfall triggered in different PGA Bands.	Significant uncertainties (factor of c. 4) stemming from empirical relationship in RoARS.	Although there is a wide range of possible rockfall, the influence on risk is negligible due to low return periods of larger rockfall triggering earthquakes
Simplified approach to calculating earthquake-induced landslide probability and risk	P_L from background (rainfall) and earthquake-induced landslides are added together rather than calculating risk separately (following established logic, assumptions, and procedures in e.g. de Vilder and Massey et al., 2024) and summing.	**Not included in calculations -** Accounting for earthquake-induced multiple landslide events has a factor of 1.03 to 1.12 impact on aggregate risk.
Days worked in a year can vary (worker users only)	Actual working days may differ from the assumed 225 days per year because of leave or other absences.	Worker AIFR changes approximately in proportion to days worked.

The full range of AIFR values, in consideration of the uncertainty in individual parameter variability, is covered in the next section.

In addition to the factors in Table 24, we also considered the effect of climate change on rainfall-triggered landsliding (Appendix C). Overall, the range of 24-hr rainfall intensities in simulations based on historical data (i.e. prediction ±1σ), have large overlap with the RCP4.5 and 8.5 predictions out to 2100 (Appendix C). Although the frequency of the most extreme rainfall events, and therefore the long-term rate of landsliding, is expected to increase, there are large uncertainties regarding the magnitude of the increase. Additionally, the average annual precipitation across the Bay of Plenty is actually expected to moderately decrease (Appendix C). Thus, although the probability of landsliding, and therefore landslide risk, could increase over the next c. 75 years, it is not clear by how much. When future rainfall-induced landslide events do occur, it will be important to consider climate attribution studies that can be used to update the P_L term of the risk equation (Equation 1).

8. Risk Evaluation Information

8.1 Visitors

Table 25 shows a comparison of the estimated Annual Individual Fatality Risk (AIFR) to the tolerance thresholds in the Bay of Plenty Regional Policy Statement (BOP RPS), the Department of Conservation Guidelines on Natural Hazard Risk Analysis (DOC NHRA) and the Australia Geomechanics Society Guidelines for Landslide Risk Management (AGS). The DOC NHRA and AGS thresholds are provided only for high-level comparison; additional consideration is only given to BOP RPS thresholds. The AGS guideline notes that acceptable risks are usually considered to be one order of magnitude lower than the tolerable risks, however no numerical values are given and therefore only the tolerable risk threshold is shown in the tables below.

In this evaluation, the results are presented per track section and for an assumed *most exposed visitor* walking the track weekly. Fewer trips will result in lower AIFR per track section. However, it is important to note that visitors may not walk a single track section, or even a whole track, in isolation. Thus, the risk from all sections and tracks must be summed to evaluate AIFR where multiple sections and/or tracks are traversed.

It is also worth noting the results of the sensitivity testing above. Risk classifications that are currently marginal (e.g., Motukauri – A & B) could be upgraded or downgraded depending on whether preferred values for different parameters are used, as well as different combinations of values. Uncertainties are presented below.

Table 25. Track section 52-trip (most exposed visitor) AIFR classifications according to BOP RPS, DOC NHRA, and AGS (2007) guidelines.

Guideline	<1E-07	1E-07 to 1E-05		1E-05 to 1E-04	>1E-04
BOP RPS	Low			Medium	High
DOC NHRA	Low	Moderate	Substantial	High	Extreme
AGS (2007)	Tolerable[1]				Intolerable

[1] For existing slopes

Track Section	Combined landslide and rockfall AIFR	BOP RPS Classification	DOC NHRA Classification	AGS (2007) Classification
Motukauri – A	9.4E-06	Low	Substantial	Tolerable
Motukauri – B	1.0E-04	High	Extreme	Intolerable
Motukauri – C	3.2E-05	Medium	High	Tolerable
Motukauri – D	Not Assessed	--	--	--
Oruahine[1]	**4.7E-05**	**Medium**	**High**	Tolerable
Te Ara Tūtanga	6.1E-05	Medium	High	Tolerable

Track Section	Combined landslide and rockfall AIFR	BOP RPS Classification	DOC NHRA Classification	AGS (2007) Classification
Waikorire – E1	3.4E-06	Low	Substantial	Tolerable
Waikorire – E2	7.3E-06	Low	Substantial	Tolerable
Waikorire – F	2.9E-06	Low	Substantial	Tolerable
Waikorire – G	3.3E-05	Medium	High	Tolerable
Waikorire – H	3.6E-06	Low	Substantial	Tolerable
Connector 1	Not Assessed	--	--	--
Connector 2	6.3E-07	Low	Moderate	Tolerable
Connector 3	1.2E-09	Low	Low	Tolerable
Connector 4 – I	2.0E-05	Medium	High	Tolerable
Connector 4 - J	4.8E-06	Low	Substantial	Tolerable

[1] The Oruahine track is bolded due to a recommendation to undertake site-specific assessment (Section 7)

The range of 52-trip AIFR values (i.e. incorporating uncertainty in each parameter allowed to vary) are shown in Figure 42. The preferred values (black squares) represent the best estimates of AIFR values; the circles represent minimum and maximum bounds in consideration of the variability in individual parameters. It is notable that this range varies and commonly spans an order of magnitude. Additionally, the position of the preferred value within the range varies by track. The net risk of a visitor traversing multiple track sections, and the uncertainties therein, should be considered when deciding on management strategies.

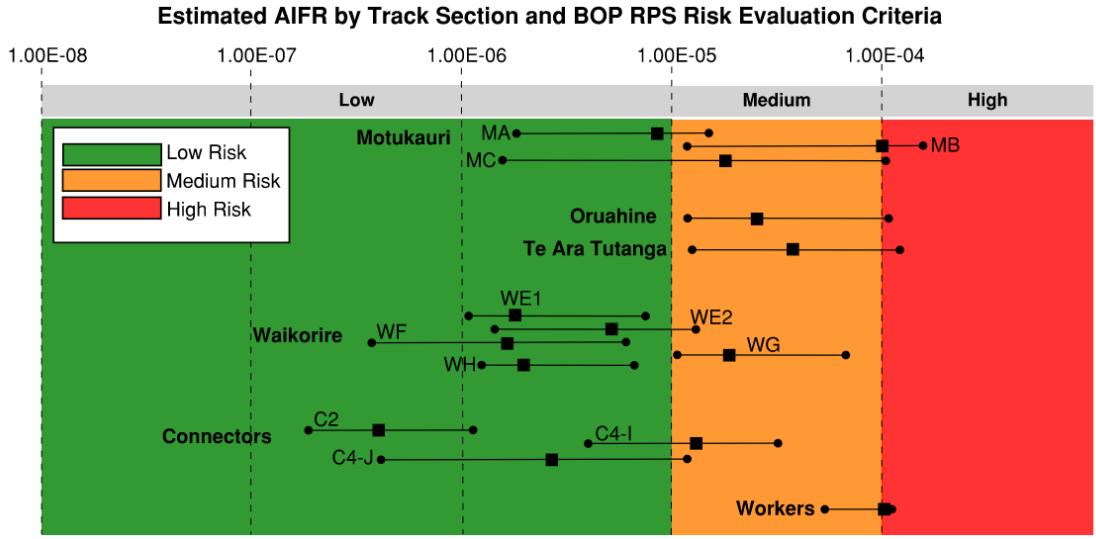

Figure 42. BOP RPS risk evaluation criteria with AIFR uncertainty ranges by track section. Black squares are preferred values. Tracks with less than 1.0E-08 AIFR are not included

Risk was also evaluated for the *most exposed visitors* in different user groups, following the approach and assumptions in Table 16. These values of AIFR are presented separately because there is more uncertainty in group behaviour both in terms of number of visits and durations on tracks. For consistency, it is assumed each group visits once a week. The results are shown in Table 26 and evaluated only against BOP RPS criteria.

Table 26. AIFR for most exposed individuals in different visitor user groups.

Track Section	Individual in Family	Elderly or Mobility-Limited Individual
Motukauri – A	1.9E-05	2.3E-05
Motukauri – B	2.0E-04	2.5E-04
Motukauri – C	6.4E-05	8.0E-05
Motukauri – D	Not Assessed	
Oruahine[1]	**9.3E-05**	1.2E-04
Te Ara Tūtanga	1.2E-04	1.5E-04
Waikorire – E1	6.5E-06	8.1E-06
Waikorire – E2	1.5E-05	1.8E-05
Waikorire – F	5.8E-06	7.3E-06
Waikorire – G	6.6E-05	8.2E-05
Waikorire – H	7.2E-06	9.0E-06
Connector 1	Not Assessed	
Connector 2	1.3E-06	1.6E-06
Connector 3	2.4E-09	3.0E-09
Connector 4 – I	3.9E-05	4.9E-05
Connector 4 - J	9.6E-06	1.2E-05

[1] The Oruahine track is bolded due to a recommendation to undertake site-specific assessment (Section 7)

The results indicate that several track sections cross into *Medium* and *High* risk categories when accounting for increased durations on the track for these groups. Notably, Te Ara Tūtanga is consistently categorised as *High* risk and sections of the Motukauri are consistently *Medium* to *High* risk.

Visitors venturing off-track are also exposed to landslide and rockfall risks, which are not quantified in this report due to having no data regarding the locations, durations, or number of visitors in off-track locations. The probability of landsliding will also vary at a spatial scale below the resolution of the track-network assessment (e.g., if a visitor is attempting to climb a rock bluff or gully head).

Qualitatively, off-track *hazard* should be the highest in mid-slope positions where (i) landslide runout in different volume scenarios is possible, and (ii) there is a high proportion of rockfall boulders reaching or passing the location's shadow angle from an uphill rock bluff. There may also be high local hazard, and a decreased ability to take evasive manoeuvres, within or immediately downslope of gully heads and rock bluffs. In such locations, the indicative recurrence of slope failures is 'likely to occur in near future' to 'occurring multiple times per year', which is rated as *Very High* to *Extremely High* hazard in the DOC screening guidance (de Vilder and Massey, 2024). Depending on visitor behaviour and time exposed to

the hazard, the resulting recommended risk management action could range from *no action required* to *site closure* under the DOC guidelines.

8.2 Workers

AIFR for the most exposed worker is aggregated across Mauao. Table 27 presents the landslide, rockfall, and total AIFR. Rockfall contributes approximately 80% of the total. The total worker AIFR of 1.1E-04 is classified as High under the BOP RPS evaluation criteria (Table 23).

Table 27. Worker AIFR for Mauao.

Landslide AIFR	Rockfall AIFR	Total AIFR
2.3E-05	8.4E-05	1.1E-04

As noted for visitors (Section 8.1), classifications that sit close to a threshold may change depending on the parameter values adopted. The total worker AIFR ranges from 7.5E-05 to 1.3E-04 (0.71 to 1.20 times the preferred value) when low and high input values are applied together (Table 24). This range is narrower than those for most track sections (Figure 42). However, it spans the 1E-04 threshold, so the total risk could be classified as either Medium or High under the BOP RPS.

The risk to the most exposed worker may also be lower or higher depending on the exposure assumptions used in the calculations. Longer periods spent in specific, higher hazard locations would increase the risk. If workers regularly traverse slopes greater than 45 degrees, or spend additional time outside the contracted management areas (e.g., on tracks), the risk would also increase. Fewer working days on Mauao would decrease the risk.

The worker results provide the only quantified estimate of off-track exposure in this assessment. They are consistent with the qualitative assessment of off-track hazard for visitors (Section 8.1), which identifies mid-slope positions below rock bluffs as likely to have the highest hazard. Although calculated differently, the total worker AIFR is comparable to the highest 52-trip visitor AIFR for a single-track section (Motukauri – B, 1.0E-04; Table 23). It is noted that any use of the track network by workers that is additional to the time worked in management areas would increase the value of AIFR presented above.

8.3 Summary

Determining whether the risk levels estimated in this analysis are tolerable, acceptable, or intolerable is the responsibility of Mauao Trust as the owner of Mauao and TCC as the decision-making authority for implementing risk management measures. Track sections have varying classifications of individual fatality risk in the BOP RPS classification scheme. To assist with decision making, the most important information related to risk evaluation is summarised below:

- AIFR has been estimated and evaluated at the maunga scale for the assumed *most exposed worker*. The risk is considered *High* under the BOP RPS. Different assumptions about worker behaviour may change this result.

- AIFR has been estimated and evaluated at the track section scale for individual visitors walking that section once per week (i.e., the assumed *most exposed visitor*). There are 8 *Low* risk, 5 *Medium* risk, and 1 *High* risk track sections. Track section risk classifications have been based on preferred values for inputs; uncertainties in AIFR commonly span more than one classification.
- It is unlikely that visitors will walk individual track sections (with the exception of the base and Oruahine tracks, which are not subdivided). The total risk is a sum of the AIFR from all track sections traversed. The risk to visitors off-track is not quantified at this time.
- The classification of a track section as *Low, Medium,* or *High* risk under BOP RPS depends not only on the number of visits per week, but also the visitor type and their walking speeds. More visits and slower walking speeds result in higher AIFR. Fewer trips and faster walking speeds will result in lower AIFR.
- The risk for a track and/or track section may be driven by AIFR at specific locations. Site-specific risk assessments may be appropriate at these locations to inform risk management (Section 10), prior to making decisions about the entire track.

9. Multiple Fatality Risk Example

Societal risk is the likelihood and the number of people suffering a given level of harm from the realisation of specified hazards (Lee and Jones, 2014). It can be defined as the product of the frequency of the causative event (e.g., landslides of different sizes) and the number of people potentially impacted in those events. An example of simplified multiple fatality risk calculation is provided below for 5, 10, and 30 or more fatalities per annum.

It is important to note that societal risk tolerances vary by jurisdiction and are generally not defined by New Zealand law or by New Zealand public organisations. Societal risk tolerances for landslide fatalities vary by orders of magnitude across societies, sectors, and cultures (Sim et al., 2022); there is debate over who gets to set tolerances and what the implications are for risk ownership. Thus, the example below is illustrative to support decision making and no risk tolerability evaluation is undertaken.

The calculation of societal risk follows the landslide risk equation (Equation 1). Two additional considerations have been taken into account for societal risk:

- Updated $P_{(S:T)}$ to account for the proportion of the year that the tracks are occupied by multiple users
- Consideration of event sizes and minimum group numbers capable of causing multiple fatalities.

9.1 Group exposure probability

9.1.1 Track user data

Track-user data, recorded at hourly intervals, were available from 2016 to 2026. The analysis used representative years with complete datasets, excluding 2020 and 2021 because COVID-19 restrictions resulted in the closure of walking tracks on Mauao. Hourly visitor counts were aggregated to produce totals for each track for each included year (Figure 43; Table 28).

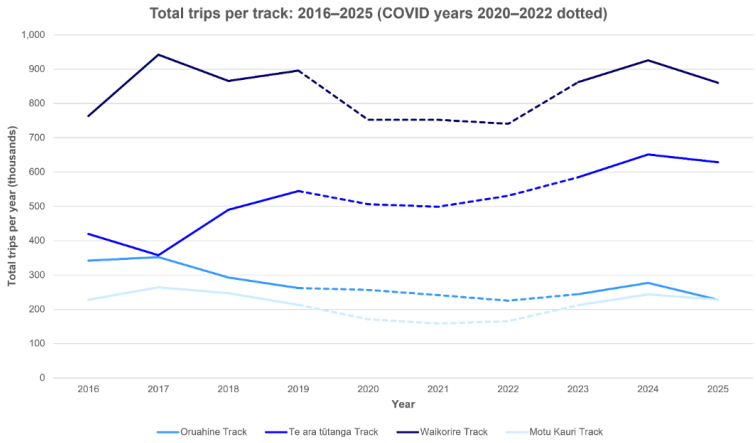

Figure 43. Annual trips over time broken down by track

The total number of average annual visitors (1.9M) is likely an overestimate due to visitors walking multiple tracks and/or triggering the track counter on entry and exit. For simplicity, it is assumed that the the Waikorire and Motukauri track numbers represent 2x the actual visitor numbers, for an annual combined total of c. 1.3-1.4M visitors.

Table 28. Annual trips per track

Year	Te Ara Tūtanga Track	Oruahine Track	Waikorire Track	Motukauri Track
2016	419,588	341,865	763,213	227,520
2017	357,431	351,971	942,412	263,774
2018	489,667	292,287	865,886	247,149
2019	544,912	262,147	895,583	212,732
2023	584,994	244,155	862,027	211,969
2024	651,381	276,735	925,377	243,375
2025	628,909	227,912	859,943	228,538
Average	**525,269**	**285,296**	**873,492**	**233,580**

9.1.2 Daily variability

Approximately 90% of visitors to Mauao walking tracks are present between the hours of 7 am and 7 pm. This indicates that for c. 50% of the year the tracks are minimally occupied.

Table 29. Visitors to all tracks between the hours of 7 am – 7 pm

Track	Visitors 07:00–18:59	Visitors, all hours	% of visitors
Te Ara Tūtanga Track	3,493,861	3,733,916	93.6%
Waikorire Track	5,323,661	6,178,374	86.2%
Motukauri Track	1,510,240	1,654,404	91.3%
Oruahine Track	1,824,039	2,015,658	90.5%

9.1.3 Seasonal variability

There is a c. 30-75% increase in summer visitor numbers (per hour, from 7 am- 7 pm) to Mauao tracks. This indicates that exposure is generally higher in the warmer, drier months; conversely, exposure is generally lower during the colder months when hazard (as measured by average monthly precipitation and not considering varying rainfall intensity in storms) may perhaps be higher.

Table 30. Seasonal variability in visitors between summer and winter months

Track	Winter visitors/hr (7am-7pm)	Summer visitors/hr (7am-7pm)	Summer vs winter
Te Ara Tūtanga Track	99.6	132.2	+32.7%
Waikorire Track	138.7	209.3	+50.9%
Motukauri Track	36.4	63.6	+74.6%
Oruahine Track	45.7	73.5	+61.0%

9.1.4 Events

Data supplied by TCC indicate that organised events can produce short periods of much higher track occupancy than the average hourly counts in Section 9.1.1. TCC recorded 53 sporting events on Mauao between 1 July 2020 and 30 June 2025 (8 to 12 per year), alongside filming, weddings, community and general-use activities. Most sporting events include a loop of Te Ara Tūtanga (the base track) or use formed tracks ‘up and down Mauao’. Estimated participant numbers on Mauao range from tens of people to 2,500 (Mount Maunganui Half Marathon, August 2024), and events of 1,000 or more participants occurred in each year of the record, including the Mount Festival of Multisport (up to 1,800 on Mauao), the Tauranga Marathon and the Tauranga City to Surf. There are approximately 25 events per year with a median participant count of c. 100.

9.1.5 Weather variability

Precipitation affects visitor numbers at Mauao (Figure 44). On average, visitor hours reduced by 78.7% across all tracks during daylight hours where rainfall exceeded 1 mm. This has the effect of decreasing exposure when hazard is highest. However, the relationship is more complex and may involve different time-dependencies, such as increased numbers during fine weather that immediately follows a period of prolonged rainfall, which may partially compensate across the course of a year.

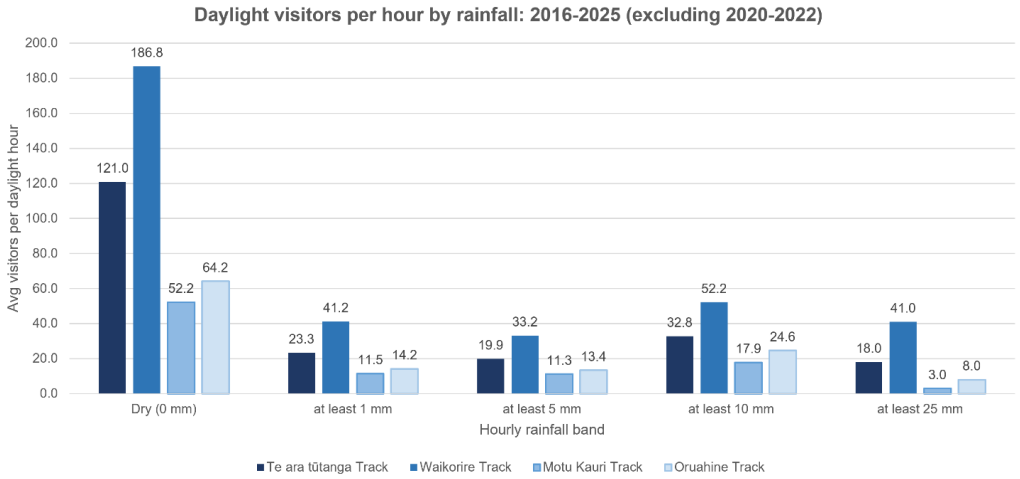

Figure 44. Variation of visitor numbers with rainfall

9.1.6 Estimation of $P_{(S:T)}$

Based on these data, high-level $P_{(S:T)}$ values were estimated (Table 31). A detailed assessment has not been conducted at this time, but could be done in future assessments, particularly if societal risk tolerances are defined.

Table 31. $P_{(S:T)}$ estimates for multiple fatality scenarios

Fatality Scenario	$P_{(S:T)}$	Assumptions
5 or more	0.35	Assuming the track is occupied by a group, in which 5 or more people could be killed, for 35% of the year – primarily during daylight hours and drier summer weather. Example: Track occupied by at least one family group for a ~3 hour walk with stops, every day, on average.
10 or more	0.25	Assuming the track is occupied by a group, in which 10 or more people could be killed, for 25% of the year – primarily during daylight hours and drier summer weather. Example: Track occupied by one guided tourist group for approximately a half day walk, every day, on average.
30 or more	0.10	Assuming the track is occupied by a group, in which 30 or more people could be killed, for 10% of the year – primarily during daylight hours and drier summer weather. Example: Track occupied by a large international tourist group or pack of trail runners for brief periods, intermittently throughout the year.

9.2 Vulnerability and minimum group numbers

Vulnerabilities to landslides and rockfall have been estimated separately. Vulnerability was estimated for different landslide volumes whereas vulnerability to rockfall only consists of a range of possible values for impact of 1 design boulder. For this reason, and because landslides are generally a more credible threat for multiple fatality risk in all but the largest and most infrequent events, societal rockfall risk has been omitted in this example. The values presented therefore are likely to be underestimates.

The minimum group size needed for the different fatality scenarios can be estimated by:

$$G = N/V \qquad \textbf{Equation 7}$$

Where G is the minimum group size, N is the number of fatalities in the scenario, and V is the vulnerability for that scenario (after T+T, 2023).

Table 32. Minimum group sizes for different multiple-fatality scenarios

Event Type	Scenario	Vulnerability	Minimum number of people in group for 5 or more fatalities	Minimum number of people in group for 10 or more fatalities	Minimum number of people in group for 30 or more fatalities
Landslide	High Frequency, Low Impact	0.5	10	20 (Not credible for 100 m^3 landslide)	60 (Not credible for 100 m^3 landslide)
	Intermediate	0.8	6-7	12-13	37-38 (Marginally credible for 1000 m^3 landslide)
	Low Frequency, High Impact	1	5	10	30

9.3 Example Calculation – Waikorire Track

The Waikorire track is a popular route to and from the summit. The annual rates of the multiple fatality scenarios we considered are between c. 2 and 10 every 1,000 years (2.4-9.4 x 10^{-3} per year; Table 33). These rates are minimums because (i) rockfall has not been considered in this draft estimate and (ii) the full track length has been assumed as potentially being impacted.

Table 33. Multiple fatality risk for the Waikorire track.

Track Section	Volume	P_L	$P_{T:L}$ – 5 or more	$P_{T:L}$ – 10 or more	$P_{T:L}$ – 30 or more	V	Risk – 5 or more	Risk – 10 or more	Risk – 30 or more
Waikorire – E1	1.0E+02	6.8E-02	9.70E-02	NA	NA	0.5	1.2E-03	NA	NA
	1.0E+03	2.5E-02	1.69E-01	1.9E-01	2.7E-01	0.8	1.2E-03	9.4E-04	5.4E-04
	1.0E+04	3.9E-03	3.66E-01	3.9E-01	4.7E-01	0.8	4..0E-04	3.0E-04	1.5E-04
	5.0E+04	0.0E+00	6.42E-01	6.6E-01	7.3E-01	1	0.0E+00	0.0E+00	0.0E+00

Track Section	Volume	P_L	$P_{T:L}$ – 5 or more	$P_{T:L}$ – 10 or more	$P_{T:L}$ – 30 or more	V	Risk – 5 or more	Risk – 10 or more	Risk – 30 or more
Waikorire – E2	1.0E+02	4.2E-02	1.88E-01	NA	NA	0.5	1.4E-03	NA	NA
	1.0E+03	1.5E-02	3.28E-01	3.7E-01	5.3E-01	0.8	1.4E-03	1.1E-03	6.4E-04
	1.0E+04	2.4E-03	7.1E-01	7.5E-01	9.1E-01	0.8	4.8E-04	3.6E-04	1.7E-04
	5.0E+04	0.0E+00	1.3E+00	1.3E+00	1.4E+00	1	0.0E+00	0.0E+00	0.0E+00
Waikorire – F	1.0E+02	2.8E-02	2.0E-01	NA	NA	0.5	9.4E-04	NA	NA
	1.0E+03	1.0E-02	3.4E-01	3.8E-01	5.5E-01	0.8	9.6E-04	7.6E-04	4.4E-04
	1.0E+04	1.6E-03	7.4E-01	7.8E-01	9.5E-01	0.8	3.2E-04	2.4E-04	1.2E-04
	5.0E+04	0.0E+00	1.3E+00	1.3E+00	1.5E+00	1	0.0E+00	0.0E+00	0.0E+00
Waikorire – G	1.0E+02	4.3E-02	4.8E-02	NA	NA	0.5	3.6E-04	NA	NA
	1.0E+03	1.6E-02	8.3E-02	9.3E-02	1.3E-01	0.8	3.6E-04	2.9E-04	1.7E-04
	1.0E+04	2.4E-03	1.8E-01	1.9E-01	2.3E-01	0.8	1.2E-04	9.2E-05	4.5E-05
	5.0E+04	0.0E+00	3.2E-01	3.2E-01	3.6E-01	1	0.0E+00	0.0E+00	0.0E+00
Waikorire – H	1.0E+02	1.2E-02	7.2E-02	NA	NA	0.5	1.5E-04	NA	NA
	1.0E+03	4.4E-03	1.3E-01	1.4E-01	2.0E-01	0.8	1.5E-04	1.2E-04	7.1E-05
	1.0E+04	6.9E-04	2.7E-01	2.9E-01	3.5E-01	0.8	5.2E-05	3.9E-05	1.9E-05
	5.0E+04	5.0E-08	4.8E-01	4.9E-01	5.3E-01	1	8.3E-09	6.1E-09	2.7E-09
TOTAL							**9.4E-03**	**4.3E-03**	**2.4E-03**

9.4 Example Calculation – Base Track

The Te Ara Tūtanga track is one of the most popular on Mauao. The annual rates of the multiple fatality scenarios we considered are between c. 0.8 and 3 every 1,000 years (0.76-3.0 x 10^{-3} per year; Table 34). These rates are minimums because (i) rockfall has not been considered and (ii) the full track length has been assumed as potentially being impacted.

Table 34. Multiple fatality risk for Te Ara Tūtanga.

Track Section	Volume	P_L	$P_{T:L}$ – 5 or more	$P_{T:L}$ – 10 or more	$P_{T:L}$ – 30 or more	V	Risk – 5 or more	Risk – 10 or more	Risk – 30 or more
Te Ara Tūtanga	100	7.3E-01	1.0E-02	NA	NA	0.5	1.3E-03	NA	NA
	1000	2.6E-01	1.8E-02	2.0E-02	2.8E-02	0.8	1.3E-03	1.0E-03	6.0E-04
	10000	4.1E-02	3.8E-02	4.0E-02	4.9E-02	0.8	4.4E-04	3.3E-04	1.6E-04
	50000	7.5E-05	6.7E-02	6.8E-02	7.5E-02	1	1.8E-06	1.3E-06	5.7E-07
TOTALS							**3.0E-03**	**1.4E-03**	**7.6E-04**

10. Risk Management

10.1 Risk tolerability and residual risk

A key component of the landslide risk management framework is the evaluation of whether an estimated risk is considered acceptable, tolerable, or intolerable/unacceptable. The formal adoption of risk tolerability thresholds for the Mauao track network is a critical prerequisite for progressing risk management decisions. Risk management then follows the process of selecting and implementing measures for risk treatment. For the Mauao walking track network, treatment options should correspond to the estimated risk, the practicability and effectiveness of available controls, and the cultural, recreational, environmental and operational values of the maunga. We note that acceptance of the estimated risk levels would be subject to criteria set by the Mauao Trust and TCC.

The DOC NHRA methodology used for the risk analysis was developed based on established best-practice landslide guidelines (de Vilder & Massey, 2024a), including the Australian Geomechanics Society guidelines (AGS, 2007). Part C of AGS (2007) presents a comparison of individual loss-of-life risk criteria used across several international jurisdictions. This is reproduced as Figure 45 below, with the red dashed outline identifying the tolerable risk threshold values. The comparison shows that there is broad consistency in the maximum tolerable individual risk threshold for the public: 10^{-4} for existing situations and 10^{-5} for new development.

Organization	Industry	Description	Risk/annum	Reference
Health and Safety Executive, United Kingdom	Land use planning around industries	Broadly acceptable risk. Tolerable limit	10^{-6}/annum, public and workers 10^{-4}/annum public(1) 10^{-3}/annum workers	HSE (2001)
Netherlands Ministry of Housing	Land use planning for industries	Tolerable limit(2)	10^{-5}/annum, existing installation 10^{-6}/annum, proposed installation	Netherlands Ministry of housing (1989), Ale (2001), Vrijling *et al.* (1998)
Department of Urban Affairs and Planning, NSW, Australia	Land use planning for hazardous industries	"acceptable" (tolerable) limits (2)	$5x10^{-7}$/annum hospitals, schools, childcare facilities, old age housing 10^{-6}/annum residential, hotels, motels $5x10^{-6}$/annum commercial developments 10^{-5}/annum sporting complexes	
Australian National Committee on Large Dams	Dams	Tolerable limit	10^{-4}/annum existing dam, public most at risk subject to ALARP 10^{-5}/annum new dam or major augmentation, public most at risk, subject to ALARP.	ANCOLD (2003)
Australian Geomechanics Society guidelines for landslide risk management	Landslides (from engineered and natural slopes)	Suggested tolerable limit	10^{-4}/annum public most at risk, existing slope 10^{-5}/annum, public most at risk, new slope	AGS (2000)
Hong Kong Special Administrative Region Government	Landslides from natural slopes	Tolerable limit	10^{-4}/annum public most at risk, existing slope. 10^{-5}/annum public most at risk, new slope	Ho et al. (2000), ERM (1998), Reeves *et al.* (1999)
Iceland ministry for the environment hazard zoning	Avalanches and landslides	"acceptable" (tolerable) limit	$3x10^{-3}$/annum residential, schools, daycare centres, hospitals, community centres. 10^{-4}/annum commercial buildings $5x10^{-5}$ recreational homes(3)	Iceland Ministry for the environment (2000), Arnalds *et al.* (2002)
Roads and Traffic Authority, NSW Australia	Highway landslide risk	Implied tolerable risk	10^{-3}/annum(4)	Stewart *et al.* (2002), RTA (2001)

Figure 45. Individual loss of life risk criteria (Table C1, AGS, 2007).

TCC is required to give effect to the Bay of Plenty Regional Policy Statement; Policy NH 3B of the RPS requires natural hazard zones assessed as being subject to High natural hazard risk to have that level of risk reduced to Medium and lower if reasonably practicable. Appendix I of the RPS classifies an annual individual loss-of-life risk level of greater than 1E-04 as 'High' and a level of 1E-04 or less and greater than 1E-05 as Medium (as discussed in Section 4.3.4).

Where estimated risk exceeds the applicable tolerability criteria, treatment should seek to reduce risk to a level that is tolerable or as low as reasonably practicable. The preferred approach may combine avoidance, exposure reduction, engineering measures, monitoring, emergency planning and acceptance. Risk treatment options have been considered at a high-level in the context of the risk estimation results.

Residual risk is the risk remaining after treatment. It is important that decision-makers and the public understand that unless the risk is entirely avoided, the consequence of any non-zero level of tolerable risk is the existence of residual risk. As the level of acceptance of risk increases, so the level of residual risk correspondingly increases. Under the BOP RPS, *High* risk locations would require treatment until the residual risk is lowered to tolerable or acceptable levels. *Medium* risk is tolerable, but it is desirable to reduce it such that residual risk is as low as reasonably practicable. *Low* risk locations do not require management beyond monitoring to ensure that the risks do not worsen. Residual risk will be quantified where necessary for remediation of individual landslide sites, and forms part of the geotechnical design report for each site. As the effects of site-specific remediation options are in the process of being modelled, residual risk has not been quantified in this report.

10.2 Risk management options

Avoidance

Permanent track closure

Permanent closure is the most direct form of risk avoidance because it removes routine visitor and worker exposure from the affected track alignment. It may be appropriate where a track section passes through a high-risk landslide or rockfall area, where failures are recurrent, and where the estimated residual risk would remain above the adopted tolerability criteria after practicable mitigation measures have been considered.

Permanent closure may also be appropriate where engineering treatment would be technically difficult, costly, environmentally intrusive, or inconsistent with the cultural and landscape values of Mauao. For example, extensive slope stabilisation, rockfall barriers or earthworks may not be suitable on some parts of the maunga. In these circumstances, closure or relocation of the track may provide a more appropriate reduction in exposure.

Permanent closure should be considered at track-section level rather than necessarily applying to an entire track. The decision should account for:

- the combined landslide and rockfall risk on the section;
- whether the hazard is localised or extends along a substantial length of track;
- the likely effectiveness and reliability of alternative treatments;

- the availability and risk profile of alternative routes;
- effects on use of other tracks, network connectivity, emergency access and maintenance activities;
- cultural, recreational, environmental and visitor-access implications; and
- the likelihood that users would bypass barriers or establish informal routes.

Closure of one track section may redistribute visitors to other parts of the network rather than remove their exposure entirely. The receiving routes should therefore be re-assessed to confirm that closure would result in a net reduction in risk. Where practicable, relocation of the track section outside mapped landslide source, slippage, debris-runout and rockfall areas may retain access while achieving risk avoidance. A relocated route should be subject to its own hazard and risk assessment and should not be assumed to be safer solely because it follows a new alignment.

Effective permanent closure would require more than signage. Physical barriers, enforcement (by TCC staff or contractors), removal of wayfinding markers, updates to maps and public information, and potentially decommissioning or rehabilitation of the former track may be needed. The effectiveness of the closure should be monitored, particularly where informal access is foreseeable.

Monitoring and temporary closures

Temporary closure can substantially reduce exposure during periods when landslide likelihood is elevated. This is particularly relevant to Mauao because intense or prolonged rainfall has produced clusters of slope failures, including significant events in 2005, 2011 and 2026. Temporary closure does not remove the underlying hazard but can prevent or reduce the presence of visitors and workers while hazardous conditions are developing or remain elevated.

Temporary closures could be considered on a seasonal basis, for example, based on monthly average rainfall totals. However, monthly averages obscure the importance of rainfall intensity, and closures based on historical averages are prone to

- Underprediction, where a large landslide-triggering storm occurs in a historically drier month (e.g., January 2026), or
- Overprediction, where dry weather in historically wet months would have prevented relatively low-risk track usage.

Temporary closures based on projected and measured rainfall during and after storms are an alternative. Temporary closures could be part of a documented Trigger Action Response Plan (TARP) implemented through an operational management plan for the Mauao Reserve. The TARP would require well-defined, objective triggers, decision-making responsibilities, required actions, communication procedures and reopening criteria. Potential triggers may include:

- Forecast rainfall over specified durations;
- Observed rainfall over short and longer durations;
- Antecedent rainfall or soil-wetness conditions;
- MetService severe-weather watches or warnings;
- Observed slope movement, fresh cracking, debris or rockfall;

- Blocked or damaged drainage;
- Reports of track damage or slope instability; and
- Earthquake shaking above an agreed threshold.

Trigger values should be developed from the Mauao rainfall and landslide records, including the conditions associated with known multi-failure events (Appendix C). They should be reviewed as further monitoring and event data become available. The risk assessment provides a basis for identifying higher-risk track sections but does not, by itself, establish operational rainfall or earthquake thresholds.

Closures should be precautionary and capable of being implemented before hazardous conditions develop. The TARP could distinguish between network-wide closure and targeted closure of track sections with higher estimated risk or greater sensitivity to rainfall. It must also allow escalation if forecasts worsen, rainfall thresholds are exceeded, or observations indicate active instability.

Temporary closure should continue after rainfall has ceased because landslides and rockfalls may occur during post-storm drainage and pore-pressure dissipation. Hazards may also remain from debris, undermined track edges, damaged structures, unstable boulders or trees or blocked drainage. Reopening should therefore not be based only on a fixed elapsed time, but rather on guidelines based on post-event inspections.

A documented post-event inspection should confirm that the track is suitable to reopen. The inspection should consider whether there is evidence of active or recent movement, fresh rockfall, damaged drainage, unstable cut slopes, loss of track support, debris on the track, or damage to retaining and protective structures. Minor events may require routine operational inspection, whereas major storms, earthquakes or observed failures may require assessment by an engineering geologist or geotechnical engineer. Staged reopening may be appropriate where some sections meet the reopening criteria before others.

A comprehensive plan to control access to the restricted tracks is crucial and should involve consultation with and participation of stakeholders.

Other methods to reduce hazard and exposure

Measures to reduce exposure could aim to reduce the time spent on certain track sections where the localised risk is high (such as permanent or temporary track closures described above), or measures that reduce the likelihood of failure or the likelihood of impact. For example, engineered slope stabilisation measures, such as soil nails or rock bolts, reduce exposure by reducing the likelihood of slope failure at the source. Other engineered measures, such as debris bunds or rockfall fences, reduce the likelihood of debris impacting the track. These measures tend to be costly, and only treat the risk in localised areas, and therefore need to be considered in terms of the location of the primary failure sources in relation to the exposed track section and the frequency of failure.

Residual risk review

Permanent and temporary closures may be combined with site-specific drainage maintenance, local slope stabilisation, rockfall protection, inspections, monitoring, visitor information and incident reporting. Residual risk (risk remaining following treatment) should be reviewed after treatment, particularly where a measure materially changes exposure or the expected likelihood or consequence of failure. Treatment

and closure procedures should also be reviewed following significant events, near misses, changes in track use, new risk assessments and monitoring information, or revisions to relevant risk tolerance policy. In assessing residual risk, and in all decision making, it is important to consider that ‘tolerable’ and ‘acceptable’ levels do not imply ‘no risk’.

11. Conclusions and recommendations

This quantitative landslide risk analysis provides a network-scale assessment of risk to life from landslides and rockfall affecting the Mauao walking tracks. Landsliding and rockfall are recurring natural processes on Mauao. The January 2026 storm triggered 49 mapped landslides across the maunga, while the wider inventory and historical record show that significant landslide and rockfall activity has also occurred during earlier rainfall and earthquake events. These processes cannot be eliminated completely, and any continued access to Mauao will retain some residual risk.

For the assumed most exposed visitor, defined as an individual walking a track section once per week, annual individual fatality risk varies substantially across the track network. Of the 14 assessed track sections, eight are classified as Low risk, five as Medium risk, and one as High risk under the Bay of Plenty Regional Policy Statement criteria. Under the AGS criteria, one track section is classified as intolerable, while the remaining 13 are tolerable.

The section-scale classifications do not necessarily represent the total risk associated with a visitor's trip; the risk associated with the complete route is the sum of the risks from all the sections traversed. AIFR also depends on trip frequency and the amount of time spent in exposed locations. Regular users, slower walkers, and people who spend longer at lookouts or rest locations may therefore have higher annual risk than the representative visitor assumed in the analysis.

Risk is not distributed evenly within track sections. In some cases, the section-scale result is controlled by a relatively small number of locations where the track intersects modelled landslide runout or rockfall areas. Decisions concerning an entire track should therefore consider the sub-section results and, where appropriate, site-specific investigation before concluding that closure or treatment is required over the full alignment.

For the assumed most exposed worker, the estimated Mauao-wide AIFR is 1.1E-04, with rockfall contributing approximately 80% of the total risk. The preferred estimate is classified as High under the Bay of Plenty Regional Policy Statement, and intolerable under the AGS guidelines. The sensitivity range of 7.5E-05 to 1.3E-04 spans the boundary between Medium and High risk, and the result remains sensitive to assumptions about where workers operate and how long they spend in those locations.

The assessment contains substantial epistemic and aleatoric uncertainty. Important sources include the incompleteness of the landslide and boulder inventories, estimated landslide and rockfall frequencies, runout modelling, visitor and worker exposure, and the vulnerability of a person if impacted. Sensitivity testing indicates that the uncertainty range for some track sections spans more than one risk classification. The results should therefore be used as data-informed estimates for comparative and management purposes, rather than as exact measures of risk.

Determining whether the estimated risks are acceptable, tolerable or intolerable is a risk-management decision for the Mauao Trust, as owner of Mauao, and Tauranga City Council, as the authority responsible for implementing management measures. This decision should consider the numerical risk estimates and their uncertainties alongside the cultural, recreational, environmental and operational

values of the maunga. Under the Bay of Plenty Regional Policy Statement, High risk requires reduction, while Medium risk should be reduced to as low as reasonably practicable.

We recommend the following actions:

1. **Formally adopt risk tolerability criteria for the track network.** Confirm how the Bay of Plenty Regional Policy Statement and Australian Geomechanics Society thresholds, Department of Conservation classifications and the as-low-as-reasonably-practicable principle will be applied to visitors and workers.
2. **Evaluate access and treatment options on a route and network basis.** For each route, assess the combined risk from all track sections traversed rather than relying on isolated section classifications.
3. **Prioritise further assessment and risk treatment according to estimated risk and uncertainty.** The prioritisation should also recognise that some nominally Low sections have uncertainty ranges or slower-user scenarios extending into higher classifications.
4. **Develop and implement an Operational Management Plan (OMP).** The OMP should set out risk-based operational controls for Mauao activities. This could include (i) a Mauao-specific trigger action response plan (TARP) for controlling access to Mauao before, during and after trigger events, (ii) slope inspections and weather monitoring, and (iii) a programme for preventative maintenance and targeted risk mitigation works where required.
5. **Prepare a specific risk-management plan for workers.** Review actual work locations, task durations, access routes and time spent beneath rock bluffs or in other high-hazard areas. Controls should include worker training and inductions, task planning, weather and TARP restrictions, exclusion from identified high-hazard areas where practicable, communication and check-in procedures, and competency requirements for work following storms or earthquakes. The worker risk assessment should then be recalculated using verified exposure information.
6. **Improve management of off-track access.** Until off-track use is better quantified, discourage access to gullies, rock-bluff bases, steep mid-slope terrain and mapped landslide source or runout areas through culturally appropriate signage, physical barriers where necessary, wayfinding and targeted visitor information. Monitoring should identify commonly used informal routes and locations where people bypass closures.
7. **Quantify residual risk after treatments are selected and implemented.** Site-specific assessments and designs should estimate the reduction in landslide occurrence, impact probability or exposure achieved by each measure. Tracks should not be assumed to meet the adopted tolerability criteria solely because remediation has been completed. The residual risk should be documented and accepted by the appropriate decision-makers before reopening.
8. **Establish an ongoing monitoring, incident-reporting and review programme.** Maintain the landslide and rockfall inventories, record near misses and track damage, retain rainfall and visitor-count data, and review the effectiveness of closures and engineering measures. The QLRA should be reviewed following each significant storm or earthquake, landslide or rockfall affecting the track network, change in track use or worker activity, completion of major remediation, or change in relevant policy or guidance.

9. **Progressively refine the risk model where improved information could materially change decisions.** Priority improvements should include linking visitor exposure to rainfall conditions, collecting more reliable worker and off-track exposure data, improving understanding of subsurface and groundwater conditions, and checking the simplified treatment of multiple landslides occurring during a common triggering event. These refinements should be directed first to decisions that are sensitive to the current uncertainty, rather than applied uniformly across the whole network.

12. Methodological Assumptions, Limitations, and Future Improvements

All risk assessments make simplifying assumptions and have associated limitations to account for uncertainty in hazard, exposure, and consequence assessment. Assumptions and limitations have generally been stated where relevant in the above methods. Additional assumptions and limitations are documented here (Table 35). This list may not be exhaustive and others may be added with additional work.

Table 35. Assumptions, limitations, and future improvements identified for the risk analysis

Category	Description	Impact	Approach / Next Steps	Priority for Improvement
Assumption – precautionary approach	A precautionary approach, consistent with the Bay of Plenty Regional Policy Statement has been applied due to the inherent uncertainties in the performance of slopes and the triggering mechanisms for landsliding	Risk levels may be overestimated	N/A	Low
Assumption - vulnerability values are representative of all causes of death	Dataset informing vulnerability of people to landslides considers only asphyxiation.	Increased uncertainty in vulnerability – likely underestimate	Conservative approach to selection of values; Sensitivity testing	Low
Assumption – rate of rainfall-induced landsliding is representative of background landslide rate	The historical record comprises rainfall-induced landslides; it is assumed that the natural background rate is dominated by rainfall-induced landslides	Possible missing component of landslide rate for events with no trigger	N/A – could consider adding an assumed / nominal background rate and treating rainfall as a trigger	Low
Assumption – landslide and	Failures that develop as slips can result in 'rockfall', but there are	Rockfall rate may be underestimated	N/A – the probabilities are small enough, and other uncertainties large	Low

Category	Description	Impact	Approach / Next Steps	Priority for Improvement
rockfall risk are independent	not enough data to consider this dependency		enough, such that the impact on the risk calculations is likely small	
Assumption – Earthquake-induced landslide characteristics are similar to those in inventory	The area-volume characteristics of earthquake-triggered landslides are assumed to be the same as rainfall-induced landslides.	Contribution of earthquake-triggered landslides to risk may be underestimated	N/A – could consider generic empirical relationships for NZ in other rock types if requested	Low
Assumption – runout modelling carried out on pre-2026 DEM	Runout models were carried out using a DEM that was produced prior to the 2026 storm and landslides	The runout based on 2025 DEM may not be representative of the current (or future) landscape	Conservative approach tested with spatial impact probability to account for terrain variability (in general)	Low
Limitation	Rockfall and landslide inventories are more complete for more recent years (i.e. higher resolution imagery)	Inventories are biased towards recent events	N/A – could consider acquiring new imagery and conducting more mapping	Low
Limitation	Timing of rockfalls, and therefore annualised rates, is limited to time window of imagery	Annualised rate of rockfall is indicative only	Conservative approach to selection of AEPs	Low
Limitation	Fallen rocks are obscured by vegetation and not otherwise identifiable in LiDAR	Rockfall statistics and runout extents may be incomplete in some areas or for some time periods.	'Representative mapping area' approach to define rockfall runout extents and proportions reaching or passing shadow angles; Could consider physics-based rockfall modelling	Low
Limitation	Rockfall trajectories are considered representative of future hazard extent	Rockfall may have occurred (or will occur) with different vegetation conditions on Mauao, which affected (or can affect) rockfall extent	N/A – can undertake more complex physics-based runout modelling accounting for vegetation effects	Low
Future Improvement	Visitors are limited to tracks; no data to support estimates for	Exposure may be over- or under-estimated	Refine off-track exposure in consultation with local experts and stakeholders	Moderate

Category	Description	Impact	Approach / Next Steps	Priority for Improvement
	off-track behaviour for visitors			
Future Improvement	Rainfall-triggered landslides and earthquake triggered landslides considered as single landslide events rather than multiple landslides	Risk may be underestimated	Perform calculations for multiple landslide triggered events and sum risk from different triggers to compare against simplified approach	Moderate
Future Improvement	Hazard is highest during and after storms when exposure (i.e. reduced visitor numbers when raining) is lowest	Risk may be overestimated	Incorporate into risk scenario calculations to support risk mitigation decisions	High

13. Limitations Statement

This report ('Report') has been prepared by WSP New Zealand Limited ('WSP') exclusively for Tauranga City Council ('Client') in accordance with the TC633/24 TCC/WSP Master Services Agreement, dated January 2024 ('Agreement'). This Report has been prepared expressly for the purpose of conducting a quantitative landslide risk analysis (QLRA) for the network of walking tracks on Mauao ('Permitted Purpose'). WSP accepts no liability whatsoever for the use of the Report, in whole or in part, for any purpose other than the Permitted Purpose. Unless expressly stated otherwise, this Report has been prepared without regard to any special interest of any party other than the Client. WSP accepts no liability whatsoever for any use of this Report, in whole or in part, by any party other than the Client. Unless WSP agrees otherwise in writing, any use or any reliance on this Report by a third party is at its sole risk without recourse to WSP. Third parties must make their own enquiries and obtain independent advice in relation to any matter dealt with or any conclusion expressed in this Report.

The data reported and conclusions drawn by WSP in this Report are based solely on information made available to WSP at the time of preparing the Report. The passage of time, unexpected variations in ground conditions, manifestations of latent conditions, or the impact of future events (including (without limitation) changes in policy, legislation, guidelines, scientific knowledge, and changes in interpretation of policy by statutory authorities) may require further investigation or subsequent re-evaluation of the conclusions.

References

Australian Geomechanics Society (AGS). (2007a). Guideline for landslide susceptibility, hazard and risk zoning for land use planning. *Australian Geomechanics, 42*(1), 13–36.

Australian Geomechanics Society (AGS). (2007c). Practice note guidelines for landslide risk management 2007. *Australian Geomechanics, 42*(1).

Avalon Industrial Services Ltd. (2003). *Mauao rock slopes & rockfall hazards* (Report No. 0314). 7 August 2003.

Avalon Industrial Services Ltd. (2004). *Mauao slopes earthquake damage & revised risk assessment*. 26 July 2004.

Avalon Industrial Services Ltd. (2006). Mauao slopes: May 2006 rockfall and landslide risk review (Report No. 0627 A). Tauranga District Council.

Avalon Industrial Services Ltd. (2009). *Mauao slopes: Monitoring report 17 June 2009*. 25 June 2009.

Avalon Industrial Services Ltd. (2017). *Mauao slopes: Monitoring report for April 2017*. 24 April 2017.

Avalon Industrial Services Ltd. (2018). *Mauao slopes: Monitoring report for April 2018*. 24 April 2018.

Avalon Industrial Services Ltd. (2021). *Mauao slopes: Rockfall incident response and routine monitoring report August 2021*. 30 August 2021.

Bay of Plenty Regional Council (BOPRC). (2014). Bay of Plenty Regional Policy Statement. Operative 1 October 2014, incorporating subsequent changes; consolidated version updated 8 April 2025.

Bay of Plenty Regional Council (BOPRC). (2026). *Our Future Climate*. Last accessed 16 November 2026. https://www.boprc.govt.nz/environment/climate-change/our-future-climate/

Briggs, R. M., Hall, G. J., Harmsworth, G. R., Hollis, A. G., Houghton, B. F., Hughes, G. R., Morgan, M. D., Whitbread-Edwards, A. R., & Wilson, C. J. N. (1996). *Geology of the Tauranga area: Sheet U14, 1:50,000* (Occasional Report No. 22). Department of Earth Sciences, University of Waikato.

Briggs, R. M., Houghton, B. F., McWilliams, M., & Wilson, C. J. N. (2005). $^{40}Ar/^{39}Ar$ ages of silicic volcanic rocks in the Tauranga–Kaimai area, New Zealand: Dating the transition between volcanism in the Coromandel Arc and the Taupo Volcanic Zone. *New Zealand Journal of Geology and Geophysics, 48*(3), 459–469. DOI: 10.1080/00288306.2005.9515126.

Brideau MA, Massey CI, Lukovic B, Morgenstern R. 2020. Deterministic mapping of potential landslide debris inundation in the Kaikōura District. Lower Hutt (NZ): GNS Science. 37 p. Consultancy Report 2019/102.

Brideau M-A, de Vilder S, Massey C, Mitchell A, McDougall S, Aaron J. 2021. Empirical relationships to estimate the probability of runout exceedance for various landslide types. In: Guzzetti F, Mihalić Arbanas S, Reichenbach P, Sassa K, Bobrowsky PT, Takara K, editors. Understanding and reducing landslide disaster risk Volume 2: from mapping to hazard and risk zonation. Cham (CH): Springer International Publishing. p. 321–327.

Cruden, D. M., & Varnes, D. J. (1996). Landslide types and processes. In A. K. Turner & R. L. Schuster (Eds.), *Landslides: Investigation and mitigation* (Transportation Research Board Special Report 247, pp. 36–75). Washington, DC: National Academy Press.

de Vilder, S. J., Massey, C. I., Power, W. L., Burbidge, D. R., Deligne, N. I., & Leonard, G. S. (2024). Guidelines for natural hazard risk analysis on public conservation lands and waters – Part 1: Risk analysis framework. Lower Hutt, New Zealand: GNS Science. Consultancy Report 2024/35. Prepared for the Department of Conservation. Revised August 2025. 33 p.

de Vilder, S. J., & Massey, C. I. (2024a). Guidelines for natural hazard risk analysis on public conservation lands and waters – Part 3: Analysing landslide risk to point and linear sites. Lower Hutt, New Zealand: GNS Science. Consultancy Report 2024/37. Prepared for the Department of Conservation. Revised August 2025. 70 p.

de Vilder, S. J., & Massey, C. I. (2024b). Guidelines for natural hazard risk analysis on public conservation lands and waters – Part 4: A commentary on analysing landslide risk to point and linear sites. Lower Hutt, New Zealand: GNS Science. Consultancy Report 2024/38. Prepared for the Department of Conservation. 90 p.

Fell, R., Corominas, J., Bonnard, C., Cascini, L., Leroi, E., & Savage, W. Z. (2008). Guidelines for landslide susceptibility, hazard and risk zoning for land use planning. *Engineering Geology, 102*(3–4), 85–98. DOI: 10.1016/j.enggeo.2008.03.022.

Finlay PJ, Mostyn GR, Fell R. (1999). Landslides: prediction of travel distance and guidelines for vulnerability of persons. In: Vitharana ND, Colman R, editors. Proceedings 8th Australia New Zealand Conference on Geomechanics: Consolidating Knowledge; 1999 Feb 15–17; Hobart, Australia. Barton (AU): Australian Geomechanics Society. p. 105–113.

Foster, K. M., Bradley, B. A., McGann, C. R., & Wotherspoon, L. M. (2019). A Vs30 map for New Zealand based on geologic and terrain proxy variables and field measurements. *Earthquake Spectra, 35*(4), 1865-1897. https://doi.org/10.1193/121118EQS281M

Franks, C. A. M. (1988). Engineering geological aspects of the Edgecumbe, New Zealand earthquake of 2 March 1987. *Quarterly Journal of Engineering Geology, 21*(4), 337-348. https://doi.org/10.1144/GSL.QJEG.1988.021.04.06

Giannoulaki, M., Christoforou, Z. (2024). Pedestrian walking speed analysis: a systematic review. Sustainability 16(11), 4813, https://doi.org/10.3390/su16114813.

Guzzetti, F., Ardizzone, F., Cardinali, M., Rossi, M., & Valigi, D. (2009). Landslide volumes and landslide mobilization rates in Umbria, central Italy. *Earth and Planetary Science Letters, 279*, 222–229. DOI: 10.1016/j.epsl.2009.01.005.

Hall, G.J. (1994). Volcanic Geology of the South-eastern Tauranga Basin, New Zealand. MSc Thesis, University of Waikato.

Hancox, G. T., Perrin, N. D., & Dellow, G. D. (2002). Recent studies of historical earthquake-induced landsliding, ground damage, and MM intensity in New Zealand. *Bulletin of the New Zealand Society for Earthquake Engineering, 35*(2), 59–95.

Hayes, R., Hunter, A., & Miner, A. S. (2024). The use of empirical methods to predict landslide runout for use in rapid landslide risk assessments following Cyclone Gabrielle, New Zealand. In Proceedings of the 11th Australia New Zealand Conference on Geomechanics (1ACEG 2024). https://doi.org/10.56295/1ACEG11

HD Geo Ltd. (2025). Mauao, Mount Maunganui: Geohazard review report (Project No. HD3639). Tauranga City Council.

Hollis, A.G. (1995). Engineering Geology of Mauao (Mount Maunganui), Tauranga. MSc Thesis, University of Waikato.

Larsen, I. J., Montgomery, D. R., & Korup, O. (2010). Landslide erosion controlled by hillslope material. *Nature Geoscience, 3*, 247–251. DOI: 10.1038/ngeo776.

Lee, E. M., Jones, D. K. C. (2014). *Landslide risk assessment* 2nd ed. London (UK): ICE Publishing. 509 p.

Leonard, G. S., Begg, J. G., & Wilson, C. J. N. (compilers). (2010). *Geology of the Rotorua area* (Institute of Geological & Nuclear Sciences 1:250,000 Geological Map 5). Lower Hutt, New Zealand: Institute of Geological & Nuclear Sciences Limited. 1 sheet + 102 p.

Brideau, M.-A., & Martin, Z. (2014). Spatio-temporal distribution of mass movements on Mount Maunganui, New Zealand. In GeoHazards 6: 6th Canadian Geohazards Conference.

Massey, C. I., McSaveney, M. J., Taig, T., Richards, L., Litchfield, N. J., Rhoades, D. A., McVerry, G. H., Lukovic, B., Heron, D. W., Ries, W., & Van Dissen, R. J. (2014). Determining rockfall risk in Christchurch using rockfalls triggered by the 2010–2011 Canterbury earthquake sequence. *Earthquake Spectra, 30*(1), 155–181. https://doi.org/10.1193/021413EQS026M

Massey, C. I., Olsen, M. J., Wartman, J., Senogles, A., Lukovic, B., Leshchinsky, B. A., Archibald, G., Litchfield, N., Van Dissen, R., de Vilder, S., & Holden, C. (2022). Rockfall activity rates before, during and after the 2010/2011 Canterbury earthquake sequence. *Journal of Geophysical Research: Earth Surface, 127*(3), e2021JF006400. DOI: 10.1029/2021JF006400.

Ministry for the Environment. (2025). National Policy Statement for Natural Hazards 2025 (ME 1947). New Zealand Government. https://environment.govt.nz/publications/national-policy-statement-for-natural-hazards/

Moos, C., Dorren, L., Stoffel, M. (2017). Quantifying the effect of forests on frequency and intensity of rockfalls. Natural Hazards and Earth System Sciences (17), 291-304, https://doi.org/10.5194/nhess-17-291-2017.

New Zealand Geotechnical Society (NZGS). (2024). Slope stability guidance: Unit 1 – General guidance. Version 1, October 2024.

Olsen, M. J., Senogles, A., Leshchinsky, B., Massey, C. I., Archibald, G., & Wartman, J. (2019). Rockfall activity rates following the Canterbury New Zealand earthquake sequence. In *Earthquake Geotechnical Engineering for Protection and Development of Environment and Constructions: Proceedings of the 7th International Conference on Earthquake Geotechnical Engineering* (pp. 4210–4217).

Richards, L. (1999). Mauao stability assessment, Mount Maunganui, Tauranga. Report prepared for Tauranga District Council, 31 May 1999.

Roads and Maritime Services. (2014). Guide to slope risk analysis. Version 4, April 2014. NSW Government.

Rosser, B., Dellow, S., Haubrock, S. & Glassey, P. (2017). New Zealand's National Landslide Database. *Landslides*, 14(6), pp.1949-1959. https://doi.org/10.1007/s10346-017-0843-6.

Sim, K. B., Lee, M. L., & Wong, S. Y. (2022). A review of landslide acceptable risk and tolerable risk. *Geoenvironmental Disasters, 9*, Article 3. DOI: 10.1186/s40677-022-00205-6.

Taig T, Massey CI. 2014. Canterbury Earthquakes 2010/11 Port Hills slope stability: estimating rockfall (boulder roll) risk for the road user along part of Wakefield avenue. Lower Hutt (NZ): GNS Science. 35 p. Consultancy Report 2013/30. Prepared for Christchurch City Council.

Tonkin & Taylor Ltd. (2011). Mauao landslide 29 January 2011. Tonkin & Taylor Ltd. Geotechnical Assessment.

Tonkin & Taylor Ltd. (2023). Cathedral Cove basic level landslide risk assessment. Report prepared for the Department of Conservation, Job No. 1007838.3000, Version 3, 28 July 2023

Tonkin & Taylor Ltd (2026). Quantitative landslide risk analysis. Mount Maunganui Beachside Holiday Park, Mount Maunganui Surf Lifesaving Club, and Mount Hot Pools. T&T Ref. 1090461.7000. Prepared for Tauranga City Council. 164 p.

Wildland Consultants Ltd. (2015). Ecological assessment of Mauao Historic Reserve. 22 January 2015. Tauranga City Council document ID 305761.

WSP New Zealand Ltd. (2022). Tauranga City Council – Mauao Base Track: High level qualitative slope stability risk assessment. Project No. 2-9B497.00, final report, 16 November 2022.

WSP. (2025). Auckland landslide susceptibility study technical report 2025. Included in Auckland Council Technical Report TR2025/7, Part 2.

Appendices

Appendix A Landslide inventory

Table 36. Attributes recorded in the Mauao landslide inventory

Attribute	Description	Comments
Source	Observations, datasets, and reports used to identify landslides	Examples: Google Earth, Ground Visits, UAV imagery, and prior mapping
Type	Failure mechanism and landslide classification after Cruden and Varnes (1996)	Examples: Debris slide, rock slide, slope displacement, piping
Confidence	Mapper confidence in attributing observation to interpreted mass movement	Rated High or Low. 'Relict' landslides also identified where interpreted from the landscape but not identified as occurring historically
Source ID	Unique identifier linking source and debris	--
Originator	Organisation that originally mapped the feature	Includes WSP, Tonkin + Taylor, Avalon, and HD Geo
Accuracy	Spatial accuracy as a function of dataset resolution and mapped location error	Rated Approximate, Inferred, Accurate, High and varies by organisation/mapper
Depth	Estimated depth based on headscarp height	Estimates available from UAV-based photogrammetric DSM and ground observations; Minimum, Preferred, and Maximum values where available.
Volume	Estimated volume based on estimated depth and mapped surface area	Estimates include Minimum, Preferred, and Maximum values where available.
Length	Downslope length	
Area	2D surface area	
F-Angle	Fahrböschung Angle	Calculated from mapping and LiDAR based on runout distance and elevation difference between head and toe, respectively
Date	Date of mapping / observation	
Slope Distance Runout Length	Slope distance from upslope extent of source area to furthest extent of debris	

Table 37. Landslide inventory

SourceID	Source	Date	Type	Originator	Confidence	Accuracy	Depth (m) estimated	Depth (m) lower	Depth (m) upper	Volume (m³) estimated	Volume (m³) lower	Volume (m³) upper	Area (m²)	F Angle (°)
1943-TT01	Retrolens	9/02/1943	Debris slide	WSP	High	Accurate							115.0431071	
1943-TT04	Retrolens	9/02/1943	Debris slide	WSP	High	Approximate							61.77889013	
1943-TT03	Retrolens	9/02/1943	Debris slide	WSP	High	Approximate							86.80732619	
1943-TT02	Retrolens	9/02/1943	Debris slide	WSP	High	Approximate							28.0075116	
1953-TT01	Retrolens	21/10/1953	Debris slide	WSP	Low	Approximate							215.7344758	
1953-TT02	Retrolens	21/10/1953	Debris slide	WSP	High	Approximate							357.4722866	
1953-MT01	Retrolens	21/10/1953	Debris slide	WSP	High	Approximate							113.0452405	
1953-TT03	Retrolens	21/10/1953	Debris slide	WSP	High	Approximate							19.71261213	
1953-TT04	Retrolens	21/10/1953	Debris slide	WSP	High	Approximate							55.26071095	
1953-TT05	Retrolens	21/10/1953	Debris slide	WSP	High	Inferred							26.77860801	
1959-MT01	Retrolens	16/01/1959	Debris slide	WSP	High	Approximate	2	1	4	200	100	400	96.82118776	29.48
1978-TT01	Retrolens	1/01/1978	Debris slide	WSP	Low	Approximate							37.61723147	
1978-TT03	Retrolens	7/11/1978	Debris slide	WSP	High	Accurate							55.25108581	
1978-TT02	Retrolens	7/11/1978	Debris slide	WSP	High	Accurate							64.8452921	
HDG_ID005	LINZ	1/07/2004	Debris slide	HDGEO	High	Inferred	1			1			14.91508675	
HDG_ID006	LINZ	1/07/2004	Rock fall	HDGEO	High	Inferred	0.6			0.6			12.45596928	
HDG_ID007	LINZ	1/07/2004	Debris slide	HDGEO	High	Approximate	1			3			7.148119329	
HDG_ID008	LINZ	1/07/2004	Slope displacement	HDGEO	Low	Inferred	1			10			17.79377491	
HDG_ID009	LINZ	1/07/2004	Slope displacement	HDGEO	Low	Inferred	1			10			23.98563726	
HDG_ID025	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	4			28000			1155.709961	12.62
HDG_ID044	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	5			1500			536.7405463	20.62
HDG_ID023	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	5			50			55.60654257	32.7
2005-TT01	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	0.5	0.2	1	6	2	12	12.70522918	23.31
2005-TT02	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1	0.5	2	15	7	25	13.47066506	22.5
2005-TT03	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2	1	3	80	40	120	38.99367362	42.04
HDG_ID043	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1			50			77.57985222	31.79
HDG_ID048	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			600			112.5994135	25.75
HDG_ID047	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	3			100			29.73187965	22.12
HDG_ID045	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1			40			45.45964889	31.88
HDG_ID042	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			50			43.64310408	26.26
HDG_ID037	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2	1	3	120	60	180	61.21550176	32.34
HDG_ID024	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	3			75			42.13285027	26.52
HDG_ID013	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	3			145			143.3019073	19.86
HDG_ID012	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	3			180			68.6536543	20.81
HDG_ID028a	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			100			79.37356049	
HDG_ID028b	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1.5			22.5			36.12975109	
2005-TT04	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate							33.61684678	
HDG_ID017	Google Earth	18/05/2005	Debris slide	WSP	High	Approximate	1			4			55.78673968	31.23
HDG_ID018	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1			9			24.71905989	29.13
2005-MT01	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate							17.08583817	

SourceID	Source	Date	Type	Originator	Confidence	Accuracy	Depth (m) estimated	Depth (m) lower	Depth (m) upper	Volume (m³) estimated	Volume (m³) lower	Volume (m³) upper	Area (m²)	F Angle (°)
2005-MT02	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate							4.424413942	
HDG_ID021	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			40			20.76900047	33.39
HDG_ID027	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	4			960			67.14485133	30.83
HDG_ID029	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			40			32.5733829	
HDG_ID039	Google Earth	18/05/2005	Debris slide	WSP	High	Approximate				50			14.48693276	
HDG_ID016	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			60			48.0008132	30.14
HDG_ID059	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate				10			17.36889507	
HDG_ID011	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	3			45			79.59288969	
HDG_ID014	Google Earth	18/05/2005	Debris slide	WSP	High	Approximate	1			4			48.58444429	21.86
HDG_ID015	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	1.5			6			10.14690498	26.9
HDG_ID019	Google Earth	18/05/2005	Debris slide	WSP	High	Inferred	1			12			13.58327634	
HDG_ID020	LINZ	18/05/2005	Debris slide	WSP	High	Approximate	3			36			4.932185869	
HDG_ID022	Google Earth	18/05/2005	Debris slide	WSP	High	Approximate	1			32			45.24436388	31.67
HDG_ID026	LINZ	18/05/2005	Debris slide	WSP	High	Inferred	1.25			10			12.89086373	
HDG_ID030	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							7.934991523	
HDG_ID031	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							4.582100146	
HDG_ID032	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							7.385570768	
HDG_ID033	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							10.09817583	
HDG_ID034	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							14.38090168	
HDG_ID035	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							6.263877365	
HDG_ID036	HDGEO (2025)	18/05/2005	Slope displacement	HDGEO	High	Inferred	1			10			7.079343853	
HDG_ID038	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							3.647545637	
HDG_ID040	Google Earth	18/05/2005	Debris slide	WSP	High	Accurate	2			50			69.82620086	
HDG_ID041	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							5.491189454	
HDG_ID046	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Approximate							10.59692916	
HDG_ID049	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred	0.8			20			9.139632472	
HDG_ID054	LINZ	18/05/2005	Debris slide	WSP	High	Approximate	0.8			20			39.49579851	
HDG_ID051	LINZ	18/05/2005	Debris slide	WSP	High	Approximate	0.8			20			66.03876664	
HDG_ID052	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							11.11443738	
HDG_ID053	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred							23.03106479	
HDG_ID055	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred	1			40			35.91379923	
HDG_ID057	LINZ	18/05/2005	Debris slide	WSP	High	Accurate	1.5			10			11.26835595	
HDG_ID056	HDGEO (2025)	18/05/2005	Slope displacement	HDGEO	High	Approximate	0.8			20			14.62846279	
HDG_ID058	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred				10			10.6900714	
HDG_ID060	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred				20			19.22991849	
HDG_ID061	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred				2			1.807665877	
HDG_ID062	HDGEO (2025)	18/05/2005	Debris slide	HDGEO	High	Inferred				2			4.129156094	
Avalon_47	Avalon 2005	18/05/2005	Debris slide	Avalon	High	Approximate				5			7.329301995	
Avalon_42	Avalon 2005	18/05/2005	Debris slide	Avalon	High	Approximate							23.24417802	
Avalon_41	Avalon 2005	18/05/2005	Debris slide	Avalon	High	Approximate							27.95131367	
Avalon_24	Avalon 2005	18/05/2005	Debris slide	Avalon	High	Approximate				1			7.450026	

SourceID	Source	Date	Type	Originator	Confidence	Accuracy	Depth (m) estimated	Depth (m) lower	Depth (m) upper	Volume (m³) estimated	Volume (m³) lower	Volume (m³) upper	Area (m²)	F Angle (°)
HDG_ID063	HDGEO (2025)	22/06/2005	Rock fall	HDGEO	High	Inferred				8			2.288614443	27.94
HDG_ID065	HDGEO (2025)	1/09/2005	Rock fall	HDGEO	Low	Inferred							3.389663936	
HDG_ID068	HDGEO (2025)	1/07/2007	Rock fall	HDGEO	Low	Inferred				1			7.425821758	
HDG_ID070	Google Earth	30/07/2007	Rock fall	WSP	High	Approximate	2	1	3	160	80	240	80.99032183	36.04
HDG_ID099	HDGEO (2025)	17/03/2009	Debris slide	HDGEO	High	Inferred				20			28.02611774	
HDG_ID101	HDGEO (2025)	17/03/2009	Debris slide	HDGEO	High	Inferred				5			7.758836401	
HDG_ID100	HDGEO (2025)	17/03/2009	Debris slide	HDGEO	High	Inferred							14.3145101	
2009-TT01	Google Earth	6/10/2009	Debris slide	WSP	High	Inferred							9.831406975	
2011-WT01	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	3	2	5	120	80	200	42.59239748	21.67
2011-WT02	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							20.65986115	
2011-TT01	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	40	20	60	21.73651774	21.83
2011-TT02	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	4	170	85	340	85.55946898	25.94
2011-OT01	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	50	25	75	23.15553251	35.76
2011-OT02	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	90	45	135	44.54823337	46.43
2011-TT03	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	290	60	525	175.2130118	38.35
2011-TT04	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	5	1200	600	3000	585.3017951	28.55
2011-TT05	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	5	400	200	1000	194.8996821	20.81
2011-TT06	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	5	2	8	500	100	800	95.39683534	26.5
2011-MT01	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							58.1528125	
2011-MT02	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							67.93796274	
HDG_ID095	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	1			1300			774.945868	21.79
2011-MT03	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	1.5	1	2	150	100	200	94.57542618	25.42
2011-WT03	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	4	140	70	280	71.89548444	27.51
2011-TT07	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							19.00482033	
2011-TT08	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							31.6761573	
2011-TT09	Google Earth	29/01/2011	Debris slide	WSP	High	Approximate							23.725068	
2011-TT10	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate							1.905956884	
2011-WT04	Google Earth	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	10	5	15	5.770282668	22.23
2011-TT11	LINZ	29/01/2011	Debris slide	WSP	High	Accurate	2	1	3	50	25	75	26.52996438	29.07
T&T_112	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			5.112876201	
T&T_099	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				10			5.589148129	
T&T_051	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				40			25.58071377	
T&T_111	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				40			20.8667811	
T&T_095	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				8			9.186017889	
T&T_089	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				10			12.51611037	
T&T_083	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				25			14.36650073	
T&T_082	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				25			10.82600956	
T&T_069	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				25			12.17057919	
T&T_049	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				20			13.43026496	
T&T_027	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				10			6.080536477	
T&T_017	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				15	10	20	6.940089327	

SourceID	Source	Date	Type	Originator	Confidence	Accuracy	Depth (m) estimated	Depth (m) lower	Depth (m) upper	Volume (m³) estimated	Volume (m³) lower	Volume (m³) upper	Area (m²)	F Angle (°)
T&T_004	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				20			11.81272686	
T&T_093	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				4			5.07165461	
T&T_087	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				3			2.776570183	
T&T_081	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.495740796	
T&T_070	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			6.281505032	
T&T_061	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.507667802	
T&T_058	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				2			1.839340405	
T&T_055	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.365775135	
T&T_048	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				2			2.372466342	
T&T_046	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			6.146609064	
T&T_045	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				3			3.413967841	
T&T_039	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				3			4.037782702	
T&T_026	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.067641052	
T&T_019	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.084740615	
T&T_010	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				3			3.786354328	
T&T_009	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.134473169	
T&T_005	Tonkin & Taylor 2011	29/01/2011	Debris slide	Tonkin & Taylor	Low	Approximate				5			7.349082695	
2012-TT01	Google Earth	27/01/2012	Debris slide	WSP	High	Accurate	2	1	3	180	90	270	86.75539109	26.11
2012-TT03	Google Earth	27/01/2012	Debris slide	WSP	High	Accurate	4	2	6	600	300	900	158.5664206	30.62
2012-TT02	Google Earth	11/09/2012	Debris slide	WSP	High	Accurate	2	1	3	200	100	600	96.34567097	15.62
2012-WT01	Google Earth	11/09/2012	Debris slide	WSP	High	Accurate							113.627212	
HDG_ID080	HDGEO (2025)	1/06/2015	Rock fall	HDGEO	Low	Inferred							6.541424106	
2016-WT01	Google Earth	11/03/2016	Debris slide	WSP	High	Accurate							159.994315	
HDG_ID083	HDGEO (2025)	25/10/2016	Rock fall	HDGEO	Low	Inferred				0.3			1.753382027	
HDG_ID083	HDGEO (2025)	9/03/2017	Rock fall	HDGEO	Low	Inferred				0.3			2.778432905	39.33
HDG_ID084	DEM	3/04/2017	Debris slide	WSP	High	Approximate							99.65640381	
2017-WT01	Google Earth	2/05/2017	Debris slide	WSP	High	Accurate	3	2	5	120	80	200	39.05154836	18.88
2017-MT01	Google Earth	2/05/2017	Debris slide	WSP	High	Accurate							42.88044812	28.81
2017-TT01	Google Earth	20/12/2017	Debris slide	WSP	High	Accurate	2	1	4	200	100	400	111.9202503	33.24
HDG_ID086	HDGEO (2025)	17/04/2018	Rock fall	HDGEO	Low	Inferred							2.407078394	
2019-TT04	LINZ	1/01/2019	Debris slide	WSP	High	Accurate							80.18263646	
2019-TT05	LINZ	1/01/2019	Debris slide	WSP	High	Accurate							11.55427347	
2019-TT06	LINZ	1/01/2019	Debris slide	WSP	High	Accurate							22.72922122	
2019-TT01	Google Earth	5/01/2019	Debris slide	WSP	High	Accurate	3	2	5	120	80	200	43.89411666	25.14
2019-TT02	Google Earth	5/01/2019	Debris slide	WSP	High	Accurate	3	2	5	180	120	300	60.90929428	20.9
2019-TT03	Google Earth	5/01/2019	Debris slide	WSP	High	Accurate	2	1	3	200	100	300	104.8698964	30.12
HDG_ID089	HDGEO (2025)	1/05/2019	Rock fall	HDGEO	Low	Inferred							3.835539319	
HDG_ID091	HDGEO (2025)	1/03/2021	Piping	HDGEO	High	Inferred							1.301450259	
HDG_ID092	HDGEO (2025)	1/03/2021	Debris slide	HDGEO	High	Inferred							14.13633471	
HDG_ID098	HDGEO (2025)	1/08/2021	Debris slide	HDGEO	High	Inferred	1		2	600		1200	104.216141	
HDG_ID090	HDGEO (2025)	2/08/2021	Rock fall	HDGEO	Low	Inferred				0.12			1.88464428	

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2023-TT01	LINZ	27/01/2023	Debris slide	WSP	High	Accurate							152.5521991	
2023-MT01	LINZ	27/01/2023	Debris slide	WSP	High	Accurate							9.795136544	
2023-TT02	Google Earth	27/01/2023	Debris slide	WSP	High	Accurate							45.81384101	
2023-TT03	Google Earth	27/01/2023	Debris slide	WSP	High	High							62.77828933	
HDG_ID094	HDGEO (2025)	2/05/2025	Rock fall	HDGEO	High	Inferred				0.1			18.65121976	
2026-CT01	Ground visit	22/01/2026	Debris slide	WSP	High	Approximate	1	0.5	2	80	40	160	251.8170119	29.11
2026-MT01	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	3	2	4	75	50	100	25.20753348	24.21
2026-MT02	Ground visit	22/01/2026	Piping	WSP	High	Accurate							25.5482549	
2026-MT02-A	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.1	1	0.6	0.2	1.3	1.323373122	25.49
2026-MT03	Ground visit	22/01/2026	Piping	WSP	High	Accurate							4.863487953	19.13
2026-MT04-A	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	2	1.5	5	1000	750	2500	371.3363781	15.33
2026-MT04-B	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1.5	0.5	2	75	25	100	29.94373132	11.03
2026-MT06	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	6	3	13	13.15390207	29.66
2026-OT01	Ground visit	22/01/2026	Slope displacement	WSP	High	Accurate							2.256791296	
2026-TT01	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	1.5	40	20	60	30.13107326	33.02
2026-TT10	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	5	3	7	1000	600	1400	158.9071503	30.63
2026-TT11	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	2	1	3	300	150	450	163.2443365	28.55
2026-TT12	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	6	3	9	1800	900	2700	294.3007859	29.2
2026-TT13	Ground visit	22/01/2026	Debris slide	WSP	High	Approximate	2	1	3	100	50	150	56.64180588	30.71
2026-TT14	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	6	4	8	4500	3000	6000	737.1476718	22.5
2026-TT15	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	3	2	5	225	150	375	75.30638207	25.43
2026-TT16	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	6	2	12	26.86125336	31.81
2026-TT17	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	2	0.5	4	3.643780733	45.73
2026-TT18	Ground visit	22/01/2026	Debris slide	WSP	High	Approximate	0.5	0.2	1	1.5	0.5	3	20.48579943	47.3
2026-TT19	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	2	30	15	60	33.14790206	31.65
2026-TT20	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	2	45	23	90	44.50739509	35.74
2026-TT22	Ground visit	22/01/2026	Rock slide	WSP	High	Approximate	1	0.3	1.5	30	10	45	28.44487799	43.57
2026-TT23	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	6	4	10	4800	3200	8000	718.7528357	25.66
2026-TT24	Ground visit	22/01/2026	Debris slide	WSP	High	Approximate	1	0.5	1.5	15	6	20	13.77057929	35.66
2026-TT25	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	5	2	10	9.265212004	25.84
2026-TT26	UAV	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	1.5	35	18	53	34.98456815	17.88
2026-TT27	UAV	22/01/2026	Debris slide	WSP	High	Accurate	2	1	3	25	12	36	12.13701559	29.96
2026-TT28	UAV	22/01/2026	Debris slide	WSP	High	Accurate	8	6	10	4500	3400	5700	572.1197553	18.29
2026-TT29	UAV	22/01/2026	Debris slide	WSP	High	Accurate	1.5	1	3	135	90	270	86.97779023	25.9
2026-TT03	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	1.5	10	5	15	11.42696577	29.13
2026-TT30	Ground visit	22/01/2026	Debris slide	WSP	High	Approximate	1	0.5	1.5	3	1.5	4.5	3.399860896	43.14
2026-TT31	Ground visit	22/01/2026	Slope displacement	WSP	High	Accurate							9.993803175	
2026-TT04-B	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	5	2	10	8.982786351	33.81
2026-TT04-A	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	0.5	0.2	1	1.5	0.6	3	2.823320364	39.93
2026-TT05	Ground visit	22/01/2026	Slope displacement	WSP	High	Accurate							28.91961619	
2026-TT06	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	1.5	5	2.5	7.5	5.894992002	42.39

SourceID	Source	Date	Type	Originator	Confidence	Accuracy	Depth (m) estimated	Depth (m) lower	Depth (m) upper	Volume (m³) estimated	Volume (m³) lower	Volume (m³) upper	Area (m²)	F Angle (°)
2026-TT07	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	2	1	3	30	15	45	14.35622912	37.29
2026-TT08	Ground visit	22/01/2026	Scour	WSP	High	Accurate							3.851428553	19.67
2026-TT09	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	4	2	7	500	250	875	121.6184585	21.56
2026-WT01	UAV	22/01/2026	Debris slide	WSP	High	Accurate	5	4	7	900	720	1300	179.0160691	11.01
2026-WT02	UAV	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	1.5	7	3.5	10	7.523944659	40.7
2026-CG03	UAV	22/01/2026	Debris slide	WSP	High	Accurate	3	2	4	210	140	280	70.22193776	12.99
2026-CG01	UAV	22/01/2026	Debris slide	WSP	High	Accurate	8	5	10	13000	8000	16000	1666.69604	12.52
2026-CG02	UAV	22/01/2026	Debris slide	WSP	High	Accurate	2	1	3	50	25	75	21.4595677	19.78
2026-CG04	Ground visit	22/01/2026	Debris slide	WSP	High	Accurate	1	0.5	2	25	12	50	23.48121881	25.46
2026-MT02-B	LINZ	22/01/2026	Piping	WSP	High	Accurate							2.192748832	7.51
2026-TT02	Ground visit	22/01/2026	Slope displacement	WSP	Low	Approximate							4.86670598	
2026-MT05	UAV	22/01/2026	Debris slide	WSP	High	Accurate							236.2124926	
2026-MT06	UAV	22/01/2026	Debris slide	WSP	High	Accurate							98.07011202	
HDG_ID001	DEM			HDGEO	Relict	Accurate	4			13000			2923.394983	
HDG_ID002	DEM			HDGEO	Relict	Approximate	4			8000			1841.739777	
Relic-CG01	DEM		Relic	WSP	Low	Accurate							1812.436273	

Appendix B Landslide susceptibility analysis methodology

Methodology

Landslide susceptibility was assessed using a statistical modelling approach adapted from that developed for the Auckland Landslide Susceptibility Study (WSP, 2025)[2]. The approach uses landslide inventory data and spatial variables representing factors influencing slope stability to model relative spatial susceptibility to landsliding.

The analysis used logistic regression, with grouped LASSO (Least Absolute Shrinkage and Selection Operator) penalisation for variable selection. LASSO reduces the influence of less informative predictors by shrinking their coefficients towards zero, allowing variables that contribute little to prediction to be removed before fitting the final logistic regression model.

A 1 m-resolution analysis grid was used, which was considered appropriate for the area of Mauao and the required scale for the assessment, and was supported by the availability of high-resolution topographic. Mapped landslide source areas were used to define locations of observed landsliding, with each grid cell represented by a binary response identifying landslide presence (1) or absence (0). The relationship between this response and the selected susceptibility variables was then modelled statistically to produce a continuous estimate of relative landslide susceptibility across Mauao.

Input data

Table 38 summarises the input variables used in the susceptibility model, which are shown spatially in Figure 46. Variables and resolutions were selected to represent site characteristics considered relevant to shallow slope instability at Mauao. Continuous variables were standardised prior to modelling to place variables onto a common scale.

Statistical model

For each model iteration, cells representing mapped landslides were combined with a random selection of cells without mapped landslides to produce a balanced dataset. The balanced data were divided into training and testing subsets, with 75% used for training and 25% reserved for testing.

A grouped LASSO logistic regression model was fitted to the training data. The degree of LASSO penalisation was selected using 10-fold cross-validation, and predictors identified as unimportant through penalisation were removed. A standard logistic regression model was then fit using the retained predictors and applied to the testing data.

This process was repeated 5,000 times using different randomly selected non-landslide cells and training/testing subsets. The final susceptibility value for each 1 m grid cell was calculated from the mean predicted probability across the model iterations.

[2] WSP (2025). *Auckland Landslide Susceptibility Study*. Technical Report GS 2025/09, prepared for Auckland Council. https://knowledgeauckland.org.nz/publications/auckland-region-landslide-susceptibility-assessment-may-2025/

Table 38. Input variables used for landslide susceptibility assessment

Variable	Data source	Resolution (m)		Role in model
		Original	Implemented	
Elevation	LiDAR DEM[1]	1	1	Proxy for broad spatial variation in geology as suitable geological data was unavailable
Slope Angle	Derived from LiDAR DEM[1]. The 1 m DEM was resampled to 4 m using nearest-neighbour resampling, and slope was then derived from the 4 m DEM using the ArcGIS Slope tool.	1	4	Represents local slope steepness; steeper slopes generally correspond to higher susceptibility to landslides
Local Slope Relief	Derived from LiDAR DEM[1] using the ArcGIS Focal Statistics tool, calculated as the range within a 6-cell-radius circular neighbourhood on the 1 m DEM.	1	1	Represents the local height and angle of the slope surrounding each grid cell in the elevation dataset (i.e. the broader steepness rather than just the slope angle of each cell). Higher, steeper slopes are generally more susceptible to failure. Slope height also influences the size and runout of landslides.
Landslide Inventory	Landslide inventory developed for this study; refer Section 5.2.1.	1	1	Defines observed landslide source areas used to fit the statistical model
Curvature	Derived from LiDAR DEM[1]. The 1 m DEM was resampled to 4 m using nearest-neighbour resampling, and curvature was then derived from the 4 m DEM using the ArcGIS Curvature tool.	1	4	Represents local slope form and changes in terrain convexity/concavity. The curvature (convex, flat, or concave) of a slope influences the flow of water across it, and the concentration of flows, which can in turn influence slope stability.
Geomorphon	Derived from LiDAR DEM[1]. The 1 m DEM was resampled to 4 m using nearest-neighbour resampling, and landform classes were then derived from the 4 m DEM using the ArcGIS Geomorphon Landforms tool, with a 10-cell search distance.	1	4	Represents local landform type derived from terrain morphology. The topographic position of each landform can influence its susceptibility to landslides, with landslides commonly observed in the middle and upper parts of hillslopes.
Overland Flow Paths	TCC[2]	1	1	Represents hydrological influence on slope instability. Slopes located close to overland flow paths are likely to have shallower groundwater levels and concentrated runoff and infiltration during storm events
Rock Bluff	Site and desktop study observations	1	1	Identifies areas where rock-slope failure processes differ from the shallow-landslide model

1: Toitū Te Whenua Land Information New Zealand (LINZ). (2025). Bay of Plenty – Tauranga LiDAR 1m DEM (2025) [Digital elevation model]. LINZ Data Service.

2: Tauranga City Council (TCC). Flood Risk GIS Layer

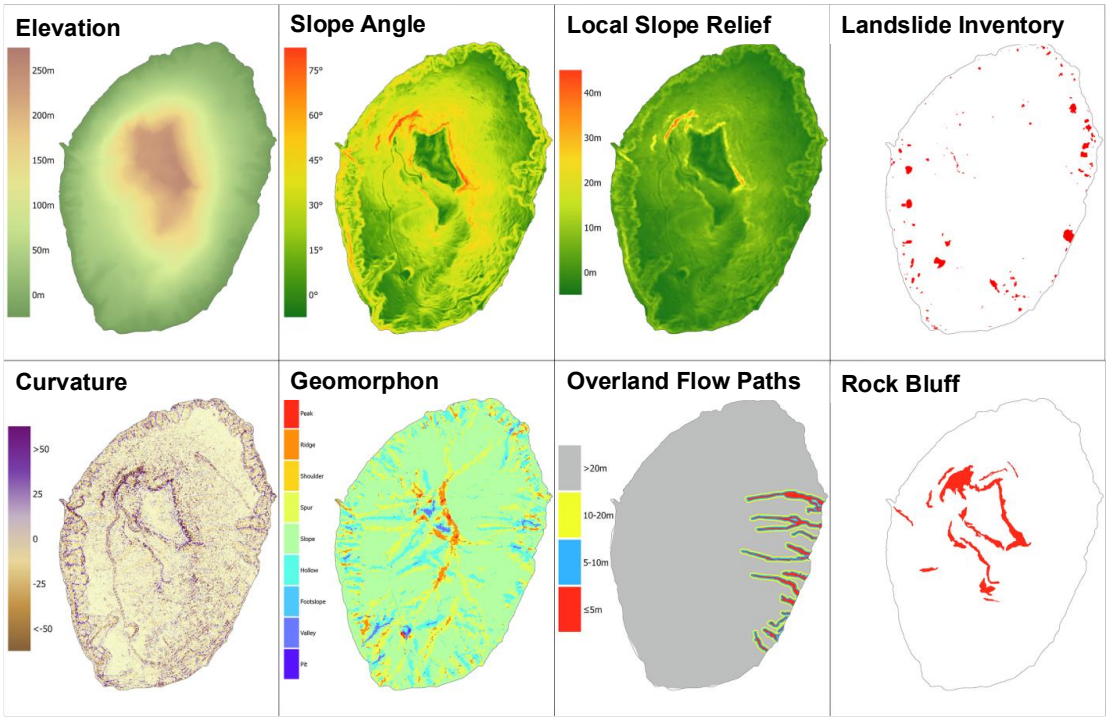

Figure 46. Input variables for landslide susceptibility assessment.

Classification

The continuous predicted landslide susceptibility was classified into five susceptibility classes: Very Low, Low, Moderate, High and Very High.

The initial class boundaries were derived following the classification approach adopted in the Auckland study (WSP, 2025). In that method, the probability threshold providing the highest classification accuracy was used to distinguish the more susceptible (i.e., Moderate, High and Very High) from less susceptible (i.e., Very Low and Low) parts of the model output, with Jenks natural breaks used to subdivide probabilities above and below this threshold into the five susceptibility classes.

At Mauao, these statistically derived boundaries were subsequently reviewed against the mapped landslide inventory, terrain and site observations. Minor adjustments were made based on this comparison to better represent observed site conditions.

Results

The final susceptibility model achieved an accuracy of 74.8% indicating reasonable discrimination between mapped landslide and non-landslide areas given the limited study area and landslide inventory. Table 39 summarises the distribution of susceptibility classes across the mapped landslide inventory and the wider Mauao study area. 75.8% of the mapped landslides fall within the High or Very High susceptibility classes, which together comprise 27.2% of the study area.

Table 39. Landslide susceptibility classification summary

Susceptibility class	Study area		Landslide inventory		
	Area in class (m^2)	Percentage of study area	Area of landslides in class (m^2)	Percentage of total area of landslides	Percentage of total study area
Very Low	156,047	20.1%	242	1.7%	0.03%
Low	192,707	25.1%	992	7%	0.13%
Moderate	211,423	27.5%	2203	15.5%	0.29%
High	87,917	11.4%	2828	19.9%	0.37%
Very High	121,398	15.8%	7928	55.9%	1.03%

Appendix C Landslide triggering information

C.1 Rainfall

Triggering Estimates from the Literature

De Vilder and Massey (2024a) provide estimated rainfall thresholds for landslide triggering. The available information indicates the threshold for landslides in the Bay of Plenty region is 201 mm/24 hrs or 8 mm per hour average intensity (de Vilder and Massey, 2024a). This threshold provides a crude baseline estimate for the 2% triggering threshold for rainfall-induced landslides regionally, where 2% of the population of known rainfall-induced landslides have occurred at or above the given rainfall intensity/duration.

Site-Specific Rainfall Triggering Data

Analysis conducted as part of this study indicates that there is a relationship between 5-day antecedent rainfall, 24-hour rainfall, and area affected by landsliding on Mauao (Figure C-1). It is noted that many landslide triggering events occur at small rainfall values (both 24-hr and 5-day) and there are many rainfall events that have not resulted in landslides. These data show that inferring different numbers and areas of landslides in rainfall events is not straightforward. However, the data may be useful for developing risk reduction measures such as TARPs.

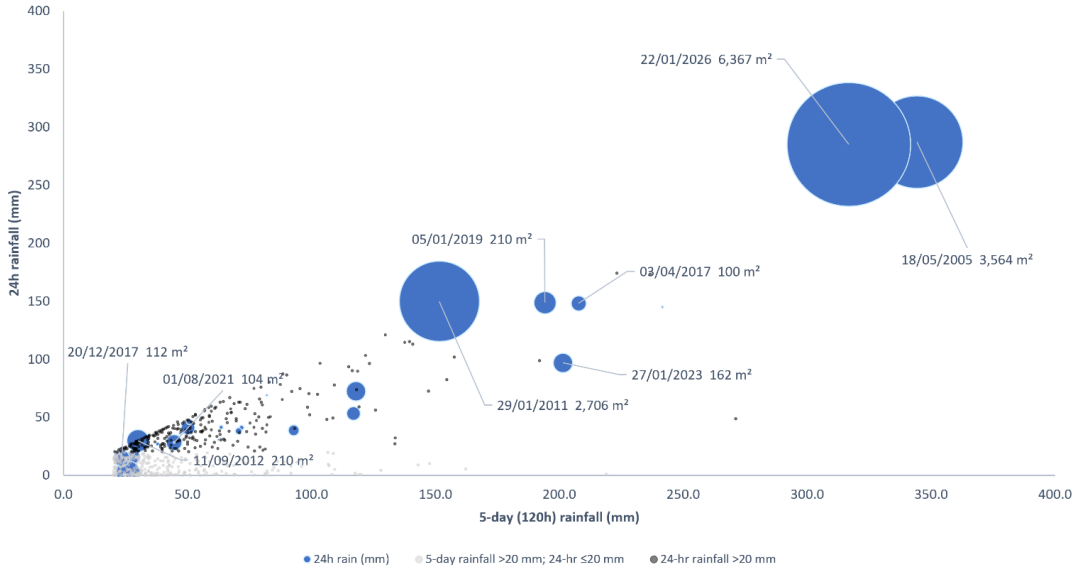

Figure C-1: Total mapped landslide area against maximum 5-day and 24-hr storm rainfall for 28 landslide events, 2004-2026. Black and grey data points are rainfall events above 24-hr and 5-day totals of 20 mm, respectively, without corresponding landslide data.

24-hour Triggering Threshold Estimates from HIRDS

To consider triggering thresholds for the largest volume scenario (50M m^3), different 24-hour rainfall intensities were selected from Earth Science New Zealand's (ESNZ's) High Intensity Rainfall Design System (HIRDS; Figure C-2).

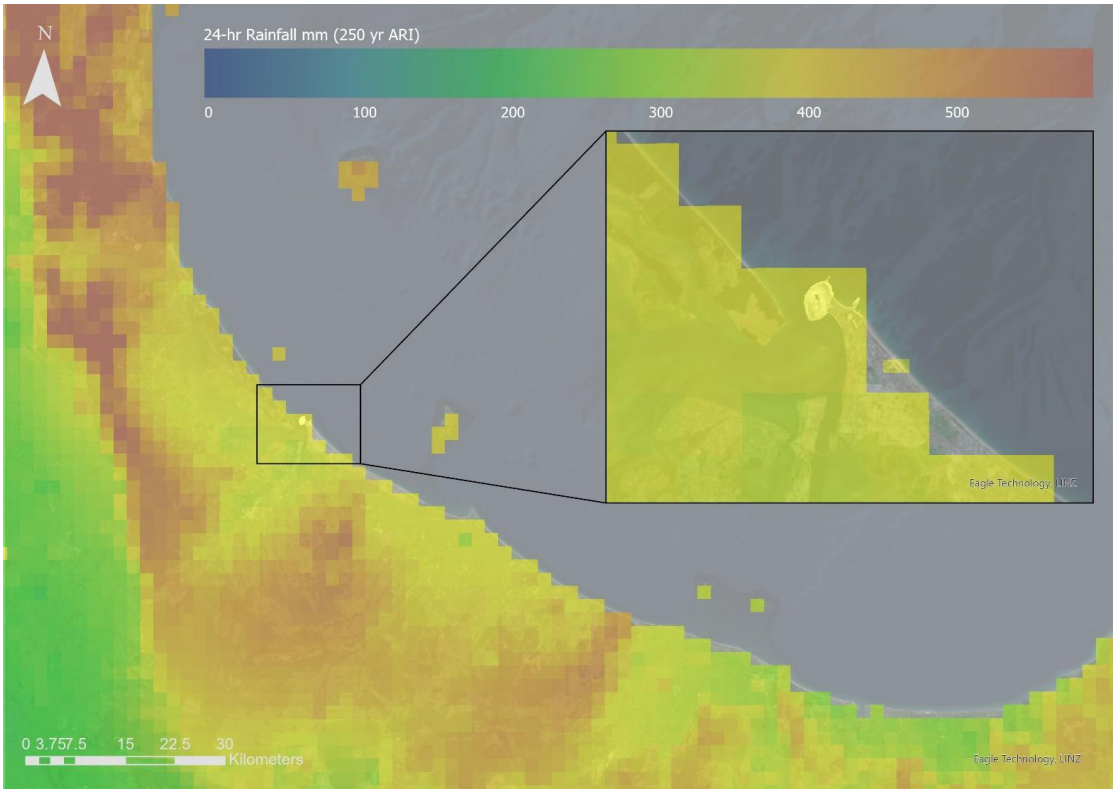

Figure C-2: HIRDS rainfall data for a 24-hour interval at 250-year ARI. The value at Mauao is 12.6 mm/hour for a total of 302.4 mm.

Effect of Climate Change

Changing climatic conditions have a complex relationship with rainfall intensity. For the Tauranga and the Bay of Plenty region, average annual precipitation and the number of 'very rainy days' are expected to slightly decrease (BOPRC, 2026). The intensity of 24-hr rainfall is expected to marginally increase based on HIRDS modelling (Figure C-3) and the annual likelihood of extreme rainfall (e.g., in major storms) is expected to increase by a factor of 1.4 to 3 (BOPRC, 2025). It is noted that the scale of individual landslide events may increase due to increased storm intensity, even if the long-term annual average remains stable. Due to the wide range of uncertainty in regional climate projections, as well as a lack of Mauao-specific rainfall data and landslide initiation thresholds (Figure C-3), different scenarios have not been incorporated as scaling factors for the background rate or 50M m^3 triggering AEPs.

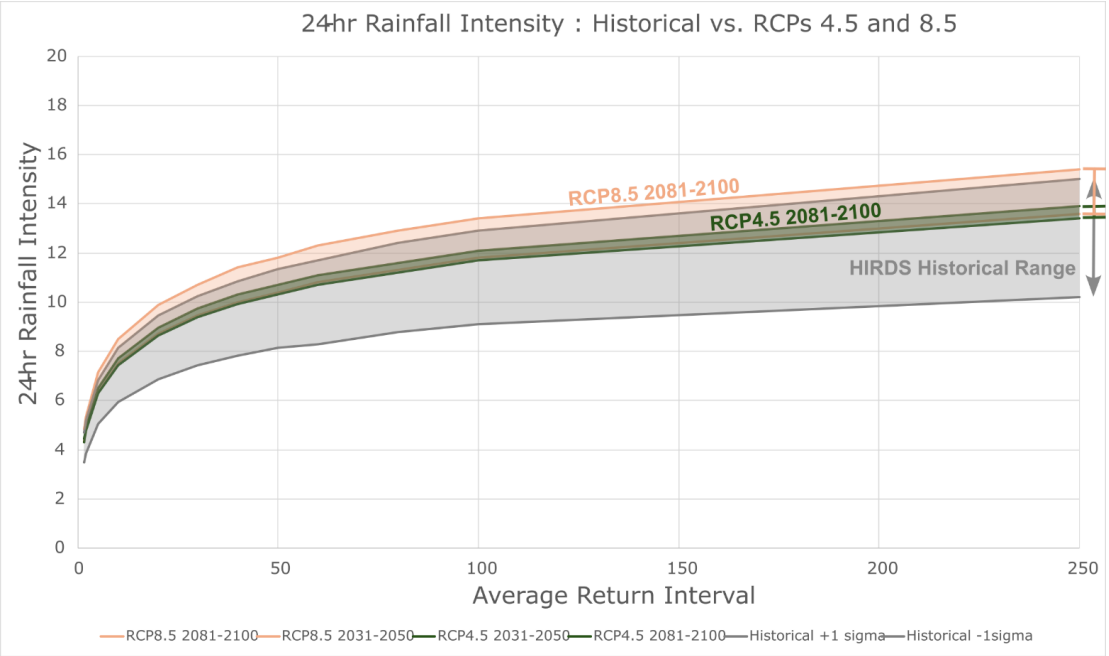

Figure C-3: HIRDS data for 24-hour rainfall intensity (mm/hr) at different ARIs and under different climates.

C.2 Earthquakes

Previous Events

Avalon Industrial Ltd. (2006) reported landslides and rockfall following the 2004 Rotoehu event: 'Many shallow surface slips occurred on the colluvial slopes (typically <0.2 m x 1 m^2)….Fifteen slips of 1 m^3 to 3 m^3 and many more of less than 1 m^3 …in the oversteepened cut slopes above the various tracks.' They estimated PGA of 0.05 to 0.15 g based on reported shaking intensities and damage. It is noted that there is uncertainty in attributing these slips to the earthquake – they considered that some may be attributable to rainfall following a fire in January 2003. However, 'A few larger slips in the colluvium were located which had clearly occurred in the preceding few days' (Avalon, 2004).

The study also noted small overslips along tracks: 'At least fifteen individual small shallow circular overslips of 1 m^3 to 3 m^3 in volume were found. The slip material had failed from the colluvium exposed by the track cuts and debris now rests on the tracks….These slips generally pose little or no hazard to track users as they will be observed and persons could reasonably easily step out of the path of any active slip' (Avalon, 2004).

Triggering estimates from NSHM

The National Seismic Hazard Model (NSHM) provides national-scale hazard estimates at different locations, intensity metrics, site characteristics, annual exceedance probabilities, and statistical measures. Three combinations of these variables were selected to represent different contributions to hazard (Figure C-4).

Peak ground acceleration (PGA) was selected as a representative intensity metric, noting that site-specific risk analysis could use spectral accelerations appropriate for individual hillslopes. A representative Vs30 of 750 m/s was selected based on Foster et al. (2019).

Here, the Lower Frequency, Higher Impact event conveys the combination of variables in the NSHM that yield the highest PGAs at Mauao. Higher intensity earthquake ground motions over larger average recurrence intervals have not been defined.

Earthquake-induced landslides may have different failure mechanisms, Area-Frequency (A-F), and Area-Volume (A-V) relationships than rainfall triggered landslides. There are no site-specific data to constrain the potential for different landslide characteristics from seismic triggers. However, the landslides in volcanic hills resulting from the 1987 Edgecumbe earthquake provide a possible analogue. Landslides in pumiceous sand, scoria, and ignimbrite were described as being shallow and 'minor' in response to c. MMI 10 shaking (Franks, 1988). In lieu of other data, separate A-F distributions were not considered for Mauao.

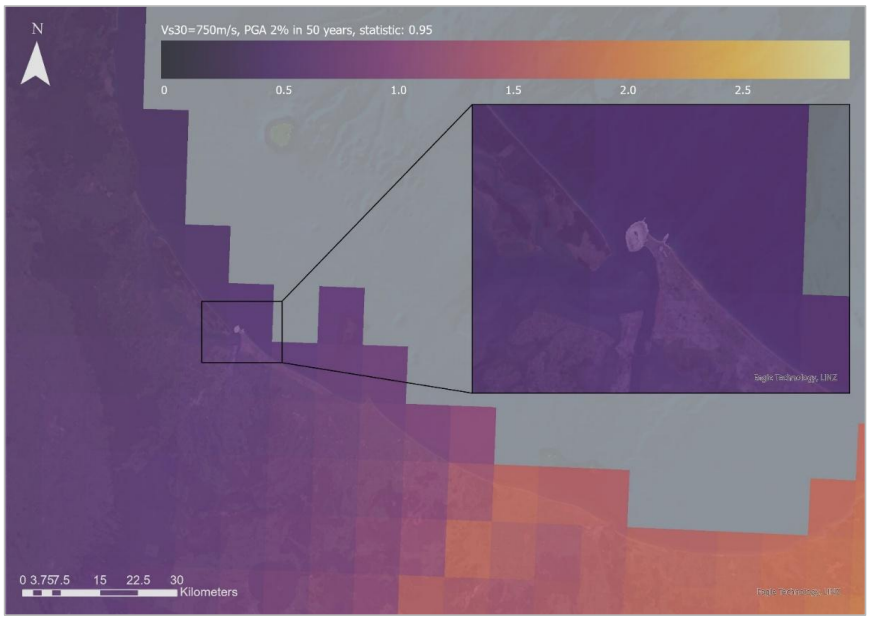

Figure C-4: Snapshot of NZ NSHM for the 50M m^3 triggering scenario. The PGA at Mauao (for the given inputs) is 0.48g.

Appendix D Rockfall Frequency

The following evidence and logic were used to estimate values in Table 11. The estimates are associated with large epistemic uncertainties.

Time Bands: Time bands were selected to loosely conform with different kinds of evidence, with inferred geomorphological processes, and with the approach of Massey et al. (2013). The 1-20 year time band coincides with the span over which historical observations of rockfall are available. The 20-100 year timeframe is consistent with the earliest imagery used to map the boulder inventory (~50 years ago). The 100-1000 timeframe is consistent with Māori occupation, use, and modification of Mauao. The 1000-10000 year timeframe is the inferred time period over which the mapped boulders are representative of rockfall activity (approximately since the start of interglacial conditions over the Holocene).

Total Accumulated Boulders: Estimated numbers of design boulders (i.e., 1-m diameter) were selected based on historical observations, the boulder inventory, and geomorphology judgement. Historical observations were considered to be underreported in this regard. Different size bin ranges centred at 1 m were considered to account for uncertainty in diameter estimation. In the inventory, there were 51 and 125 boulders of diameter between 1 ± 0.1 and 1 ± 0.25 m, respectively, from 2010 to 2026. These values would correspond to annual frequencies of 3.19 and 7.81 '1-m' boulders per year. We estimated 100 boulders accumulated over 20 years and 250 boulders accumulated over 100 years. These estimates account for increased rates over the more recent decades due to fires, deforestation, and other human activity. The estimates for the remaining time bands were assigned based on a total budget of ~2400 1-m boulders (1460 and 3811 boulders of 0.9-1.1 and 0.75-1.25 m diameter, respectively) in the inventory and an assumed decrease in overall erosion rates with age due to generally cooler Holocene climate and stabilising effects of more forest cover on rockfall frequency and intensity (Moos et al., 2017) and broader slope stability which indirectly influences rockfall production rates. It is acknowledged that this figure may be an underestimate due to the unquantified effect or vegetation cover and boulder burial over time on mapping.

Annual Accumulation Rates: The number of boulders per year were calculated based on the total accumulated boulders divided by the upper age for that timeframe (i.e. 20, 100, 1000, and 10000 years).

Boulders per Event: The number of boulders produced per rockfall event can be based on historical observations and/or logical assumptions about the rockfall activity in, for example, representative storms that occur over that particular timeframe (Massey et al., 2013). There have been approximately 2 boulders per event over the last c. 20 years. The size of these boulders has been variable but due to the potential for underreporting we conservatively use this value for the design boulder size of 1 m. The number of rockfalls per event increases for more infrequent triggers over longer timeframes. Up to the 1000-10000 year timeframe, these values were selected so as to be proportional to the timeframe (2 vs 10 boulders for 20- and 100-year timeframes, respectively). It was considered that the number of boulders triggered for the most infrequent storms likely has a maximum threshold, above which additional rain does not equate to detachment of additional rockfall. On balance, a value of 500 boulders was selected (or, one half of the 1000 based on

proportional scaling to timeframe) on the basis that the 2500-year average return period earthquake in this range (0.04% AEP) is only expected to produce up to c. 250 boulders.

Effective (Rockfall) Event Annual Frequency: This number is calculated from the previous two parameters (accumulation rate divided by boulders per event).

Sense Checks: The numbers of boulders per year and rockfall event frequencies might be expected to be similar to historical observations and the inventory (accounting for the limitations of both datasets). The approach above results in a total annual rockfall rate for 1 m boulders, excluding seismic triggers, at 8.4 per year and c. 2.8 rockfall events (in which multiple boulders can be mobilised) per year. The inventory indicates c. 3-8 c. 1-m boulders per year and historical observations indicate an average number of c. 3.5 rockfall (all sizes) produced per event. Given the large epistemic uncertainties in all sources of data, and the incompleteness of the inventory, these values were considered to be consistent with the available data.

The NSW Transport Guide to Slope Risk Analysis also provides some qualitative descriptors for different field observations and annual detachment probabilities. In general, most rock bluffs around Mauao are consistent with an annual probability of 1 (i.e., failure could be triggered by an event with a short return period or ‘fairly’ common event): (i) the rockfall mechanism is clear in current slopes, (ii) there is ample evidence of past failures, (iii) failure could be initiated with minor progressions of e.g., joint opening, and (iv) failure could be initiated by a triggering event such as a 1–10 year ARI storm.

Appendix E $P_{(S:T)}$ Calculation

Track	Section	Total length (m)	Normal length (m)	Slope (%) (excl. stairs)	Normal speed (m/s)	Stair length (m)	Stair speed (m/s)	Stair rest (5 min)	Lookouts (5 min each)	Bench/rest stop	Stoppage time (s)	One-way time (s)	One-way time (min)	PST — 1 visit/yr	PST — 12 visits/yr	PST — 52 visits/yr
Connecting Tracks	C1	213.8	154.5	12.91	0.890	59.3	0.5	Yes	0	No	300	592	9.9	1.88E-05	2.25E-04	9.76E-04
Connecting Tracks	C2	164.3	164.3	8.74	1.030	0.0	0.5	No	0	Yes	600	759	12.7	2.41E-05	2.89E-04	1.25E-03
Connecting Tracks	C3	80.9	80.9	7.46	1.078	0.0	0.5	No	1	Yes	900	975	16.3	3.09E-05	3.71E-04	1.61E-03
Connecting Tracks	CI	261.1	261.1	74.25	0.104	0.0	0.5	No	0	Yes	600	3,109	51.8	9.86E-05	1.21E-03	5.26E-03
Connecting Tracks	CJ	160.9	160.9	36.11	0.395	0.0	0.5	No	0	Yes	600	1,007	16.8	3.19E-05	3.83E-04	1.66E-03
Motu Kauri	MA	490.1	490.1	6.43	1.117	0.0	0.5	No	0	Yes	600	1,039	17.3	3.29E-05	3.95E-04	1.71E-03
Motu Kauri	MB	407.4	407.4	12.74	0.896	0.0	0.5	No	0	Yes	600	1,055	17.6	3.34E-05	4.01E-04	1.74E-03
Motu Kauri	MC	700.2	700.2	18.14	0.741	0.0	0.5	No	0	Yes	600	1,544	25.7	4.90E-05	5.88E-04	2.55E-03
Motu Kauri	MD	340.9	340.9	8.68	1.032	0.0	0.5	No	2	Yes	1,200	1,530	25.5	4.85E-05	5.82E-04	2.52E-03
Waikorire	E1	299.3	299.3	6.74	1.105	0.0	0.5	No	0	No	0	271	4.5	8.59E-06	1.03E-04	4.47E-04
Waikorire	E2	153.9	62.0	5.12	1.170	91.9	0.5	Yes	0	No	300	537	8.9	1.70E-05	2.04E-04	8.85E-04
Waikorire	WF	147.5	147.5	13.79	0.863	0.0	0.5	No	0	No	0	171	2.8	5.42E-06	6.50E-05	2.82E-04
Waikorire	WG	610.5	312.4	11.88	0.923	298.1	0.5	Yes	0	Yes	900	1,835	30.6	5.82E-05	6.98E-04	3.02E-03
Waikorire	WH	403.1	251.3	18.65	0.728	151.9	0.5	Yes	1	Yes	1,200	1,849	30.8	5.86E-05	7.03E-04	3.05E-03
Oruahine	O	532.9	427.4	11.99	0.919	105.5	0.5	Yes	0	Yes	900	1,576	26.3	5.00E-05	6.00E-04	2.60E-03
Te Ara Tūtanga	T	2,878.9	2,878.9	7.08	1.092	0.0	0.5	No	3	Yes	2,100	4,736	78.9	1.50E-04	1.80E-03	7.81E-03



wsp.com

11.2 Mauao Recovery: Business Support and Rates Relief Options

File Number: **A21455958**

Author: **Emily McLean, Recovery Business & Community Manager**
Jim Taylor, Manager: Rating Policy and Revenue
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Authoriser: **Charlie Rahiri, Recovery Manager**

PURPOSE OF THE REPORT

1. To respond to feedback received from businesses affected by the Mauao landslides and associated road closures, including requests for further business support.
2. To assess the applicability of Council's Rates Remission Policy and other potential support measures for businesses directly affected by the Mauao recovery response.
3. To seek Council direction on whether any further support should be provided and, if so, the preferred form of assistance.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Mauao Recovery: Business Support and Rates Relief Options".

(b) Notes the feedback received from business affected by the Mauao landslide and associated road closures.

(c) Notes the assessment of the applicability of the Council Rates Remission Policy to the affected businesses.

(d) Determines whether:

(i) No further support is provided; or

(ii) A targeted rates remission approach is adopted; or

(iii) Alternative support measures are progressed; or

(iv) A combination of the above options is progressed.

EXECUTIVE SUMMARY

4. This report responds to concerns raised by businesses impacted by the Mauao landslide and associated road closures that occurred following the January 2026 severe weather event. Businesses advised elected members that the closure of Marine Parade and Adams Avenue, together with the prolonged disruption to visitor activity associated with restricted access to Mauao, had a significant impact on business performance and recovery.
5. Since January 2026, Council and partner agencies have undertaken a range of support initiatives including direct business engagement, activation funding, rates payment postponements, fee waivers, recovery advocacy and distribution of $228,340 through the Mayoral Relief Fund. Approximately 56% of relief funding was directed toward businesses, including $40,000 provided to the Mount Business Association for local activation activity. Engagement has also been undertaken through individual business visits, regular business check-ins, recovery working groups and meetings with elected members.
6. At a meeting held on 2 November 2026, affected businesses requested that Council reconsider the impact of commercial rates and identify further support measures.

7. Council's current Rates Remission Policy (2022) provides a mechanism for relief where a natural disaster or emergency affects a property's ability to be occupied. However, the policy was primarily developed for situations where properties are unable to be occupied for an extended period and does not specifically address broader economic impacts experienced by businesses that remain operational.

8. Three broad options are presented, including a hybrid option combining elements of Options 2 and 3 for Council consideration:

   (a) Option 1: No additional support ($0)

   (b) Option 2: Targeted rates remission (approximately $4,000 to $37,800)

   (c) Option 3: Alternative support measures (approximately ~$7,500 to ~$150,000)

   (d) Option 4: Hybrid approach combing rates relief and alternative support (to be determined based on selected measures)

9. The options presented involve balancing support for businesses impacted by an unprecedented event against policy consistency, precedent considerations, funding availability and equity for other businesses affected by disruptions across the city.

BACKGROUND

10. On 22 January 2026 a fatal landslide occurred at Mauao, prompting an emergency response led by New Zealand Police and partner agencies. To protect public safety and support emergency management activities, Police established cordons and access restrictions around the landslide area. As a result, the Mount Maunganui Beachside Holiday Park, Mount Hot Pools, Pilot Bay boat ramp and surrounding public areas were immediately closed. Access restrictions also included the closure of Marine Parade and Adams Avenue, directly affecting a cluster of food and beverage businesses operating within the Mount North precinct.

11. A Police-enforced cordon remained in place between 22 and 27 January 2026 while emergency response activities, recovery operations, investigations and site assessments were undertaken. Following the reduction of the cordon, three businesses on Adams Avenue continued to experience restricted access until 6 February 2026 due to ongoing geotechnical risk management requirements and operational controls associated with the main campground landslide site.

12. In late July 2026, further landslide regression events occurred at the main campground landslide site. As a precaution, Adams Avenue was closed to vehicles for 26 days between 24 July and 19 August 2026 while additional assessments and mitigation works were undertaken, creating a further period of disruption for affected businesses.

13. While recovery milestones have been achieved, access restrictions remain in parts of the Mauao precinct. The Mount Hot Pools, Mount Maunganui Beachside Holiday Park and portions of the recreation reserve remain closed. The summit and loop track network are not currently accessible. The Mount Surf Lifeguard Service building has reopened and the Pilot Bay boat ramp now operates under Trigger Action Response Plan (TARP) settings.

Business impacts

14. The interruption occurred during the peak summer trading period for many Mount North businesses. While impacts varied between operators, businesses have consistently advised Council that disruption occurred during the most important trading period of the year and affected revenue normally relied upon to sustain businesses through quieter winter months.

15. Feedback from businesses can be generally summarised by three (3) broad impact themes:

   (a) Reduced access and visitation.

   (b) Business revenue and operational impacts.

   (c) Ongoing uncertainty regarding reopening timeframes and visitor activity.

16. On 3 February 2026, a request was received seeking full annual rates remission for 15 food and beverage businesses directly affected by the road cordons and access restrictions. Council considered the request under the Rates Remission Policy and determined that the circumstances did not satisfy the policy requirement relating to properties being unable to be occupied for an extended period.

Support delivered to date

17. Recognising business and economic recovery as an important component of the wider Mauao recovery programme, Council and partner agencies have undertaken a range of support, advocacy and recovery initiatives since January 2026. These activities have focused on immediate relief, business engagement, visitor activation, information sharing and restoration of access.

Direct financial support

18. Through the Mayoral Relief Fund, a total of $228,340 was distributed to 39 eligible applicants. Approximately 56% of this funding supported businesses, including one-off contribution to affected food and beverage businesses (calculated on number of days initially closed) and a $40,000 contribution to the Mount Business Association to deliver local activations and initiatives aimed at encouraging visitation and supporting recovery. Central government contributed $200,000 toward the fund, however no additional direct business recovery funding was secured.

19. Additional practical support provided by Council included:

    (a) Postponement of rates payment obligations until 31 December 2026;

    (b) waiver of Licence to Occupy fees for eligible businesses operating outdoor dining areas;

    (c) deferment of food licensing verification fees; and

    (d) advocacy for additional recovery assistance through recovery and central government channels.

Activation and promotion

20. Council provided $40,000 of activation funding to the Mount Business Association, which was combined with external funding sources to support activities aimed at encouraging visitation, supporting local businesses and restoring confidence in the area including a specific focus on attracting visitors back to the Mount North area.

Recovery and reopening

21. The primary focus of the recovery programme has been restoring safe public access to Mauao and reopening affected facilities and infrastructure as quickly as possible. This has included extensive geotechnical assessment, risk management, design and implementation of mitigation works and ongoing planning for reopening of the track network and surrounding facilities when it is safe to do so. Businesses have consistently identified restoration of access to Mauao as the single most important factor supporting long-term recovery and visitor return.

Engagement, referral and advocacy

22. Since January 2026, Council staff, elected members and recovery partners have undertaken extensive direct engagement with affected businesses. During the initial emergency response and recovery period, Council staff undertook regular business visits and check-ins, averaging approximately fortnightly engagement with affected businesses over the first three months following the event, in addition to responding to ongoing issues as they arose. Engagement was most intensive during the immediate response period and following subsequent landslide regression events in July 2026.

23. Engagement activities have included individual business visits, regular check-ins, recovery workshops, direct correspondence, community meetings and meetings with elected members.

24. Council also established a business recovery working group involving the Tauranga Business Chamber, Tourism Bay of Plenty and the Mount Business Association to coordinate information sharing, recovery support and advocacy efforts. Businesses were provided with information about assistance available through partner agencies including MSD, IRD and MBIE, although no dedicated national business recovery support package was established for affected businesses.

Challenges associated with business recovery support

25. While Council recognises the significant impacts experienced by affected businesses, local government has limited mechanisms available to provide direct financial assistance to commercial operators. Unlike central government disaster recovery programmes, Council does not maintain a discretionary business hardship fund and its primary role is generally focused on restoring access, public infrastructure, community facilities and enabling economic recovery.

26. Other challenges include:

    (a) many affected business operators are tenants rather than property owners;

    (b) rates are collected from landowners and there is no mechanism requiring any rates relief to be passed through to tenants;

    (c) the Rates Remission Policy was designed primarily for properties that are unable to be occupied following an emergency event;

    (d) any departure from the policy framework may create expectations for future events;

    (e) businesses experienced impacts differently depending on location, timing and reliance on visitor activity, creating equity considerations when determining eligibility for support.

Outstanding issues raised by businesses

27. Despite the support provided to date, businesses advised elected members at a meeting on 2 November 2026 that significant concerns remain regarding the cumulative impact of the landslide, ongoing precinct closures and business recovery of the area. Businesses acknowledged the work undertaken through the recovery programme but raised concerns about the extent to which support had reached the businesses most directly affected. Key themes raised are summarised below, with more detailed meeting notes provided in **Attachment 1**.

    (a) Financial hardship and lost revenue, particularly following disruption during the peak summer trading period.

    (b) Commercial rates burden and requests for Council to reconsider the impact of rates during periods of significant disruption.

    (c) Communication, engagement and inclusion of the most affected businesses in recovery and activation initiatives.

    (d) Transparency of Mayoral Relief Fund and activation funding allocation and expenditure.

    (e) Greater certainty around Mauao reopening, Mount Hot Pools reopening and other recovery milestones to support business planning.

    (f) Destination marketing, promotion and activation activity, including stronger involvement of affected businesses and greater promotion of alternative Mount attractions while access to Mauao remains restricted.

STATUTORY CONTEXT

28. Council has broad discretion under the Local Government Act 2002 to undertake activities that promote the social, economic, environmental and cultural wellbeing of communities. The options presented in this report fall within Council's general powers and relate to consideration of business support measures following the Mauao landslide event.

29. Any rates remission approved by Council must be considered in accordance with the provisions of Council's Rates Remission Policy and the Local Government (Rating) Act 2002. Alternative support measures, including grants, activations or placemaking initiatives, may be undertaken through existing Council powers subject to appropriate budget provision and decision-making processes.

STRATEGIC ALIGNMENT

30. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	☐
We value, protect and enhance the environment	☐
We are a well-planned city that is easy to move around	☐
We are a city that supports business and education	✓
We are a vibrant city that embraces events	✓

31. This report contributes to Council's strategic outcomes of supporting business and education, and being a vibrant city that embraces events, through consideration of business recovery, visitor activation and economic support initiatives following the Mauao landslide event.

OPTIONS ANALYSIS

32. There are a range of options available to Council.

33. **Option 1:** No additional support (status quo)

Advantages	Disadvantages
• Consistent with previous decisions and the intent of the current Rates Remission Policy. • No additional cost to Council	• Does not address concerns raised by affected businesses regarding financial hardship. • May be perceived by some businesses as a lack of recognition of the exceptional circumstances experienced following the landslide and subsequent access restrictions. • Does not provide any additional support while key attractions, including parts of Mauao and the Mount Hot Pools, remain closed or partially inaccessible.

34. **Option 2:** Targeted rates remission for defined businesses and defined period.

This option recognises that the identified businesses experienced differing levels of disruption depending on their location and access constraints, Council could consider a range of targeted remission options:

(a) Remission for mandated closure periods only

Rates remission would be applied only for period where businesses were directly prevented from operating due to road cordons and closures.

Business group	Period	Indicative days	Closure
Twin Towers/Marine Parade businesses	22-17 January	5 days	Full closure
Adams Avenue businesses	22 January – 6 February	15 days	Full closure
Adams Avenue businesses	24 July – 19 August	26 days	Partial closure (pedestrian access only)

Indicative cost: Staff estimate the total cost at approximately $4,100 - $4,500 depending on final eligibility confirmation.

Advantages	Disadvantages
• Most closely aligns with the intent of the current Rates Remission Policy. • Recognises the actual periods of direct access disruption. • Lowest financial impact • Lower precedent risk	• Does not consider impacts felt beyond the physical closure periods.

(b) Peak trading period remission

Rates remission would be applied for all 15 identified businesses from 22 January to 30 April reflecting business feedback that impacts continued well beyond the physical closure periods and affected the remainder of the critical summer trading period.

Indicative cost: approximately $37,800

Advantages	Disadvantages
• Recognises broader economic impacts • Simple to administer	• Exceeds normal intent of the Rates Remission Policy as businesses remained operational for most of this period. • Higher precedent risk • Doesn't reflect those businesses affected by July/August road closures

(c) Partial peak trading remission

50% remission for all identified businesses between 22 January and 30 April 2026.

Indicative cost: approximately $18,900

Advantages	Disadvantages
• Recognises impacts while acknowledging business maintained a level of operation post closures • Lower cost than full remission	• Extends beyond the Rates Remission Policy intent • Higher precedent risk • Doesn't reflect those businesses affected by July/August road closures

35. **Option 3:** Alternative support without rates remission

This option would not provide rates relief but instead direct available funding toward activities that support visitation, economic activity and business recovery in the Mount North area.

These approaches would seek to increase customer activity and improve confidence while access restrictions remain and recovery continues.

(a) Two-month equivalent remission/grant

Council could provide relief equivalent to approximately two months' rates for the 15 identified businesses.

Indicative cost: approximately $23,250.

Advantages	Disadvantages
• Acknowledges business impacts • Could be delivered as alternative one-off business support rather than through the Rates Remission Policy • Lower precedent risk than a full peak period remission. • Relatively simple to administer	• Less closely aligned with Rates Remission Policy intent.

(b) Additional funding for local activation and events

Council could provide targeted funding to support activations, events and place-based programming focused on the Mount North area while Mauao remains partially inaccessible. This could include small-scale events, community activities, temporary activations, partnerships with existing event organisers, and targeted programmes designed to attract visitors into the area.

Given the scale of coordination required, funding would need to cover both event delivery and a resource function to programme, coordinate and deliver activities.

Indicative cost: $60,000 - $100,000 for 3-6 months

Advantages	Disadvantages
• Generates reasons for people to visit and spend in the area • Builds on Mount Business Association activation programme • Creates visible community activity and confidence in the area	• Benefits cannot be guaranteed to flow to all affected businesses • Higher cost • Requires staff capacity to design and deliver within a short timeframe • Timing may limit effectiveness if partial access is returned to Mauao tracks during summer • Timing may clash with programme of other events in the area

Attachment 2 provides an example of previous staff work exploring how a targeted placemaking and activations programme could support visitation, community connection and economic activity in the Mount North area while access to key Mauao attractions remains restricted.

(c) Funding for destination placemaking and/or marketing

Council could provide targeted funding to further improve the visitor experience around the closure area and strengthen awareness that Mount North businesses remain open and accessible.

This option would build on work already undertaken, including removal of redundant exclusion-zone fencing, installation of artistic scrim treatments, improved presentation of the recovery area and public realm improvements. Funding could support:

- temporary placemaking installations;
- visitor interpretation and storytelling;
- public art and site activation opportunities;
- targeted destination marketing campaigns;
- wayfinding and information improvements;
- initiatives encouraging visitors to continue visiting the area while parts of Mauao remain closed.

Indicative cost: $30,000 - $150,000. The broad cost range reflects varying scales of intervention, from targeted tactical placemaking through to a coordinated destination marketing programme.

Advantages	Disadvantages
• Enhances visitor experience and the perception of the area • Builds on recovery initiatives already made on site • Can continue delivering benefits beyond the immediate recovery period • Flexible scale depending on available funding	• Benefits cannot be guaranteed to flow to all affected businesses • Higher cost • Requires staff capacity to design and deliver within a short timeframe • Timing may limit effectiveness if partial access is returned to Mauao tracks during summer

Attachment 2 also shows potential destination and placemaking opportunities that were explored through the Mauao recovery programme, including improved presentation of closure areas, cultural storytelling, memorialisation, temporary destinations, visitor experiences and marketing initiatives designed to maintain visitor interest and connection with the area during recovery.

(d) Council-funded Mount Business Association associate membership

Council could fund one year of Mount Business Association associate membership for the 15 identified businesses.

Indicative cost: approximately $500 per business (approximately $7,500 total), although council could choose to broaden eligibility beyond the initially affected food and beverage businesses.

Advantages	Disadvantages
• Relatively low cost from an identified existing budget • Supports stronger business participation and representation • Provides access to existing business promotion, networking and advocacy opportunities • May support longer-term business resilience and collaboration	• Financial benefit to businesses is modest • Does not directly address revenue losses resulting from road cordon and closure impacts • Could create expectations that council funds memberships in future circumstances.

36. **Option 4:** Rates relief plus alternative support (hybrid of above options)

Council could adopt a hybrid approach that combines a targeted rates remission option with one or more alternative support initiatives. This approach would provide immediate recognition of business impacts while also investing in activities aimed at increasing visitation, supporting recovery and improving confidence in the area.

FINANCIAL CONSIDERATIONS

37. The options presented in this report have varying financial implications ranging from no additional cost through to new expenditure of up to $150,000 depending on the support mechanism selected. Targeted rates remission options are estimated to cost between approximately $4,000 and $37,800.

38. Any rates remission approved by Council would result in a direct reduction in rating revenue. Any grant, activation, placemaking or marketing initiative would require identification of an appropriate funding source within existing budgets or through future budget decisions.

39. Council has already provided support to affected businesses through the Mayoral Relief Fund, rates payment postponements, fee waivers, activation funding and ongoing recovery activities. Approximately $127,870 has been distributed to support businesses through recovery funding mechanisms, including direct support to businesses and $40,000 activation funding administered through the Mount Business Association.

RISKS AND LEGAL IMPLICATIONS

40. There are a range of legal, financial and policy risks associated with the options presented in this report.

    (a) Rates Remission Policy alignment. The current Rates Remission Policy was designed primarily for circumstances where properties are unable to be occupied for an extended period following a natural disaster or emergency. While Council has discretion to establish criteria for remission relating to a declared event, extending relief beyond periods where businesses were directly prevented from operating would represent a broader application of the policy than has traditionally been contemplated.

    (b) Policy precedent. Any decision to provide rates remission that goes beyond the intent of the current policy may create expectations for future requests arising from natural hazard events, infrastructure projects, road closures or other disruptions affecting commercial activity.

    (c) Equity and consistency. Businesses experienced differing levels of disruption depending on location, duration of access restrictions and reliance on visitor activity. While this report focuses on 15 businesses directly affected by road cordons and closures, other businesses in Mount Maunganui also experienced reduced visitor numbers and indirect economic impacts. Determining eligibility for support therefore involves equity considerations and may create perceptions of inconsistency.

    (d) Tenant and property owner interface. Rates are charged to property owners rather than business tenants. There is no statutory mechanism requiring any rates remission granted by Council to be passed on to tenants. As a result, the intended benefit of rates relief may not always flow directly to the businesses that experienced the disruption.

    (e) Community and stakeholder. Affected businesses have consistently advised Council that they consider the support provided to date insufficient relative to the impacts experienced. A decision not to provide further support may attract criticism from affected businesses and stakeholders. At the same time, providing additional support may create community expectations that Council compensate businesses for economic impacts arising from future events that fall outside Council's direct control.

TE AO MĀORI APPROACH

41. This report relates to potential business support and rates relief options arising from the Mauao recovery programme. The recommendations do not directly affect Council’s Te Ao Māori approach or specific Māori outcomes.

42. The wider Mauao recovery programme continues to be undertaken in partnership with the Mauao Trust and mana whenua. However, the options presented within this report relate to financial assistance and business support measures and are primarily administrative in nature.

CLIMATE IMPACT

43. The options presented in this report are not expected to have an impact on Tauranga's ability to adapt to climate change or enhance biodiversity outcomes. The recommendations relate to rates remission and business support options associated with recovery from the Mauao landslide event. Any environmental, climate adaptation and resilience considerations continue to be addressed through the broader recovery programme and associated geotechnical planning work.

CONSULTATION / ENGAGEMENT

44. Consultation and engagement relevant to this report has been undertaken through the wider Mauao recovery programme and is summarised in the Background section above. The issues and options presented in this report have been informed by feedback received through those engagements, including discussions with affected businesses on 2 November 2026.

SIGNIFICANCE

45. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

46. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the matter.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

47. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the matter is of high significance to the affected business owners affected.

ENGAGEMENT

48. Taking into consideration the above assessment, that the matter is of high significance, officers are of the opinion that no further engagement is required prior to Council making a decision.

NEXT STEPS

49. Subject to Council's consideration of the options outlined in this report, staff will implement the preferred approach and communicate the outcome to affected businesses and stakeholders.

50. The wider Mauao Trust and Council recovery programme will continue to focus on restoring public access to Mauao, reopening affected facilities and supporting the long-term recovery of the Mount North area.

ATTACHMENTS

1. **Attachment 1 Notes from Meeting with Mount Businesses 2 Nov 2026 - A21469514**
2. **Attachment 2 Mauao Edge Placemaking and Activation Brief - A21469515**

Notes from Meeting with Mount Businesses

2 November 2026, 5:30pm at the Mount Surf Lifeguard Service

This document captures statements and questions put to the Mayor, Councillors and staff from the businesses impacted through the closure of Adams Avenue and Marine Parade, during the Mauao landslide tragedy that occurred on 22 January 2026.

High-level summary

Businesses affected by the closure of Adams Avenue and Marine Parade following the Mauao landslide expressed significant concern about the financial impact of the disruption and the level, timeliness and visibility of Council support.

While Council outlined the support provided to date, including direct assistance through the Mayoral Relief Fund, funding for business activations, efforts to reopen access as quickly as possible, and the continued priority being given to reopening Mauao, a number of businesses said they did not feel adequately supported, engaged or included in the recovery response.

The strongest themes were:

- the significant and ongoing financial impact on businesses, particularly following disruption during the important January to April trading period;
- a perception that communication and engagement with the most directly affected businesses has been insufficient;
- a desire for greater transparency about how Mayoral Relief Fund funding has been allocated and spent;
- concern that some of the most affected businesses have not been sufficiently included in activation and recovery initiatives;
- a request for Council to reconsider the impact of commercial rates during the period businesses were significantly affected;
- the need for clear and timely information about the reopening of Mauao, and the Mount Hot Pools so businesses can plan with greater certainty;
- a desire for affected businesses to have a stronger voice in destination marketing, tourism and recovery activity; and
- the need for careful communication and engagement regarding Mauao reopening and first-anniversary plans.

The clear message from businesses was that reopening Mauao remains critically important to restoring visitor activity, but that this needs to be accompanied by more direct engagement, regular communication and targeted consideration of businesses that have borne the greatest impact.

Key questions and Council responses

1. What support has Council provided to affected businesses?

Council response

- Direct financial assistance was provided to eligible affected businesses through the Mayoral Relief Fund.
- Council and elected members prioritised the reopening the cordoned area as quickly as it was safe to do so.
- Funding was provided through the Mayoral Relief Fund to the Mount Business Association for activation activity intended to encourage people back into the area.
- Council's continuing priority of resources to support the reopening of Mauao, is considered one of the most significant steps towards restoring visitor activity and supporting local businesses.

Business feedback

Several businesses said that, despite these measures, they felt Council support had been insufficient, particularly in the immediate aftermath of the landslide.

2. How have the businesses most directly impacted been included in recovery and activation initiatives?

Council response

Funding provided to the Mount Business Association included an expectation that affected Mount North businesses would be considered and included. Associate membership has also subsequently been opened to businesses outside the association's traditional geographic boundary.

Business feedback

Some businesses considered that they had not been adequately included in activation initiatives and that communication had either been too slow or had not reached them.

3. How has the $40,000 activation funding been spent?

Council response

The Mount Business Association outlined activation initiatives undertaken and planned to encourage people back into the Mount area.

Follow-up required: Provide businesses with a clear summary of the allocation, expenditure and intended outcomes of the $40,000 activation funding, including how Mount North businesses have benefited or will benefit.

4. Why was rates relief not provided to affected businesses?

Council response

Council's existing rates-remission settings were developed around circumstances where properties are rendered uninhabitable or unusable, including settings developed following the Christchurch

earthquakes. Consideration also needs to be given to the precedent created by extending rates relief beyond existing policy settings.

Follow-up required: At the Mayor's request, staff are to review the commercial rates impact on businesses directly affected by the Marine Parade and Adams Avenue closure in 2026, including whether any options are available within Council's existing policy or decision-making framework.

5. What was the Mayoral Relief Fund spent on?

Council response

Approximately $239,000 was available through the fund, with funding applied to support affected businesses directly and indirectly, including through activation activity.

Business feedback

Some businesses challenged whether the majority of the funding had benefited those most directly affected.

Follow-up required: Prepare a clear breakdown of Mayoral Relief Fund expenditure, distinguishing between:

- direct business assistance;
- business and area activation funding; and
- any other categories of expenditure.

6. When will Mauao reopen?

Council response

Reopening Mauao remains a key Council priority and is considered one of the most important steps Council can take to support the recovery of the area and local businesses. Council reiterated that the decision to reopen access to Mauao, was not Council’s on it’s own. The Maunga is owned by Mauao Trust on behalf of Iwi with joint management a partnership with Council and Mauao Trust. Council is committed to working collaboratively in partnership with mana whenua.

Business feedback

Businesses emphasised that certainty around reopening is important so they can make staffing, stock, marketing and other commercial decisions.

Action: Communicate the confirmed reopening date, or the best available indicative timeframe and dependencies, as soon as Council can do so.

7. What is happening with the Mount Hot Pools?

Council response

The aspiration remains to reopen the Hot Pools, provided this can be done safely. Further assessment is required, with access and assessment having been constrained by ongoing safety risks and further ground movement.

Action: Provide businesses with a further update once assessment work allows greater clarity on the future and potential reopening timeframe.

8. Can Mauao tracks reopen while the physical impacts of the campground slip remain visible?

Council response

The physical condition and appearance of the Holiday Park landslide is a consideration but does not prevent safe reopening of the tracks on Mauao. Engagement with key stakeholders is an important part of reopening planning.

Council will continue to consider opportunities to improve the appearance of the Adams Avenue area.

9. How can businesses contribute to tourism and destination marketing?

Business request

Affected businesses would like greater involvement in Tourism Bay of Plenty's recovery, destination marketing and visitor-attraction activity.

Businesses also asked for greater promotion of Mount Maunganui's beaches and other attractions while access to Mauao remains restricted.

Action: Council to discuss with the Mount Business Association and Tourism Bay of Plenty how affected businesses can contribute to relevant destination and recovery initiatives.

10. What is planned for the first anniversary of the tragedy?

Council response

Further information will be provided once plans are sufficiently developed. Engagement with the affected families must occur before wider communication.

Businesses raised whether events around the anniversary period are appropriate. Council indicated it would review planned activity to ensure it is respectful and does not conflict with memorial or commemorative activity.

In Summary

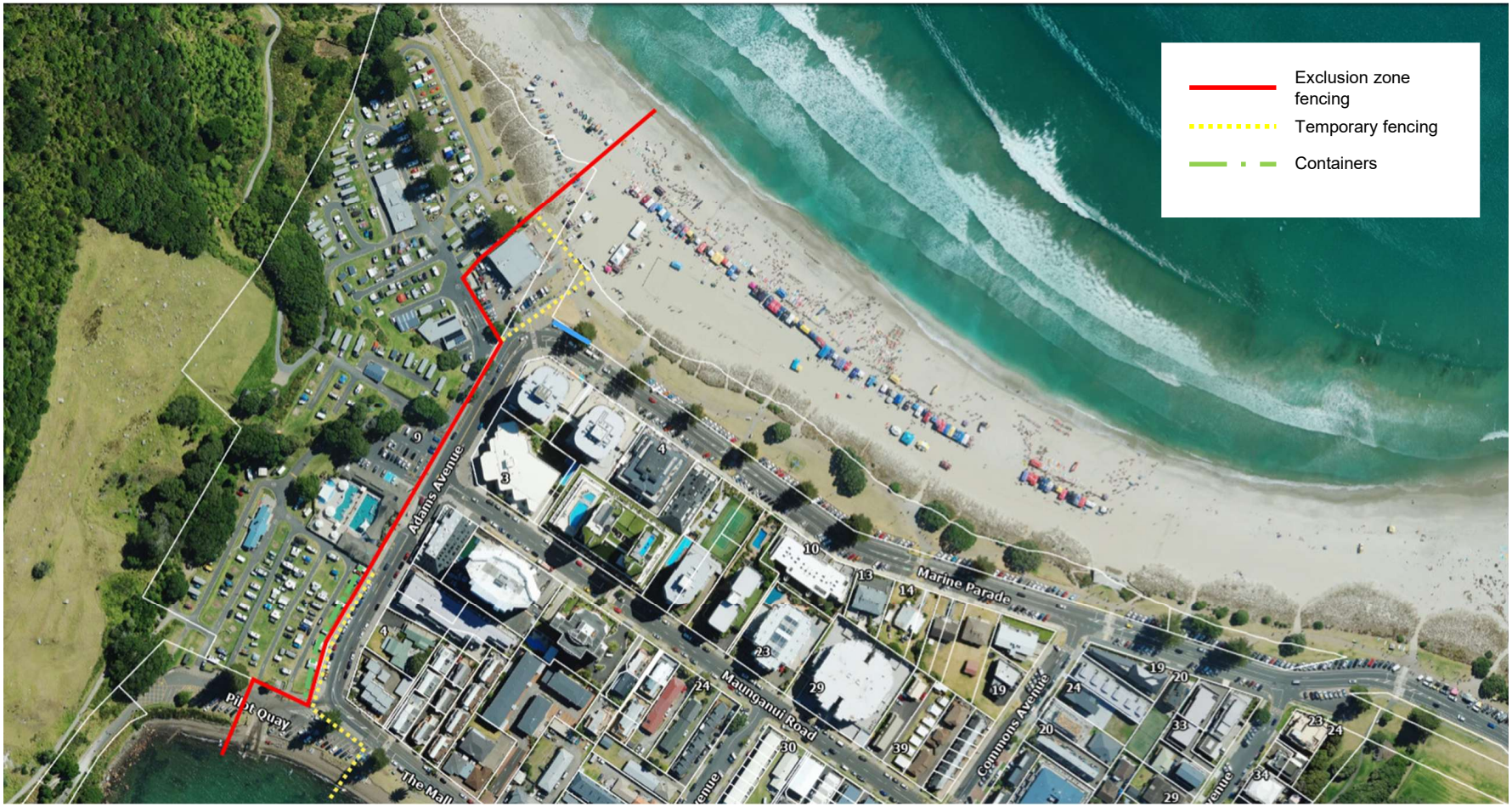
Council heard clearly that, while a range of support and recovery measures have been put in place, many of the businesses most directly affected do not feel that support or engagement has been sufficient. The immediate focus is therefore to provide greater transparency on the assistance delivered to date, improve direct and regular communication, review specific rates impact on affected businesses, and provide certainty on the reopening of Mauao and the Mount Hot Pools, as soon as it is safe and responsible to do so.

Consolidated action list

	Action	Proposed next step	Owner	Date
1.	Review Commercial Rates Impacts	Review the commercial rates paid by businesses directly affected by the Marine Parade and Adams Avenue closures during 2026 and identify whether any relief or other options are available.	TCC	1 December (Council meeting)
2.	Report business feedback to Council	Incorporate the key themes and concerns from the 2 November business meeting into the next Mauao Recovery report to Council.	TCC	1 December (Council meeting)
3.	Provide Mayoral Relief Fund breakdown	Prepare a clear breakdown of the approximately $239,000 Mayoral Relief Fund, including direct business support, activation funding and other expenditure.	TCC	1 December (Include in action 2 for Council meeting)
4.	Account for the $40,000 activation funding	Confirm expenditure to date, planned activity and how directly affected Mount North businesses have been included and benefited.	MBA	30 November
5.	Strengthen direct business communications incl. confirmation of Mauao reopening and updates on Mount Hot Pools	Retain access for affected businesses to regular updates via subscription to Council's existing update channels. Retain proactive targeted updates to affected businesses where applicable. Ensure significant milestones are communicated promptly including when available, confirmed reopening timeframe for Mauao and updates on the status of the Mount Hot Pools following further assessments into any damage.	TCC	Ongoing
6.	Connect affected businesses to destination marketing opportunities.	Discuss opportunities for affected businesses to contribute to destination marketing and recovery activity, including stronger promotion of Mount beaches and attractions.	MBA & TBOP with TCC	Ongoing with TBoP/MBA
7.	Review anniversary-period activity	Check proposed January events against planned memorial and anniversary activity to ensure they are appropriate and respectful.	TCC	1 December (Council meeting)

8.	Communicate anniversary plans	Engage affected families first, then provide businesses and the wider community with clear information about anniversary arrangements.	TCC	As decisions are finalised
9.	Maintain oversight of MBA funding expectations	Continue working with the Mount Business Association to ensure the purpose and conditions attached to Mayoral Relief Fund activation funding are being met, particularly the inclusion of affected Mount North businesses.	TCC	Ongoing
10.	Report back to businesses	Close the loop with participating businesses by providing a concise response outlining what Council heard, what actions are being taken and when they can expect further updates.	TCC	ASAP!

Mauao Edge Placemaking and Activations | Interim Plan


Exclusion zone fencing
Temporary fencing
Containers
Adams Avenue
Marine Parade
Maunganui Road
Commons Avenue
The Mall



Purpose

- To provide an interim placemaking and activation strategy that supports community wellbeing and economic resilience while Mauao and key visitor destinations remain closed.
- To ensure the cordon and exclusion zone are not just safe, but also welcoming, legible, and reflective of the mana and significance of the place.
- To create opportunities for people to continue connecting with the area in meaningful ways during the recovery period.

Why its Important

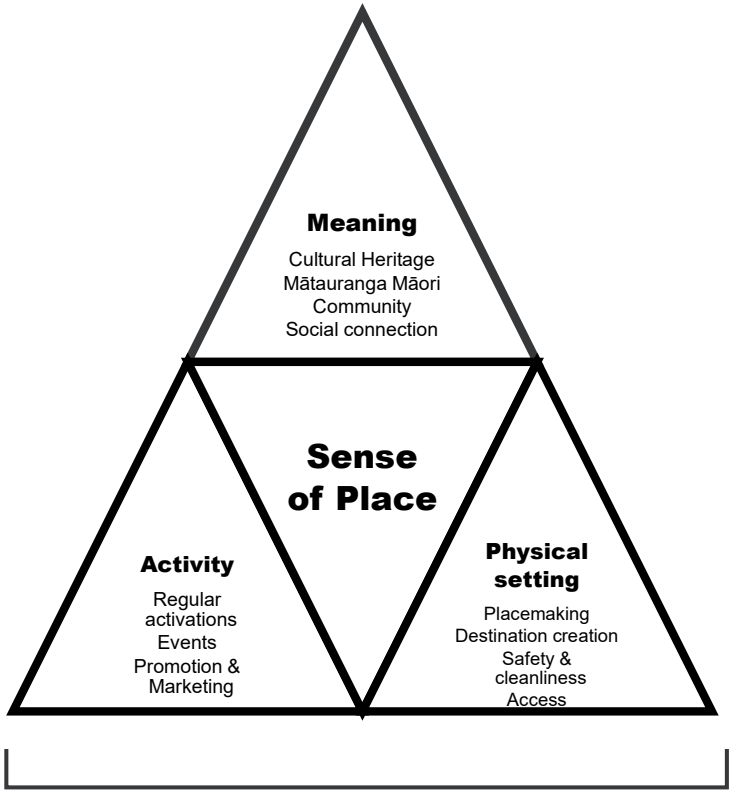
- The closure of Mauao, the Mount Maunganui Beachside Holiday Park, the Mount Hot Pools and the Mount Maunganui Surf Lifeguard Service and Pilot Bay boat ramp has significantly reduced foot traffic and activity in the area.
- A thoughtful, culturally grounded response maintains the mana of the area and honours its importance to the community and visitors.
- Creating reasons for people to return supports local businesses, protects livelihoods, and maintains economic momentum.
- Visible improvements and community-focused activations reinforce confidence during the recovery and demonstrate progress.
- Interim interventions help bridge the gap until full access is restored, ensuring the area remains relevant, cared for, and connected.

Scope of an interim plan

- Enhancing the visual quality, cultural expression, and wayfinding of the existing fencing and cordon areas.
- Introducing temporary destinations and experiences that draw people back to the area and sustain vibrancy. “Moving on but not forgetting.”
- Developing and marketing a programme of regular activations and events that encourage visitation, support local businesses, and maintain a sense of place.
- Working collaboratively with mana whenua, businesses, residents, and partners to ensure the plan is community-led and place-appropriate.

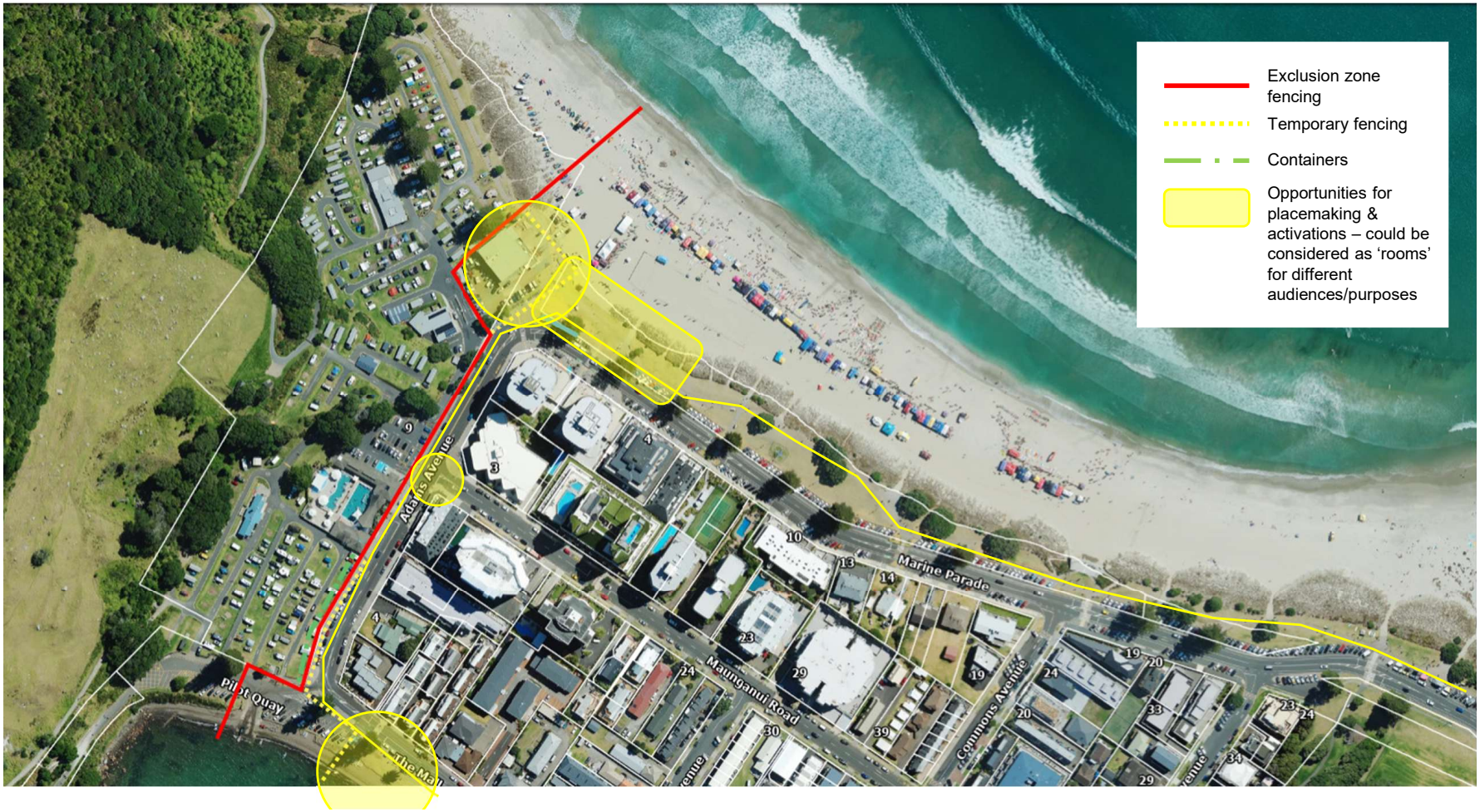
Key principles to guide interventions

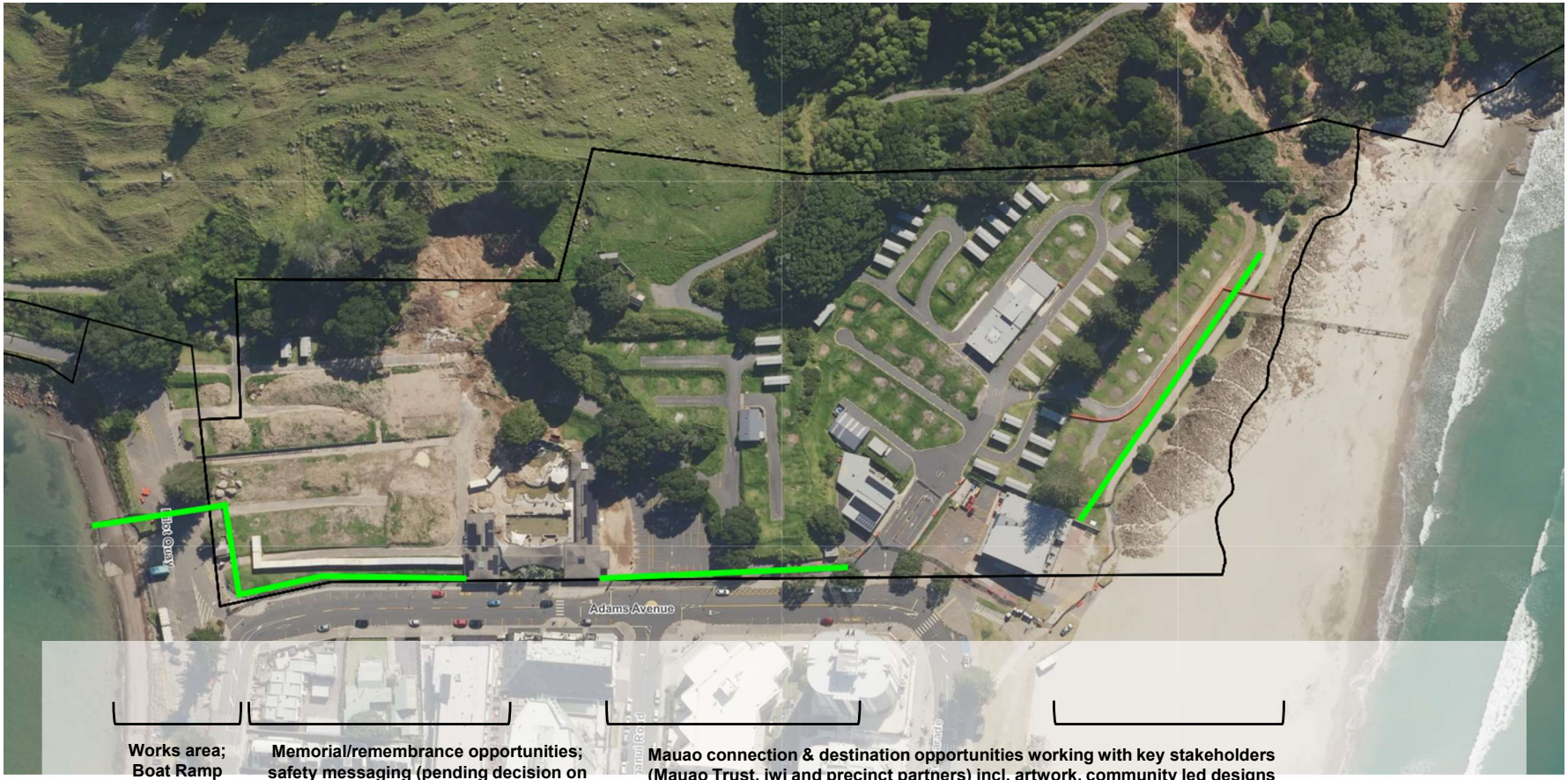
- Work with Iwi, hāpu and Mauao Trust
- Promote a sense of safety and connectedness
- Engage with Mount Maunganui Lifeguard Service, businesses and residents
- Stay connected with Mount Business Association, Tauranga Business Chamber, Tourism Bay of Plenty and Events
- Consider timeframes such as *Now* (contending with TARPs and possible evacuations), *Soon* (winter down period) and *later*
- Fill funding gaps where appropriate to complement other government funding opportunities
- Complement programme with strong, creative and enduring comms, engagement and marketing plan



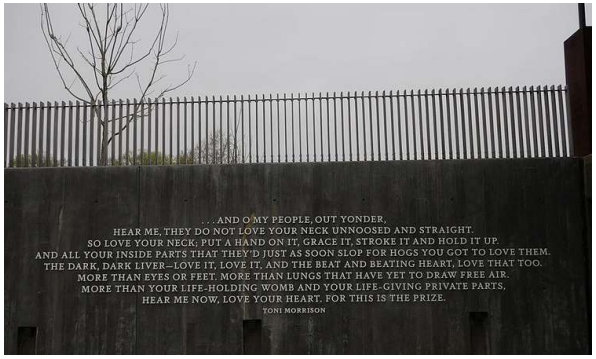
Mauao Recovery "Pillars of Interest"

Mauao as a Living Taonga and Source of Mauri Ora:	**Mauao as a Place of Prosperity and Welcome**	**Mauao as a Beacon for Everyday Life and Wellbeing**	**Mauao as Place of Remembrance and Reflection**
A sacred place of cultural connection, spiritual wellbeing, and living heritage	An iconic destination supporting visitation, local identity and regional prosperity	A shared place for connection, active lifestyles and community belonging	Honouring loss, acknowledging severed connections and supporting collective healing


Exclusion zone fencing
Temporary fencing
Containers
Opportunities for placemaking & activations – could be considered as 'rooms' for different audiences/purposes
Marine Parade
Maunganui Road
Commons Avenue
Adams Avenue
Pilot Quay


Adams Avenue
Works area; Boat Ramp & Safety messaging
Memorial/remembrance opportunities; safety messaging (pending decision on soil bund/containers)
Mauao connection & destination opportunities working with key stakeholders (Mauao Trust, iwi and precinct partners) incl. artwork, community led designs

Improved edge (scrim/hoardings) & Memorialisation and Reflection









Utilise general Mauao memorial material created by public at He Maimai Aroha directly following the tragedies.

Improved edge (scrim/hoardings): Place connection & destination









Emphasise ecological and/or cultural values

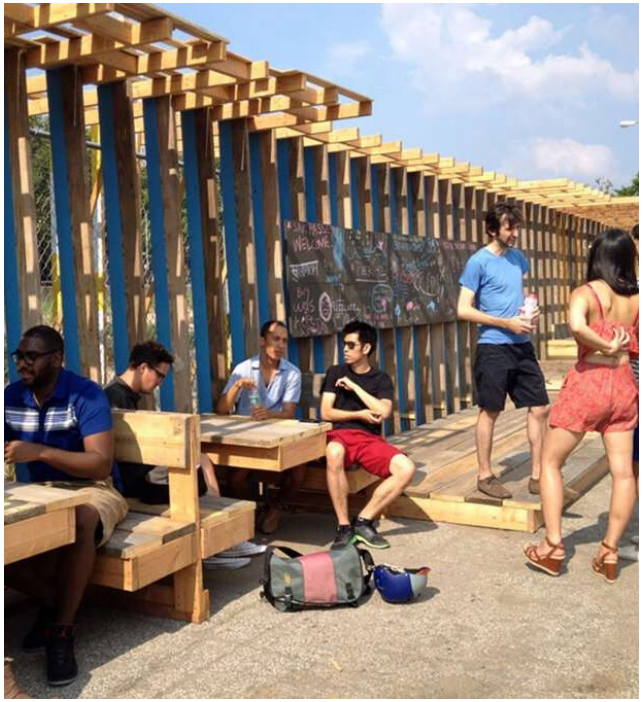
Improved edge (scrim/hoardings): Place connection & destination



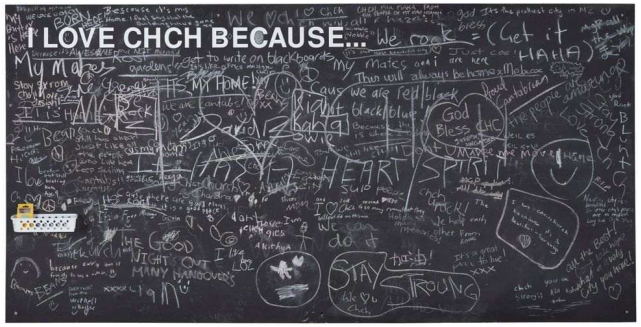


Emphasise ecological and/or cultural values

Improved edge (scrim/hoardings): community participation & interactive









Destination Creation

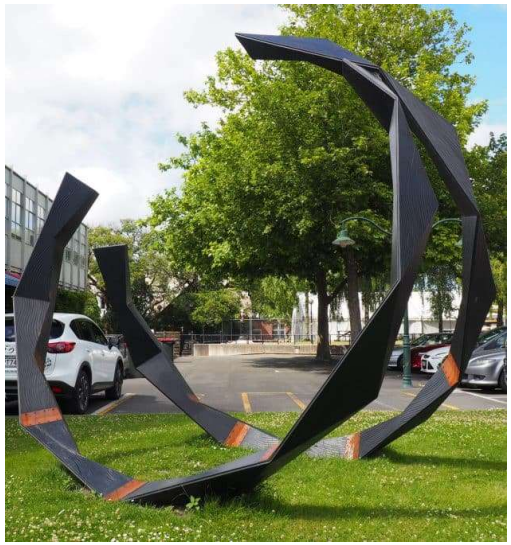






Memorialisation

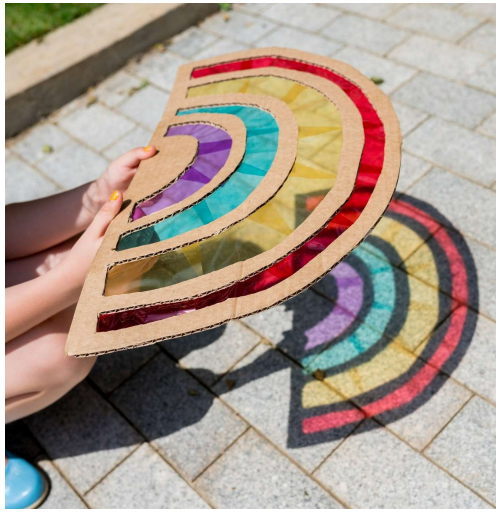






Activations - Repeat reasons to visit

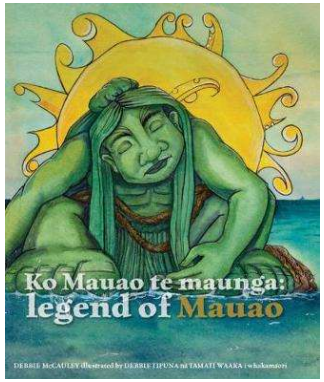












Mauao Recovery "Pillars of Interest"

Mauao as a Living Taonga and Source of Mauri Ora:

A sacred place of cultural connection, spiritual wellbeing, and living heritage

Mauao as a Place of Prosperity and Welcome

An iconic destination supporting visitation, local identity and regional prosperity

Mauao as a Beacon for Everyday Life and Wellbeing

A shared place for connection, active lifestyles and community belonging

Mauao as Place of Remembrance and Reflection

Honouring loss, acknowledging severed connections and supporting collective healing

Example Activations

Cultural & storytelling:

- Art/mural activations
- Story-book trail
- PopUp cinema
- Historic/cultural Talks and information sharing
- Feature marketing focussed on telling stories of people & Place (Our Place, Uno, NZME etc.)

Seasonal:

- Jazz Festival Activations (April)
- Kings Birthday
- International Day of Play (June)
- Winter solstice event
- Mini golf | Ice rink | curling

Health, Wellness & outdoors:

- Bootcamps,
- "Get in your 3.2Km"
- Pickleball
- Little Big Market – at the beach
- Beach dig, sandcastle art/competitions
- Children-centric weekly activations (i.e. Pocketsized play)

Memorialisation:

- Memorial-focussed activations
- Breathing/yoga workshops
- Art/mural activations

11.3 January Weather Event - Recovery Progress Report

File Number: **A21496640**

Author: **Caroline Irvin, Governance Advisor**

Authoriser: **Caroline Irvin, Governance Advisor**

BACKGROUND

1. The report accompanying this agenda item, ‘January Weather Event - Recovery Progress Report’, will be circulated separately prior to the meeting.

11.4 Mauao Reopening Arrangements

File Number: **A21496645**

Author: **Caroline Irvin, Governance Advisor**

Authoriser: **Caroline Irvin, Governance Advisor**

BACKGROUND

1. The report accompanying this agenda item, ‘Mauao Reopening Arrangements’, will be circulated separately prior to the meeting.

11.5 Refinement to Major Transport Projects for Draft 2027-37 LTP Prioritisation

File Number: **A21461670**

Author: **Susan Braid, Finance Lead Capital Performance and Community Investment**
Kathryn Sharplin, Head of Finance

Authoriser: **Craig Rice, Chief Operating and Financial Officer**

PURPOSE OF THE REPORT

1. To seek Elected Member direction on proposed refinements to the funding and phasing of four key major transport projects within the Draft 2027-37 Long-term Plan (LTP) capital programme, which are:
   (a) Turret Road / 15th Avenue
   (b) Cameron Road Stage 2
   (c) Hewletts Road / Connecting Mount Maunganui
   (d) Area B Ōtūmoetai Local Loop
2. The refinements are intended to:
   (a) maximise available external funding based on latest information, including utilisation of the remaining Infrastructure Funding and Financing (IFF) facility and Infrastructure Acceleration Fund (IAF) funding;
   (b) reflect the updated deliverability and timing of the transport programme; and
   (c) have an overall favourable effect on key financial metrics by increasing external revenue in years 1 and 2 of the LTP by $12.1m, partly offset by an increase in Council funding in these years of $1.8m.

RECOMMENDATIONS

That Council:

(a) Receives the report "Refinement to Major Transport Projects for Draft 2027-37 LTP Prioritisation".

(b) Approves the revised funding assumptions for Turret Road / 15th Avenue, that caps total IFF funding at $50m inclusive of historicalal claims, increasing net Council funding by $11.1m in FY30 and $9.8m in FY31.

(c) Revokes the previously agreed 10% descoping of Cameron Road Stage 2 and retains the draft LTP project budget of $93.29m, noting that the scope reduction would have no financial gain to Council but would instead reduce the IAF grant funding by the amount of the reduction.

(d) Approves the revised delivery profile for Hewletts Road / Connecting Mount Maunganui, retaining design and Detailed Business Case progress through to 2030 and allowing strategic land acquisition to commence in the first three years of the LTP, rather than applying a full three-year deferral, leading to an increase in external revenue of $13.8m across FY28-FY30, with no impact on Council funding.

(e) Notes the removal of approximately $29.5m of IFF funding associated with the Area B Ōtūmoetai Local Loop from the final three years of the draft LTP, replaced with Council debt funding, as the remaining IFF facility is expected to be fully utilised by other eligible projects before those years.

EXECUTIVE SUMMARY

3. Council considered the draft 2027-37 LTP capital programme on 10 and 11 November 2026 and agreed a package of project deferrals and scope changes to reduce near-term debt funding requirements. For the three major transport projects considered in this report, that direction included rephasing Turret Road / 15th Avenue, a 10% descoping of Cameron Road Stage 2, and a three-year deferral of Hewletts Road / Connecting Mount Maunganui.

4. Following those decisions, staff completed a detailed reconciliation of the available IFF facility, the IAF funding agreement for Cameron Road Stage 2, project funding stacks and updated delivery profiles. This work identified that amendments to the November capital programme would provide better financial results for Council. The proposed changes build on the direction Council set in November, while making better use of external funding and avoiding project changes that would reduce outcomes without producing the expected financial benefit.

5. The changes proposed in this paper significantly improve Council's key financials in years 1 and 2 of the LTP. They increase external revenue, make use of the IFF borrowing commitment to avoid penalty costs, and improve the balanced budget metric. If agreed, by the end of year 2 there would be an increase to net Council funding of $1.8m, increasing to $12.6m by the end of year three. The overall increase to net Council funding across the full ten year programme would be $50.5m, because of the overestimated IFF funding.

6. The external funding is weighted to the first two years, with increases of approximately $7.1m in FY28 and $5.0m in FY29 against gross capital expenditure increases of approximately $5.1m and $8.8m in those years. Because IFF, IAF and NZ Transport Agency Waka Kotahi (NZTA) subsidies are recognised as revenue, Council borrowing in the first two years is below or close to the November position while revenue is higher. The debt-to-revenue ratio impact is therefore favourable in those years.

7. The key uncertainty is that final NZTA funding approval has not been received for Turret Road / 15th Avenue and Hewletts Road / Connecting Mount Maunganui projects. The proposed draft LTP assumptions should therefore be treated as planning assumptions and updated when formal approvals and eligibility decisions are received.

BACKGROUND

8. Council's June 2026 direction for the draft LTP emphasised value for money, efficient scope and delivery, use of available subsidies and the existing transport IFF commitment, and a smoother, deliverable capital programme. The first draft programme was subsequently tested through project scoring, staff moderation, external funding review and Elected Member feedback.

9. At the 10 and 11 November 2026 meeting, Council made project-level decisions intended to lower capital expenditure and net Council debt funding in the first three years of the LTP. The decisions were made using the best information available at the time, but several funding assumptions required further validation after the meeting. In particular:

   (a) The corporate planning model contained more IFF funding than the undrawn facility available, with a significant portion of the over-allocation sitting in later LTP years on the Otumoetai Area B Loop project.

   (b) The Cameron Road Stage 2 IAF agreement requires other available funding to be applied and provides for repayment of grant funding that is not required for the agreed infrastructure. This changes the expected benefit from the 10% descoping of the project so the $9.9m reduction in spend provides no net savings to Council when accounting for the reduced subsidy.

   (c) The full three-year deferral of Hewletts Road / Connecting Mount Maunganui removed the ability to commence land acquisition and progress development work in the early

LTP years, despite this project using IFF funding and potentially qualifying for NZTA funding.

(d) The delivery team has refined the profile for Turret Road / 15th Avenue to reflect deliverability, including the timing of drawdown of IFF funding already committed.

IFF facility position

10. The Transport System Plan IFF facility totals $177m. Actual drawdown to the end of the 2025/26 financial year (FY26) was $100.32m, leaving $76.68m, or 43.3% of the facility, available from FY27 onwards. The facility is an existing financing commitment and should be actively managed to align eligible project expenditure and drawdown. Carrying a large undrawn balance into later years would unnecessarily defer infrastructure investment as this is not constrained by Council's debt and interest limits.

Table 1: IFF facility position

Facility position	Amount	Percentage
Total IFF facility	$177.00m	100.0%
Drawn to end of FY26	$100.32m	56.7%
Remaining from FY27 onwards	$76.68m	43.3%

Table 2: Proposed allocation of remaining IFF facility

Project	Future IFF allocation	Share of remaining facility	Expected final drawdown
City Centre Transport Hub	$0.20m	0.3%	FY27
Tauranga Crossing Bus Facility	$0.19m	0.2%	FY27
Turret Road / 15th Avenue	$45.71m	59.6%	FY30
Hewletts Road / Connecting Mount Maunganui	$8.78m	11.5%	FY30
Cameron Road Stage 2	$21.79m	28.4%	FY31
Total	**$76.68m**	**100.0%**	**FY31**

Chart 1: Proposed allocation of remaining IFF facility

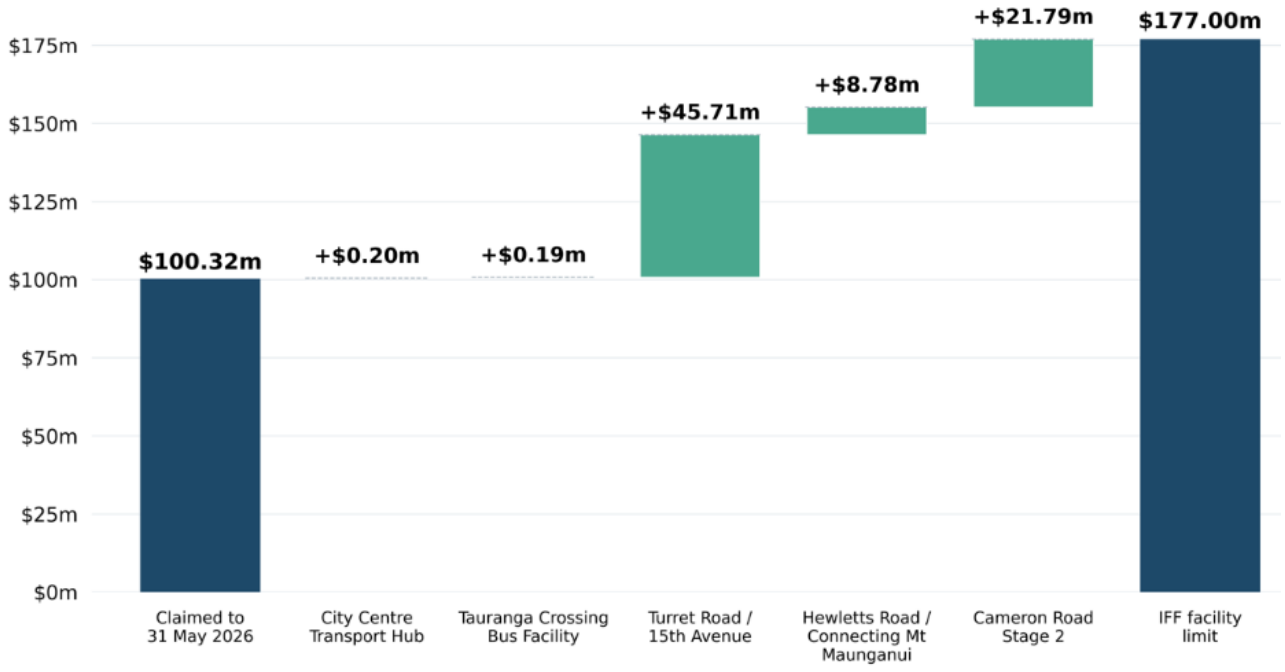
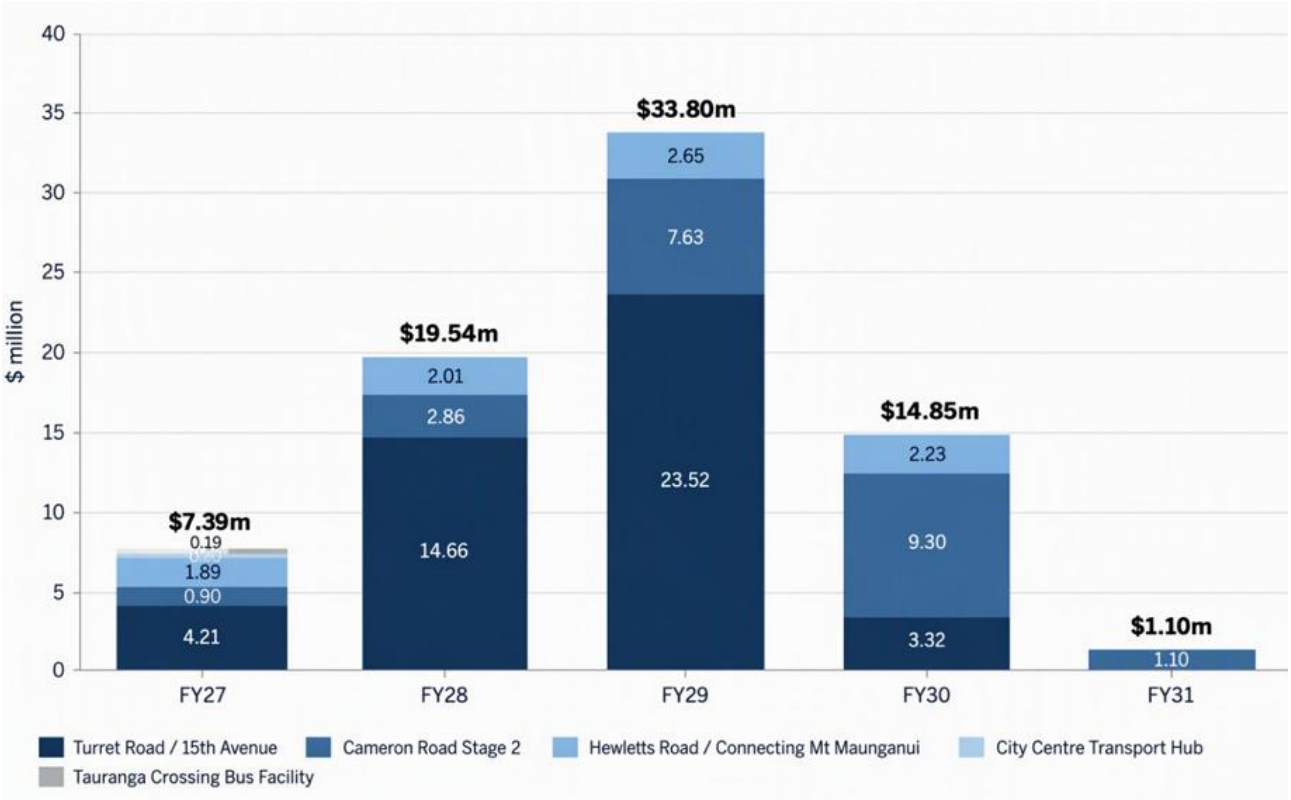


Table 3: IFF drawdown profile

Financial year	Forecast future IFF drawdown	Cumulative facility drawdown
Actual to end FY26	-	$100.32m
FY27	$7.39m	$107.71m
FY28	$19.54m	$127.25m
FY29	$33.80m	$161.05m
FY30	$14.85m	$175.90m
FY31	$1.10m	$177.00m
Total future drawdown	**$76.68m**	**$177.00m**

Chart 2: Proposed IFF Drawdown by Project and Financial Year



Proposed treatment of the four major transport projects

11. Attachment 1 sets out the proposed phasing and funding of the four major transport projects by financial year, compared with the draft LTP before 10 November and the position agreed on 10 and 11 November. Over FY28 to FY30, the proposed package provides gross capital expenditure of approximately $107.4m for Turret Road / 15th Avenue (unchanged from the November position), $88.4m for Cameron Road Stage 2 (up from $79.6m) and $13.8m for Hewletts Road / Connecting Mount Maunganui (previously nil), an overall increase of approximately $22.6m. In the first two years there is a net benefit to key financial metrics including the balanced budget benchmark and the debt to revenue ratio. This will be unfavourable across the full ten years however, due to overestimated IFF funding associated with Turret Road / 1th Avenue and Area B Ōtūmoetai Local Loop projects. The proposed treatment of each project is set out below.

Turret Road / 15th Avenue

12. Council agreed the staff recommendation to rephase approximately $20m of the programme into FY31. The proposed capital profile is unchanged from that direction. The required adjustment is to correct the funding stack so that total IFF funding is capped at the project maximum of $50m, inclusive of approximately $4.29m already drawn. The remaining future

IFF allocation is $45.71m and is proposed to be fully drawn by FY30. The residual local share is funded through Council borrowing.

13. The change does not increase the total project programme. It reallocates funding between IFF and Council borrowing and brings the future drawdown into line with the facility cap and latest project phasing.

Cameron Road Stage 2

14. The project has already reduced substantially from the programme assumed in the previous LTP and is now estimated at approximately $93.29m across the 2027-37 LTP period. Council agreed a further 10% descoping on 10 and 11 November, with an assumed improvement of approximately $1.8m in net Council funding across the first three years.

15. Subsequent review of the IAF agreement indicates that a further reduction in project cost or agreed infrastructure would result in reduced or repayable IAF funding before it generated the expected saving in the Council-funded component. On that basis, proceeding with the 10% descoping would reduce the project outcome but would not provide the financial benefit presented to Council. Staff therefore recommend retaining the current project scope, updating the IAF cashflow to better align with expenditure, retaining the planning assumption that development contributions fund 20% of annual expenditure, and allocating approximately $21.79m of future IFF funding through FY31. The proposed changes result in a net increase in Council funding across the first three years of $1.5m.

Hewletts Road / Connecting Mount Maunganui

16. Council's November direction was to defer the project by three years. That approach removed all expenditure from the first three LTP years. Staff have now developed a revised profile that maintains near-term debt discipline while continuing design, the Detailed Business Case and allowing for strategic land acquisition to commence.

17. The revised profile provides approximately $13.8m of expenditure over FY28 to FY30, including approximately $5.5m to commence strategic land acquisition. The first three years are modelled at 51% NZTA funding and 49% IFF funding, subject to eligibility and funding approval, with the exception of the operating expenditure component of the Detailed Business Case for NZTA-owned assets, which is assumed to be fully funded through the IFF. This would allow eligible land and development activity to progress without an additional Council-funded share in those years. A further provision for the continuation of land acquisition in FY31 preserves flexibility to respond to willing-seller opportunities or to make use of available IFF capacity if other projects deliver more slowly than forecast.

18. The revised profile is preferable to a wholesale deferral because it preserves programme momentum, avoids unnecessary delay in commencing the acquisition of strategically important land and maintains Council's ability to progress a regionally significant project while formal funding decisions are developed.

Other eligible IFF projects

19. The City Centre Transport Hub and Tauranga Crossing Bus Facility have been included for completeness because small residual IFF drawdowns are forecast in FY27. They are not the focus of the decisions sought in this report. The draft LTP previously included approximately $29.5m of IFF funding for the Area B Ōtūmoetai Local Loop in the final three years of the programme. Because the IFF facility is now fully allocated to, earlier projects, no IFF capacity remains for this project. This funding is therefore being removed from the draft LTP and replaced with Council debt funding. This correction has an unfavourable impact on the debt to revenue ratio and debt position in the later years of the LTP.

STATUTORY CONTEXT

20. The requirement to produce a long-term plan every three years is set out in the Local Government Act 2002.

STRATEGIC ALIGNMENT

21. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	✓
We are a vibrant city that embraces events	✓

22. The capital projects support all of Council's community outcomes to varying degrees. The proposed package applies the principles previously adopted by Council: value for money, looking after existing assets, and supporting economic and population growth.

OPTIONS ANALYSIS

23. Option 1 – Agree the proposed package (recommended).

Advantages	Disadvantages
Makes full use of the remaining $76.68m IFF facility by FY31, within the $177m cap. Avoids ratepayers bearing unnecessary financing costs on undrawn IFF funding. The facility is repaid by ratepayers through the Transport System Plan levy over 30 years, so drawing it down on eligible projects early in the LTP ensures that funding is matched by infrastructure delivered. Corrects the over-allocation of IFF in the draft LTP, including removing the Area B Ōtūmoetai Local Loop provision from the final three years. Avoids the 10% descoping of Cameron Road Stage 2, which would reduce project outcomes and IAF funding without delivering the expected net Council saving. Retains momentum on Hewletts Road / Connecting Mount Maunganui (design, Detailed Business Case and commencement of strategic land acquisition) rather than a full three-year deferral. Adds approximately $10.1m of external funding across the first three years of the draft LTP, including approximately $7.1m in FY28 and $5.0m in FY29. In those two years Council borrowing is below or close to the November position while revenue is higher, which is favourable to the debt-to-revenue ratio and supports the balanced budget position. Gives staff clear direction for the next iteration of the draft LTP financial model.	Increases gross capital expenditure by approximately $22.6m and net capital expenditure over FY28 to FY30 compared with the November position. Increases Council borrowing by approximately $12.6m over the same period compared with the November position, most of it in FY30, when the debt-to-revenue ratio weakens. Reverses or modifies parts of Council's 10 and 11 November decisions. Relies on NZTA funding assumptions (51%) that have not yet been approved. Earlier capital activity will bring forward interest, depreciation and operating costs.

24. Option 2 – Do not agree the proposed package.

Advantages	Disadvantages
Retains the position agreed on 10 and 11 November, with approximately $22.6m less gross capital expenditure and $12.6m less Council borrowing over FY28 to FY30 than Option 1. Avoids reliance on unconfirmed NZTA funding for early Hewletts Road expenditure.	The planning model continues to include more IFF funding than the facility allows, including the Area B Ōtūmoetai Local Loop provision in the final three years. The Cameron Road Stage 2 descoping proceeds, reducing project outcomes and IAF funding without the expected net Council saving. A full three-year deferral of Hewletts Road prevents land acquisition from commencing and delays development work that may qualify for IFF and NZTA funding. Risks leaving part of the IFF facility undrawn and forgoing external funding, with a less favourable effect on revenue, the debt-to-revenue ratio and the balanced budget position. Risks ratepayers continuing to bear financing costs on undrawn IFF funding, which is repaid through the Transport System Plan levy, without the corresponding infrastructure investment being delivered. Further corrections would be needed later, which compresses the remaining LTP timetable and may require another decision round.

25. Option 1 is recommended because it corrects the IFF over-allocation, makes better use of external funding and avoids project changes that would reduce outcomes without producing the expected financial benefit. It also keeps the projects moving while formal NZTA confirmations are obtained, with any material changes reported through the remaining LTP process.

FINANCIAL CONSIDERATIONS

Table 4: Comparison with decisions made on 10 and 11 November 2026

Measure	FY28	FY29	FY30	Total FY28-FY30
Gross capital increase / (decrease)	$5.12m	$8.81m	$8.71m	$22.64m
External funding increase / (decrease)	$7.08m	$5.04m	($2.06m)	$10.06m
Council debt funding increase / (decrease)	($1.96m)	$3.77m	$10.77m	$12.58m

26. The proposed package increases gross capital expenditure by approximately $22.6m in the first three LTP years. Approximately $10.1m is funded through additional external grants and subsidies and approximately $12.6m through additional Council borrowing. The increase is not a simple addition to project scope. It reflects reversal of the Cameron Road Stage 2 descoping decision, partial restoration of early Hewletts Road activity, and corrected allocation of IFF funding across the programme.

27. The reduction in external funding in FY30 is mainly driven by Turret Road / 15th Avenue. The November model assumed more IFF funding would be available to draw down for the project in that year than the facility allows.

With total IFF funding for the project capped at $50m, inclusive of historical claims, and the remaining allocation fully drawn by FY30, no further IFF funding is available. The residual local share is funded through Council borrowing, which is why additional Council borrowing in FY30 is higher than the increase in gross capital expenditure.

Debt-to-revenue ratio

28. IFF, IAF and NZTA funding are recognised as revenue for financial reporting and debt-covenant purposes. In the first two years of the draft LTP, Council borrowing is below or close to the November position while revenue is higher. In FY28, additional external funding of approximately $7.1m exceeds the approximately $5.1m increase in gross capital expenditure, so Council borrowing is approximately $2.0m lower than the November position. In FY29, additional external funding of approximately $5.0m offsets part of the approximately $8.8m increase in gross capital expenditure, with the balance of approximately $3.8m funded by Council borrowing. Cumulative borrowing is therefore approximately $1.8m above the November position at the end of FY29. The higher revenue increases the denominator in the debt-to-revenue calculation, so the ratio is expected to be favourable in these two years compared with the November position. The ratio weakens in FY30. External funding is approximately $2.1m lower than in the November position and additional Council borrowing is approximately $10.8m, which brings the three-year total to approximately $10.1m of additional external revenue and $12.6m of additional Council borrowing.

Balanced budget and operating grant context

29. The external grant revenue is also favourable to Council's balanced budget position in the first two LTP years, when additional external funding of approximately $7.1m and $5.0m is recognised and Council borrowing is below or close to the November position. This is relevant because Council is managing the impact of loan-funded operating grants and investments across Community Services, Spaces & Places and Digital Services. The proposed transport funding package does not directly fund those grants and investments, but the recognition of additional external capital revenue improves the whole-of-Council financial result and provides greater resilience while the first years of the draft LTP are balanced.

30. The capital programme will still create future interest, depreciation and operating costs as assets are delivered. These impacts, together with any changes in external funding certainty, will be incorporated into the next full LTP financial model and reported with the draft financial strategy and balanced budget assessment.

RISKS AND LEGAL IMPLICATIONS

31. The key risks associated with the proposed package, and the proposed treatments, are set out in the table below.

Risk	Proposed treatment
NZTA funding is not confirmed The proposed 51% assumptions for eligible Turret Road and Hewletts Road expenditure remain planning assumptions.	Staff will continue engagement through the National Land Transport Programme (NLTP) process and update the programme if approval, timing or eligibility differs.
Project delivery and cashflow The proposed drawdown depends on projects incurring eligible expenditure in the forecast years.	Project teams will review forecasts at each LTP iteration and reallocate eligible IFF drawdown within the approved facility if delivery changes.

Risk	Proposed treatment
Land acquisition timing Property opportunities may not align with annual budgets.	The programme includes flexibility in FY31 and any material bring-forward will be managed through existing delegations or referred to Council where required.
Future operating costs Earlier capital activity will bring forward interest, depreciation and maintenance costs.	These will be included in the full financial model and managed through LTP balancing decisions.
Facility over-allocation The previous model included more IFF than the remaining facility.	The proposed allocation removes the Area B late-year provision and caps each project to keep total drawdown within $177m.

TE AO MĀORI APPROACH

32. The three major transport projects in this report affect Tauranga Moana communities and areas of interest to mana whenua. The changes proposed are to funding and phasing, and do not change the purpose of the projects. Staff have not identified any new impacts on mana whenua commitments arising from the proposed package.

CLIMATE IMPACT

33. The proposed changes are not expected to materially alter the climate outcomes of the three projects. The package maintains the delivery profile for Turret Road / 15th Avenue, and reverses the Cameron Road Stage 2 descoping decision, retaining the current project scope, including the transport choice and mode shift outcomes it supports. For Hewletts Road / Connecting Mount Maunganui, it continues design, the Detailed Business Case and allows strategic land acquisition to commence rather than deferring all activity for three years, which keeps the project progressing towards its transport outcomes. The proposed changes do not alter the physical scope of any project beyond reinstating the Cameron Road Stage 2 scope, so staff have not undertaken a separate emissions assessment. Climate considerations, including adaptation and resilience, will continue to be assessed through project design and business cases.

CONSULTATION / ENGAGEMENT

34. The decisions in this report provide direction for preparing the draft LTP and are not final adoption decisions. Formal LTP consultation is expected in March/April 2027. Before then, staff will continue engagement with NZTA on NLTP funding assistance, eligibility and timing, and with Crown Infrastructure Partners or the relevant funding agency on the Cameron Road Stage 2 IAF agreement. Affected partners and funders will also be engaged where a proposed change may affect a commitment, funding agreement, delivery arrangement or material community outcome.

SIGNIFICANCE

35. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

36. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region.

    (b) any persons who are likely to be particularly affected by, or interested in, the matter.

(c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

37. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the matter is of **medium** significance.

ENGAGEMENT

38. Taking into consideration the above assessment, that the matter is of medium significance, officers are of the opinion that no further engagement is required prior to Council making a decision.

39. At this early stage of the LTP process, consultation is not required, but as options develop Councillors and staff may engage with relevant stakeholders.

NEXT STEPS

40. Update the corporate planning model and project funding stacks to reflect Council's decisions.

41. Continue engagement with NZTA on Regional Land Transport Plan (RLTP) and NLTP bids, funding assistance rates, eligibility and timing.

42. Incorporate the revised capital, external revenue, debt, interest, depreciation and balanced budget impacts into the next draft LTP financial information.

ATTACHMENTS

1. **Attachment 1 - Major Transport Projects - Proposed Phasing & Funding - A21463396** ⇩

FOUR MAJOR TRANSPORT PROJECTS | Proposed Phasing & Funding

All amounts NZ$ million

01 | OVERALL FUNDING MOVEMENT — Proposed 1 Dec less Agreed 10 Nov

Increase / (decrease)	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	TOTAL FY28–30	TOTAL FY28–37	TOTAL FY27–37
Gross capex	–	5.12	8.81	8.71	21.56	25.30	20.36	5.43	(10.50)	(47.08)	(36.41)	22.64	1.30	1.30
External funding (NZTA / IAF + IFF)	–	7.08	5.04	(2.06)	(1.52)	6.57	10.38	2.77	(6.62)	(37.43)	(33.41)	10.06	(49.20)	(49.20)
Debt / DC funding*	–	(1.96)	3.77	10.77	23.08	18.73	9.98	2.66	(3.88)	(9.65)	(3.00)	12.58	50.49	50.49

02 | TURRET ROAD / 15TH AVENUE — TSP007 · N.000001.02

Scenario	Capex / funding	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	TOTAL FY28–30	TOTAL FY28–37	TOTAL FY27–37
Draft LTP pre-10 Nov	**Capex**	**8.59**	**40.92**	**55.65**	**30.79**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**127.36**	**127.36**	**135.95**
	Funding - NZTA	4.38	20.87	28.38	15.70	–	–	–	–	–	–	–	64.95	64.95	69.34
	Funding - IFF	4.21	20.05	27.27	0.21	–	–	–	–	–	–	–	47.53	47.53	51.74
	Funding - Loans	–	–	–	14.88	–	–	–	–	–	–	–	14.88	14.88	14.88
Agreed 10 Nov	**Capex**	**8.59**	**29.92**	**48.00**	**29.44**	**20.00**	**–**	**–**	**–**	**–**	**–**	**–**	**107.36**	**127.36**	**135.95**
	Funding - NZTA	4.38	15.26	24.48	15.01	10.20	–	–	–	–	–	–	54.75	64.95	69.34
	Funding - IFF	4.21	14.66	23.52	14.43	9.80	–	–	–	–	–	–	52.61	62.41	66.62
	Funding - Loans	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Proposed 1 Dec	**Capex**	**8.59**	**29.92**	**48.00**	**29.44**	**20.00**	**–**	**–**	**–**	**–**	**–**	**–**	**107.36**	**127.36**	**135.95**
	Funding - NZTA	4.38	15.26	24.48	15.01	10.20	–	–	–	–	–	–	54.75	64.95	69.33
	Funding - IFF	4.21	14.66	23.52	3.32	–	–	–	–	–	–	–	41.50	41.50	45.71
	Funding - Loans	–	–	–	11.10	9.80	–	–	–	–	–	–	11.10	20.90	20.90

03 | CAMERON ROAD STAGE 2 — TSP018 · N.000009.03

Scenario	Capex / funding	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	TOTAL FY28–30	TOTAL FY28–37	TOTAL FY27–37
Draft LTP pre-10 Nov	**Capex**	**4.02**	**12.79**	**34.09**	**41.52**	**4.89**	**–**	**–**	**–**	**–**	**–**	**–**	**88.40**	**93.29**	**97.31**
	Funding - IAF	2.31	2.85	28.53	23.31	0.29	–	–	–	–	–	–	54.69	54.97	57.29
	Funding - IFF	0.90	4.92	2.17	8.61	2.30	–	–	–	–	–	–	15.70	18.00	18.90
	Funding - DCs	0.80	5.02	3.38	9.60	2.31	–	–	–	–	–	–	18.01	20.32	21.12
Agreed 10 Nov	**Capex**	**4.02**	**11.51**	**30.68**	**37.37**	**4.41**	**–**	**–**	**–**	**–**	**–**	**–**	**79.56**	**83.96**	**87.98**
	Funding - IAF	2.31	2.56	25.68	20.98	0.26	–	–	–	–	–	–	49.22	49.48	51.79
	Funding - IFF	0.90	4.43	1.95	7.75	2.07	–	–	–	–	–	–	14.13	16.20	17.10
	Funding - DCs	0.80	4.52	3.05	8.64	2.08	–	–	–	–	–	–	16.21	18.28	19.09
Proposed 1 Dec	**Capex**	**4.02**	**12.79**	**34.09**	**41.52**	**4.89**	**–**	**–**	**–**	**–**	**–**	**–**	**88.40**	**93.29**	**97.31**
	Funding - IAF	2.31	7.37	19.64	23.92	2.82	–	–	–	–	–	–	50.92	53.74	56.05
	Funding - IFF	0.90	2.86	7.63	9.30	1.10	–	–	–	–	–	–	19.80	20.90	21.79
	Funding - DCs	0.80	2.56	6.82	8.30	0.98	–	–	–	–	–	–	17.68	18.66	19.46

04 | HEWLETTS SUB AREA — TSP002 · N.000046.39

Scenario	Capex / funding	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	TOTAL FY28–30	TOTAL FY28–37	TOTAL FY27–37
Draft LTP pre-10 Nov	**Capex**	**2.67**	**8.49**	**12.06**	**22.47**	**37.43**	**43.54**	**44.47**	**34.46**	**–**	**–**	**–**	**43.02**	**202.92**	**205.59**
	Funding - NZTA	0.79	4.07	6.15	11.46	19.09	22.20	22.68	17.57	–	–	–	21.68	103.23	104.01
	Funding - IFF	1.89	4.16	5.91	–	–	–	–	–	–	–	–	10.08	10.08	11.96
	Funding - Loans	–	0.26	–	11.01	18.34	21.33	21.79	16.89	–	–	–	11.26	89.61	89.61
Agreed 10 Nov	**Capex**	**2.67**	**–**	**–**	**–**	**8.82**	**12.92**	**23.98**	**39.86**	**46.23**	**47.08**	**36.41**	**–**	**215.30**	**217.97**
	Funding - NZTA	0.79	–	–	–	4.23	6.59	12.23	20.33	23.57	24.01	18.57	–	109.53	110.32
	Funding - IFF	1.89	–	–	–	4.33	6.33	–	–	–	–	–	–	10.66	12.55
	Funding - Loans	–	–	–	–	0.27	–	11.75	19.53	22.65	23.07	17.84	–	95.11	95.11
Proposed 1 Dec	**Capex**	**2.67**	**3.84**	**5.40**	**4.56**	**29.90**	**38.22**	**44.34**	**45.29**	**35.72**	**–**	**–**	**13.80**	**207.27**	**209.94**
	Funding - NZTA	0.79	1.83	2.76	2.32	15.25	19.49	22.61	23.10	18.22	–	–	6.91	105.58	106.36
	Funding - IFF	1.89	2.01	2.65	2.23	–	–	–	–	–	–	–	6.89	6.89	8.78
	Funding - Loans	–	–	–	–	14.65	18.73	21.73	22.19	17.51	–	–	–	94.80	94.80

05 | OTUMOETAI LOCAL LOOP — TSP035 · N.000018.17

Scenario	Capex / funding	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35	FY36	FY37	TOTAL FY28–30	TOTAL FY28–37	TOTAL FY27–37
Draft LTP pre-10 Nov	**Capex**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**2.17**	**22.94**	**25.37**	**–**	**50.47**	**50.47**
	Funding - IFF	–	–	–	–	–	–	–	–	1.41	14.91	16.49	–	32.81	32.81
	Funding - Loans	–	–	–	–	–	–	–	–	0.76	8.03	8.88	–	17.67	17.67
Agreed 10 Nov	**Capex**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1.95**	**20.64**	**22.83**	**–**	**45.43**	**45.43**
	Funding - IFF	–	–	–	–	–	–	–	–	1.27	13.42	14.84	–	29.53	29.53
	Funding - Loans	–	–	–	–	–	–	–	–	0.68	7.22	7.99	–	15.90	15.90
Proposed 1 Dec	**Capex**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1.95**	**20.64**	**22.83**	**–**	**45.43**	**45.43**
	Funding - IFF	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	Funding - Loans	–	–	–	–	–	–	–	–	1.95	20.64	22.83	–	45.43	45.43

11.6 Arena Extension Business Case

File Number: **A21496671**

Author: **Caroline Irvin, Governance Advisor**

Authoriser: **Caroline Irvin, Governance Advisor**

BACKGROUND

1. The report accompanying this agenda item, ‘Arena Extension Business Case’, will be circulated separately prior to the meeting.

11.7 Rating Policy Matters for 2027-37 Long-term Plan

File Number: **A21256407**

Author: **Jim Taylor, Manager: Rating Policy and Revenue**
Frazer Smith, Manager: Strategic Finance & Growth
Kathryn Sharplin, Head of Finance

Authoriser: **Kathryn Sharplin, Head of Finance**
Craig Rice, Chief Operating and Financial Officer

PURPOSE OF THE REPORT

1. To seek decisions on key rating policy settings as part of the development of the draft 2027-37 LTP (LTP) and draft Revenue and Financing Policy, including:
   - General rates differentials and rating categories.
   - The basis for setting the Uniform Annual General Charge (UAGC).
   - Growth targeted rates.
   - Direct Debit Policy – moving from paid by instalment due dates to paid in arrears.
   - Rates Calculator.

RECOMMENDATIONS

That Council:

(a) Receives the report "Rating Policy Matters for 2027-37 LTP".

(b) Notes that this report seeks direction for rates modelling. Proposed rating policy changes will be considered for consultation through the draft LTP (LTP), with a separate decision under recommendation (j) (iii) below on whether to consult on direct debit in arrears.

(c) Notes that the analysis of impacts by types of ratepayer uses the example rates targets of 5.3% and 7% rather than current draft budget numbers. The rates distribution table which will be presented for the draft budget to be consulted on will therefore be different because of the draft budget details and because of revisions to property capital values which are currently being revalued.

(d) Agrees, for the apportionment of general rates in the 2027-37 LTP, to either:

   (I retain an apportionment target for general rates. If commercial and industrial remain separate, retain the 2024–2034 LTP target of *65% residential, 15% commercial and 20% industrial*, or agree a different split. If they are combined, agree a split between residential and the combined business category instead; or

   (ii) remove the proportion requirement as set in the 2024-2034 LTP, leaving each category's share of general rates to be determined by the differentials and the capital value of properties.

(e) Agrees to one of the following options for general rates modelling:

   (i) keep separate commercial and industrial rating categories; or

   (ii) combine the commercial and industrial categories into one business rating category.

(f) Agrees to model one of the following, consistent with the rates-share decision in (d) and the rating categories chosen in (e):

   (i) Recalculate the differentials to get close to the target split, if a target is retained under

(d)(i); or

(ii) If the categories remain separate, retain the current differentials: 2.25 for commercial and 2.7 for industrial; or

(iii) Set different commercial and industrial differentials if the categories remain separate. If they are combined, set one business differential (for example, 2.6) and decide whether to model it with the Option 5 industrial roading targeted rate.

(g) Agrees the basis for setting the Uniform Annual General Charge (UAGC), by choosing one of:

(i) the current policy, where the UAGC and other targeted rates set on a fixed basis together are 10% of total rates (not recommended by staff);

(ii) change the UAGC policy, to set the UAGC at 10% of general rates; or

(iii) change the UAGC policy, to set the UAGC at 15% [or other percentage] of general rates.

(h) Agrees how to fund part of the interest on Te Tumu debt associated with the Pāpāmoa East Interchange, by choosing one of the following options:

(i) retain the location-based differential fixed charge; or

(ii) a single fixed charge for all rating units; or

(iii) general rates; or

(iv) a differential value-based targeted rate.

(i) Agree how to fund the Pyes Pa West development contribution shortfall, by choosing one of the following options:

(i) partially use a location-based fixed targeted rate; or

(ii) general rates; or

(iii) a differential value-based targeted rate.

(j) For Council's Direct Debit Payment Policy, choose between (i) and (ii), and make a separate decision on consultation under (iii). No change to payment terms is being adopted at this meeting:

(i) retain payment in advance; or

(ii) progress for further modelling the option of allowing periodic direct debits in arrears without penalty, noting estimated first-year interest of $1.2 mat current uptake (about 21%), equivalent to approximately 0.5% on rates; **and**

(iii) agree whether to include this question in the LTP consultation, given the impact on the rates requirement.

(k) Agree to build a rates calculator, either

(i) a one-year calculator, which is in development within current budgets (recommended by staff), or

(ii) a three-year LTP calculator (estimated additional cost $120,000; not recommended by staff).

(l) Requests that staff model the options chosen for inclusion in the draft financials for the 15 December Council meeting, and report back with draft policy changes in the new year for inclusion in the 2027-37 LTP consultation process.

EXECUTIVE SUMMARY

2. This report seeks Council decisions on rating policy settings for the 2027-37 LTP. These decisions will determine the proportion of rates that is paid by different parts of the community, such as residential and commercial and industrial ratepayers, and lower value properties relative to higher value properties. The analysis used in this report to assist Council to understand its decisions is based on example rates increases of 5.3% and 7% it is not the draft budget which is still in development.

3. For Councillors, the fundamental choice is whether to collect a greater proportion of rates through fixed charges (UAGC), property value (general rates) or targeted rates linked to specific activities, and how much of the overall burden should be carried by residential versus business (commercial and industrial) ratepayers. The direct debit and rates calculator decisions are different: they change Council's own costs rather than who pays.

GENERAL RATES DIFFERENTIALS

4. In 2026/27 (the current year), commercial ratepayers pay general rates based on capital value at 2.25 times the rate paid by residential ratepayers, and industrial ratepayers at 2.7 times. The 2024-34 LTP set a policy of moving the residential share of general rates down over time to 65%, with differentials changing each year to achieve a 65/15/20 residential/commercial/industrial split; the current residential share is about 66%. In the 2026/27 Annual Plan, Council froze the differentials at 2.25 and 2.7 pending this review. If they are kept, the 2026 revaluation would move the split to 67.5% residential, 13.9% commercial and 18.7% industrial.

Decision Sought:

5. Whether Council wishes to keep the policy of moving the shares paid by residential, commercial and industrial ratepayers towards a 65/15/20 split, a different split, or remove it,

6. Whether and to what extent Council wishes to maintain commercial and industrial differentials relative to residential rates charge based on capital value, and at what level, and

7. Whether to maintain separate rating category differentials for industrial and commercial ratepayers.

8. Each option changes how general rates are shared across the three categories of ratepayers; the modelled effects are set out in the General Rates Differentials and Rating Categories section.

UNIFORM ANNUAL GENERAL CHARGE (UAGC)

9. The current policy (the UAGC and other fixed targeted rates together at 10% of total rates) would reduce the UAGC from $349 in 2026/27, as metered water is no longer included in rates. Setting the UAGC alone at 10% or 15% of general rates would give a higher UAGC than the current policy, with 15% the highest. A higher UAGC lowers rates for higher-value and business properties and raises them for lower-value properties, including dwellings on Māori land.

Decision Sought:

10. The UAGC basis: the current policy (not recommended by staff), the UAGC alone at 10% or 15% of general rates, or another percentage.

GROWTH TARGETED RATES

11. Council must decide who funds the Te Tumu interest cost (debt mainly incurred in relation to the Pāpāmoa East Interchange) and the Pyes Pa West development contribution shortfall. Should it be the wider community through the general rate: or those geographically located to benefit from the infrastructure that is in place and for all or a portion of the costs.

Decision Sought:

12. For Pāpāmoa East, whether to keep the location-based differential fixed charge, use a single fixed charge, the general rate or a differential value-based targeted rate. For Pyes Pa West whether to partially use a location-based fixed targeted rate, use a value-based targeted rate or fund the whole shortfall through the general rate (part of the debt is funded this way now).

DIRECT DEBIT POLICY

13. Paying periodic direct debits in arrears would be simpler for customers and staff but would permanently increase Council debt, with the interest funded by all ratepayers. At current uptake (about 21%), debt rises $32.7m and first-year interest is $1.2m (about 0.5% on rates); at 50% uptake, $78.5m, $3.0m and 1.2%.

Decision Sought:

14. Whether to retain payment in advance or model allowing periodic direct debit payments in arrears without penalty. Council is also asked whether to consult on the arrears option through the LTP; it is not being asked to adopt it at this meeting.

Rates Calculator:

15. A three-year LTP calculator would cost about $120,000 plus ongoing support; the one-year calculator is already being replaced.

Decision Sought:

16. Whether to retain the one-year calculator (recommended by staff) or develop a three-year version (not recommended by staff).

17. These settings are judgements for Elected Members, so staff make no recommendation, except changing the current UAGC policy to provide certainty of the level of UAGC and retaining the one-year rates calculator due to costs and resourcing constraints.

BACKGROUND

18. Tauranga City Council currently funds a significant proportion of its activities through general rates, targeted rates, fees and charges, subsidies and development contributions.

19. The current rating framework has evolved over a number of LTPs and Annual Plans. Changes in growth patterns, property values, affordability concerns, infrastructure investment requirements and customer expectations provide an opportunity to reassess whether existing rating settings remain appropriate.

20. In the 2024-34 LTP, the commissioners agreed to move the proportion of general rates paid by the residential ratepayer down to a 65% of the general rate by the 2027/2028 rating year. In the 2026/2027 Annual Plan Council decided to freeze the commercial differential at 2.25 and the industrial differential at 2.7 pending consideration of the policy as part of the 2027-2037 LTP.

21. The 1 July 2026 revaluation (audit expected December 2026) applies from 1 July 2027, when Taheke – Bay Waters Limited also starts billing metered water, and rates capping legislation may follow within the first three years of the plan.

22. A poll of Councils on Taituarā's message board identified that Tauranga City Council's direct debit policy is out of step with most other Councils who permit periodic direct debits to be paid in arrears rather than in advance.

23. Tauranga City Council's 2026 city-wide revaluation has a valuation date of 1 July 2026 and is expected to complete the audit process in December 2026. The new property values will be used to assess rates from 1 July 2027.

24. The new Waters organisation Taheke – Bay Waters Limited will bill metered water from 1 July 2027. Tauranga City Council will collect rates revenue for wastewater and stormwater

and pass to Taheke until such time as they have a functional billing system, potentially by 30 June 2028.

STATUTORY CONTEXT

25. The Local Government Act 2002 requires Council to set out in its Revenue and Financing Policy how each activity is funded, and to consult on that policy through the LTP. In allocating funding under section 101(3), Council must consider:

- the community outcomes to which the activity primarily contributes; and
- the distribution of benefits between the community as a whole, any identifiable part of the community, and individuals; and
- the period in or over which those benefits are expected to occur; and
- the extent to which the actions or inaction of particular individuals or a group contribute to the need to undertake the activity; and
- the costs and benefits, including consequences for transparency and accountability, of funding the activity distinctly from other activities; and
- the overall impact of any allocation of liability for revenue needs on current and future communities.

26. The Local Government (Rating) Act 2002 provides the tools to give effect to those funding decisions. It allows Council to:

- set differential general rates by rating category, as considered in the differentials options;
- set a Uniform Annual General Charge (UAGC). The UAGC, together with any targeted rates set as uniform fixed charges, is capped at 30% of total rates revenue (section 21), which is relevant to the UAGC options in this report;
- set targeted rates, including the growth targeted rates, using the factors in Schedule 3; and

27. Any changes would be consulted on through the 2027-37 LTP. Proposed rates capping legislation and the transfer of water services to Taheke – Bay Waters Limited may change this framework during the plan period.

STRATEGIC ALIGNMENT

28. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	☐
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	✓
We are a vibrant city that embraces events	☐

29. The LTP process provides the primary opportunity for Council to review and consult on significant rating policy changes.

PROPOSED RATING POLICY OPTIONS

30. Options for each proposed policy change are discussed below. The analysis uses two budget options, 5.3% and 7%, after growth of 1.2%.

BENCHMARKING

31. The following information was sourced from the 2026/27 Annual Plans of New Zealand's six largest metropolitan Councils. The settings shown reflect those Annual Plans and may change as Councils consider their next LTPs.

Metro comparisons | council general rates				
Council	**Business share of**	**Residential / rural share**	**Business differential**	**UAGC / fixed general charge**
Auckland	34.6%	65.4%	~2.42	$663, 14% of total general rates
Hamilton	46.8%	53.2%	~2.99	$925, 22.3% of total general rates
Wellington	48.0%	52.0%	3.68	No UAGC
Christchurch	33.0%	67.0%	2.00	$213, 6.7% of total general rates
Dunedin	32.0%	68.0%	2.50	No UAGC; Community Services Rate $124
Tauranga	**34.0%**	**66.0%**	**2.25 comm / 2.7 ind**	**2026/27: $349, equivalent to 7.4% in 2027/28 under the current policy**

32. Tauranga's overall rating structure does not appear out of line with comparable metropolitan Councils. The commercial and industrial sectors contribute around 34% of general rates, similar to Auckland, Christchurch and Dunedin, while Tauranga's 2026/2027 UAGC represents a relatively modest 7.4% of general-rate only revenue.

33. This suggests there is scope to consider changes to either the differential or fixed-charge components, but **these should be assessed together** because both influence how the rating burden is distributed between residential and business ratepayers.

MODELLING ASSUMPTIONS

34. The existing UAGC policy is that the UAGC and targeted rates set on a fixed basis together equal 10% of total rates (7.4% of general rates). This gives a UAGC of around $295-$300, which is lower than the 2026/2027 UAGC of $349.

35. Growth in the rating base (capital value and rating units) is assumed to be 1.2%.

36. At a high level, the revaluation is expected to move each sector's aggregate rateable valuation as follows:

- Residential capital value aggregate 0% (flat market).
- Commercial capital value aggregate -10% (reducing market – most impacted category).
- Industrial aggregate capital value -5% (reducing market).

GENERAL RATES DIFFERENTIALS AND RATING CATEGORIES

Current Position:

37. Council uses rating categories and differential factors to recognise differing land uses, service demands and ability to pay. Based on capital value changes in the city, commercial values are expected to fall about 10% and industrial about 5%, while there is expected to be little change in residential values.

38. If the current differentials (2.25 commercial, 2.7 industrial) are maintained next year the apportionment of general rates would move to 67.5% residential, 13.9% commercial and 18.7% industrial, against a 65/15/20 policy target.

Potential Options:

39. Higher differentials would be required to achieve the existing policy of a 65/15/20 split.

40. Differentials of 2.4/2.8 would keep the split close to the existing 66% share paid by residential ratepayers.

Key Issues:

- Whether existing categories remain appropriate.
- Complexity and customer understanding.
- Equity between residential, commercial, industrial and other sectors.
- Tauranga City Council's triennial revaluation is in the same year as the LTP. If the valuations pass audit first time this timing would align with Council choosing the differentials.

Potential Options:

Option 1:

41. Status Quo (existing differentials as decided in the 2026/2027 Annual Plan).

42. Retain existing categories and differential policy to achieve a 65% residential, 15% commercial and 20% industrial proportion of the general rates over time.

43. The differentials were temporarily set by Council in the 2026/2027 annual plan as commercial 2.25 and industrial 2.7.

44. Using the existing differentials creates a new proportion of 67.5% residential, 13.9% commercial and 18.7% industrial, assuming the changes in the 2026 revaluation.

45. The commercial and industrial differentials would need to be moved significantly higher to achieve a 65% residential/ 15% commercial, 20% industrial split.

Advantages	Disadvantages
• Creates stability and predictability when fixed proportions are achieved. • Fixed shares limit shifts between rating categories at each three-yearly revaluation, (*but individual bills can still change*).	• Does not necessarily reflect external factors that affect each sector's ability to pay, as cost-of-living and economic pressures often impact sectors at different times. • Changes towards the current policy proportions would increase rates on the commercial and industrial sectors over the next few years.

Analysis of Option 1:

46. In the status quo – no changes to the current differentials the revaluation redistributes the allocation of rates to the residential category from the commercial and industrial categories.

47. The residential share of general rates would be 67.5%, against a 65% target. At the 5.3% budget the average residential change is +6.2%, the average commercial change is -1.6% and the average industrial change is +4.1%.

Option 2:

48. Rebalance Differentials to maintain a split close to the existing split for example residential 66.5%, commercial 14.5%, industrial 19% (and keep this proportion, *or another when considering any changes to the UAGC*, for three years)

49. Reviews the contribution of commercial and industrial sectors relative to residential properties.

50. Post revaluation, the equivalent differentials of around 2.4 commercial and 2.8 industrial would maintain the proportions for each category close to the existing 2026/2027 split (residential 66.4%, commercial 14.5%, industrial 19.0%).

Advantages	Disadvantages
• Maintains current level of general rates for each category. • Rebalancing the differentials to residential 66%, commercial 15% and Industrial 19% would minimise change **and** create stability and predictability (this could be phased).	• May not reflect the commercial and industrial category's ability to pay in the current economic environment.

Analysis of Option 2:

51. Increasing the commercial and industrial differentials to 2.4 and 2.8 offsets the impact of the revaluation and keeps the general rates split close to the existing one: 66.4% residential, 14.5% commercial and 19.0% industrial.

52. Under the rebalanced differentials, the modelled average rates changes are +4.7% for residential, +2.8% for commercial and +6.1% for industrial properties.

Option 3:

53. Change the policy to a fixed differential starting at 2.1 for commercial and 2.6 for industrial or **other** differentials as chosen by Council.

54. These reduced differentials can be modified to any combination noting that reducing the differentials in one category increases rates on the others.

Advantages	Disadvantages
• Provides Council with the ability to set the differential differently each LTP (for the first three years).	• Replaces long term certainty and stability with short term decision making. • Reducing the differential alongside lower relative commercial and industrial values will shift rates from businesses to residential ratepayers.

Analysis of Option 3:

55. Lowering the commercial and industrial differentials to 2.1 and 2.6 shifts a greater share of general rates to residential properties. Their modelled share rises to 68.5%.

56. Compared with the status quo, Option 3 produces a larger average rates increase for residential properties, a larger average decrease for commercial properties and a smaller average increase for industrial properties.

    Council can also move to a preferred position over time in the LTP (phasing).

Option 4: Simplify Categories:

57. Reduce category numbers and simplify differential structures.

Advantages	Disadvantages
• Simpler to model and understand for Council and ratepayers. • Aligns with commonly used category definitions in other New Zealand metros.	• Commercial general rates would increase, and industrial rates would decrease in a merger without other mitigation (*see option 5*).

58. Tauranga is an outlier in the local government sector, maintaining separate Commercial and Industrial rating categories.

    This approach was adopted through the previous LTP, reflecting the stronger performance of the Industrial sector, supported by growth at the Port of Tauranga, while parts of the Commercial sector, particularly hospitality, were facing significant cost-of-living pressures.

59. Generally, the revaluation process rebalances these differences through each triennial revaluation, as changes in relative property values reflect shifts in economic performance and demand across sectors.

Analysis Option 4:

60. The differential between the Commercial and Industrial categories was established primarily to recognise the Industrial sector's contribution to transportation costs, particularly investment in and maintenance of the roading network.

61. Consideration was also given to the broader impacts associated with port-related industrial activity, including traffic congestion, environmental effects, and the additional demand placed on Council infrastructure and services arising from population growth that supports port, warehousing, storage, and import-export operations.

62. Consolidates the commercial and industrial categories into a single business differential of 2.6, broadly preserving the current overall relativity between business and residential properties.

63. Industrial properties would generally benefit because their current differential (2.7) is higher than commercial (2.25).

64. Commercial properties would generally pay more if the new combined differential was 2.6 post revaluation.

65. The allocation of general rates would move from the industrial category to the commercial category. The commercial share rises from 13.9% to 15.7% and the industrial share falls from 18.7% to 17.7%, while the residential share falls slightly (66.5%, against 67.5%).

Option 5:

66. Simplify Categories **and** create **new industrial roading targeted rate.**

67. Reduce category numbers, simplify differential structures and introduce new targeted rate for Industrial roading.

Advantages	Disadvantages
• One business differential simplifies the general rate, although the separate industrial roading rate adds a charge. • Compared with a merger alone, the targeted rate shifts some roading costs to industrial properties, reducing general rates funding needs. • Industrial category would pay a	• TCC does not have sufficient level of detail to understand how much of the roading budget relates to capex and opex costs as a result of industrial use on the roads. • Transferring rates from the general rate to a targeted rate reduces Council's ability to use the funds for other purposes if needed.

Advantages	Disadvantages
transparent share of the roading budget.	

Analysis Option 5:

68. **Option 5** would introduce an industrial targeted rate of $8m, primarily used to fund roading and other associated impacts, in addition to the combined business differential of 2.6.

69. The $8m is an illustrative figure used to show an option for the two categories to be recombined, and Council could choose a different amount. Because the $8m is collected from industrial properties through the targeted rate, the general rates needed from all categories are lower.

70. Adding an industrial roading targeted rate of $8m to the combined differential of 2.6 moves cost onto industrial properties.

71. The targeted rate explicitly identifies the purpose for which the additional funding is collected e.g. Roading and congestions. The connection between funding and benefit becomes more visible than under a broad differential, noting that Council does not have specific data to predict the exact impact of Industrial traffic on our roads.

SUMMARY OF DIFFERENTIAL ANALYSIS

72. The status quo will move the allocation to the residential properties as a result of a lower UAGC (discussed in the next section) and the city wide revaluation.

73. Council can fix the current allocation by either changing the set proportions to 66.5%/14.5%/19% or differentials that approximate this split.

74. Lower business differentials shift costs from commercial and industrial properties to residential properties.

75. Combining commercial and industrial differentials simplifies the system and generally benefits industrial properties while increasing rates for some commercial properties.

76. Adding an industrial targeted rate for roading improves transparency by linking funding to a defined activity rather than embedding it within the general rate.

77. For Councillors, the fundamental choice is whether they want to collect a greater proportion of rates through fixed charges (UAGC), property value (general rates), or targeted rates linked to specific activities, and how much of the overall burden should be carried by residential versus business ratepayers.

UNIFORM ANNUAL GENERAL CHARGE (UAGC):

Current Position:

78. The UAGC ensures all Separately Used or Inhabited Parts (SUIPs) contribute a fixed amount towards Council services.

Key Issues:

- Affordability impacts.
- Balance between fixed and value-based charging.
- Impact on lower-value and higher-value properties.

79. Increasing the UAGC would increase rates on lower value properties and reduce rates on the highest-value residential properties and on most commercial and industrial properties.

80. This is because the extra revenue from the 71,000 SUIPs across the 63,000 rating units reduces the general rates needed from capital value.

81. The baseline UAGC is **$295-$300** (5.3% and 7% budgets) for the 2027/2028 rating year.

82. Under the existing policy, the UAGC and any other targeted rates set on a fixed basis together equal 10% of total rates, so the UAGC is what remains after those fixed targeted rates are deducted (*the UAGC would have been $369-$376 had metered water remained in rates*). Options 2 and 3 apply the percentage to general rates for the UAGC alone, which is why they give a higher UAGC. This is the baseline for the analysis.

PROPOSED GOVERNMENT LEGISLATION TO MERGE COUNCILS

83. In the event of future local government reorganisation where Council potentially merges with Western Bay of Plenty District Council (WBOPDC), it would be desirable to minimise disruption when harmonising rating policy. WBOPDC's UAGC is currently **$560**, or around **16% of its general and roading rates combined**. Tauranga City Council funds roading through its general rate, so this is the closest comparison with a UAGC set as a percentage of Tauranga's general rates. Of the options in this report, 15% of general rates (Option 3) would sit closest to Western Bay's 16%.

Potential Options:

84. **Option 1**: Maintain Current UAGC (the UAGC and other fixed targeted rates together are 10% of **total rates**).

85. The UAGC would reduce from $349 in the 2026/2027 rating year to $295-$300.

Advantages	Disadvantages
• Lower value properties would pay less than under Options 2 and 3, because the UAGC is lower ($295-$300).	• Compared with Options 2 and 3, the lower fixed charge means higher-value homes and businesses on average pay more, but the low-value business examples pay less. • The current methodology, which sets the UAGC and other fixed targeted rates together at 10% of total rates, is not commonly used in metros, which typically state a percentage of general rates.

86. **Not recommended** because it does not provide certain in the Revenue and Financing Policy as waters rates transition. The UAGC falls from $349 to about $295, which shifts rates onto higher-value and business properties and materially changes the allocation of rates across the community.

87. The UAGC would reduce further as the wastewater and stormwater rates progressively move over to Taheke – Bay Waters Limited.

Option 2:

88. Change the calculation of the UAGC to 10% of general rates,

89. The UAGC would increase from $295-$300 to $398-$405. The increase arises because the current 10% of total rates also covers the other fixed targeted rates, whereas Option 2 applies 10% of general rates for the UAGC alone.

Advantages	Disadvantages
• Aligns with the definition commonly used by metros to calculate the fixed component of the general rates budget. • Excludes other fixed targeted rates, e.g. waste, pool inspections, service level growth targeted rates, from the calculation.	• Compared with the status quo at the same budget level, lower-value properties generally pay more because the fixed charge makes up a larger share of their bill.

Option 3:

90. Change the calculation of the UAGC to 15% of general rates (the UAGC alone).

91. The UAGC would increase from $295-$300 to $598-$608. The increase arises because Option 3 applies 15% to general rates for the UAGC alone, whereas the current 10% of total rates also covers the other fixed targeted rates.

Advantages	Disadvantages
• Collecting more through the fixed charge reduces rates relative to the status quo for the high-value residential example and the median and high-value business examples. • Aligns better with the Western Bay of Plenty District Council UAGC (16% of general and roading rates combined). • Reduces sensitivity to valuation changes.	• Of the three options, the 15% UAGC produces the largest increases for the low-value residential, commercial and industrial examples.

Analysis Options 1, 2 and 3:

92. The UAGC options are the status quo (*the UAGC and other fixed targeted rates together at 10% of total rates*), the UAGC alone at 10% of general rates, and the UAGC alone at 15% of general rates.

93. Increasing the UAGC shifts rates away from a property value basis and onto a fixed per SUIP basis. All options result in fixed rates, including the UAGC, staying under the 30% cap set in the Local Government (Rating) Act 2002.

94. The current policy (the UAGC and other fixed targeted rates together at 10% of total rates) would result in a lower UAGC than if the metered water budget had remained in rates.

95. At the 5.3% budget, raising the UAGC increases the average residential change from +6.2% under the current policy to +7.1% at 10% of general rates and +8.9% at 15%. The average commercial change moves from -1.6% to -3.5% and -7.1%, and the average industrial change from +4.1% to +1.6% and -3.1%.

96. Increasing the UAGC has a larger impact on the rates of lower value properties.

97. At 15%, the increase for a low-value (1st percentile) residential property is 15.3%, against 3.4% under the current policy, while the increase for a high-value (99th percentile) residential property falls to 3.5%, against 8.5%. Low-value commercial and industrial properties also see larger increases (16.9% and 8.7%), while median and high-value commercial and industrial properties see lower changes than under the current policy.

98. Residential dwellings on Multiple Owned Māori Land tend to be in the lower value group.

99. The 7% budget adds roughly 1.5 to 1.8 percentage points to each average figure.

COMBINING POTENTIAL DIFFERENTIAL AND UAGC OPTIONS

100. The general rate policy decisions for differentials and rating categories and UAGC have a combined impact on ratepayers.

ANALYSIS OF COMBINATIONS OF CHANGES

101. A range of differential and UAGC combinations could be considered. Table 5 in **Attachment 1** – Rating Policy option tables models two examples.

102. The first combines the commercial and industrial categories at a differential of 2.6, introduces an industrial roading targeted rate of $8m, and sets the UAGC alone at 15% of general rates. Because the $8m reduces the general rates collected, the UAGC dollar amounts in this example differ slightly from those in the UAGC section. The second keeps separate categories, changes the differentials to 2.4 for commercial and 2.8 for industrial, and sets the UAGC at 10% of general rates.

103. Combining the commercial and industrial categories at 2.6 with the industrial roading targeted rate and a 15% UAGC moves the allocation of rates to residential and low value commercial and Industrial. The split of general rates would be 68.5% residential, 14.9% commercial and 16.5% industrial.

104. The 15% UAGC shifts the burden towards lower-value properties. The low-value (1st percentile) residential increase is 11.1%, against 3.4% under the status quo, while the high-value (99th percentile) residential change is -1.2%, against +8.5%.

105. Keeping separate categories with differentials of 2.4 and 2.8 and a 10% UAGC gives a split of 67.1% residential, 14.3% commercial and 18.6% industrial.

106. The 7% budget adds roughly 1.5 to 1.8 percentage points to each average figure.

ANALYSIS OF RATING POLICY OPTIONS

107. The summary table below models the 2027/28 change in TCC rates for residential, commercial and industrial properties. Each option is run at a 5.3% rates budget increase ($379.7m, including water targeted rates and IFF levies) and a 7.0% rates budget increase ($384.1m, including water targeted rates and IFF levies).

108. The modelled changes are for TCC rates only and exclude water targeted rates and IFF levies. The figures below are the 5.3% results. The 7.0% results follow the same pattern and are about 1.5 to 1.9 percentage points higher.

Option comparison (median change, 5.3% budget, 1.2% growth)

Option	Residential	Commercial	Industrial
Status quo: Differentials 2.25 / 2.7; UAGC 7.4%	+5.8% ($159)	-2.0% (-$139)	+3.9% ($664)
Differentials 2.25 / 2.7; UAGC 10%	+7.2% ($198)	-3.0% (-$204)	+1.8% ($307)
Differentials 2.25 / 2.7; UAGC 15%	+9.9% ($272)	-4.8% (-$328)	-2.2% (-$379)
Differentials 2.1 / 2.6; UAGC 7.4%	+7.2% ($199)	-6.4% (-$441)	+1.9% ($330)
Differentials 2.4 / 2.8; UAGC 7.4%	+4.4% ($120)	+2.2% ($153)	+5.8% ($986)
Combined 2.6 / 2.6; UAGC 7.4%	+4.5% ($125)	+10.0% ($690)	-1.0% (-$179)
Combined 2.6 / 2.6; UAGC 7.4% + roading	+1.4% ($38)	+6.5% ($449)	+13.4% ($2,288)
Combined 2.6 / 2.6; UAGC 10% + roading	+2.8% ($76)	+5.3% ($364)	+11.5% ($1,966)
Combined 2.6 / 2.6; UAGC 15% + roading	+5.4% ($149)	+2.9% ($201)	+7.9% ($1,346)
Differentials 2.4 / 2.8; UAGC 10%	+5.8% ($160)	+1.2% ($80)	+3.6% ($620)

109. Revaluation: Falling business valuations shift more liability toward residential.

110. Higher UAGC: More fixed-charge funding raises the median residential bill and reduces the business examples' bills.

111. Differentials: Higher business weightings shift funding toward business; combining at 2.6 shifts more toward commercial and less toward industrial.

112. Separate roading: Industrial funds the targeted charge, reducing general-rate costs for residential and commercial.

113. Combined effect: Combining the categories at 2.6 with the industrial roading targeted rate and a UAGC of 15% gives median increases of 5.4% residential, 2.9% commercial and 7.9% industrial. At a 10% UAGC the medians are 2.8%, 5.3% and 11.5%, so a higher UAGC moves cost from business to residential.

114. Combined effect: Differentials of 2.4 and 2.8 with a 10% UAGC give median increases of 5.8% residential, 1.2% commercial and 3.6% industrial, but individual property impacts still vary.

115. Detailed tables are included in **Attachment 1** – Rating Policy options tables.

GROWTH TARGETED RATES - CURRENT POSITION

116. Growth infrastructure is primarily funded through development contributions, borrowing and general rates.

117. As part of the 2024-34 LTP Council decided to push out the development of the future growth area of Te Tumu outside the LTP period in order to reduce the level of Capital Expenditure required. However, there were a number of projects that were still required to be completed to enable existing growth areas that were to be partially funded by future Te Tumu ratepayers (through Development Contributions). With Te Tumu debt being incurred within the 10-year period, but no revenue from Te Tumu growth area the interest impact on this debt was significant, as shown in the table below.

118. The risk of allowing this debt to accumulate created risk to Council that Te Tumu Development Contribution charges would become so high that development became unfeasible and that this debt would need to be funded by the ratepayer.

Growth Funding | impacts		
Project Name	Future Te Tumu Debt portion (before interest) $M	Te Tumu portion in 20 years if no funding ($M)
3 waters projects	250.21	552.24
Transportation projects	59.33	183.15
Total	309.54	735.39

Table: Likely Impact on Te Tumu debt if it is left to compound until 2045

119. Council reduced this risk by funding a portion of the interest on the future Te Tumu debt by instigating a targeted rate (Report A14856800 on 11 September 2023). This targeted rate was consulted upon as part of the 2024-34 LTP consultation and was adopted on the following basis (options considered can be seen in original report):

    1. 50% of the Te Tumu interest costs recovered
    2. Only recovered interest costs on the non-water components of the debt (water activities expected to be transferred to another entity)
    3. A flat charge per ratepayer (to recognise the citywide benefit) with a differential charge to the portions of the city that directly benefited from the infrastructure being constructed.
    4. Because of the decision to not charge a rate on any waters infrastructure the project that predominantly created Te Tumu funded debt was the Papamoa East Interchange.
    5. In Pyes Pa West there was a funding shortfall in the development contributions required to pay for the infrastructure. The commissioners decided that the ratepayers who benefited from this capital works should fund this shortfall through a targeted rate.

Decision Sought:

120. For Pāpāmoa East, whether to keep the location-based differential fixed charge, use a single fixed charge, the general rate or a differential value-based targeted rate. For Pyes Pa West, whether to partially use a location-based fixed targeted rate, use a value-based targeted rate or fund the whole shortfall through the general rate (part of the debt is funded this way now).

Key Issues:

- Ensuring growth pays a fair share of growth costs.
- Intergenerational equity.
- Funding major infrastructure in growth areas.

121. In policy terms, Council must decide how it wants to fund the interest on the on the Te Tumu related debt due to delayed development and the development contribution shortfall in the Pyes Pa West area. Ultimately, the choice is whether the wider community should fund the shortfall created by growth, or whether those who have benefited most from growth should contribute a greater share.

OPTIONS FOR PĀPĀMOA EAST INTERCHANGE TARGETED RATE

Option 1:

122. Status Quo (Continue existing funding arrangements)

123. Continue funding through a fixed charge **differentiated on geographic location**. (Ratepayers with highest benefit pay 3 times more than the rest of the city.)

Advantages	Disadvantages
• Ratepayers with greater level of benefit from infrastructure partially funded by future Te Tumu ratepayers pay more.	• Ratepayers in the areas who pay more may perceive this as inequitable as the risk of any future non development of Te Tumu would impact the entire city.

Option 2:

124. Flat rate - Change the rate to a single flat rate over all ratepayers.

125. Change to funding through a **flat** fixed charge for all rating units in the city.

Advantages	Disadvantages
• Ratepayers in the Pāpāmoa area may perceive this as more equitable because the risk of any future non development of Te Tumu would impact the entire city.	• Ratepayers in other areas may perceive inequity when they pay the same rates as ratepayers that have generated the immediate need for those projects to be constructed now.

Analysis Option 2:

126. Table 6- Pāpāmoa East Interchange targeted rate. The current location-based fixed charge ($35 for the rest of the city, $70 for the wider area of benefit and $106 for the full area of benefit) compared with a single flat charge of $44 for all rating units, showing the change in annual dollars and as a percentage of total rates. In the table, City is the rest of the city, Wide is the wider area of benefit and Full is the full area of benefit. Figures are rounded.

127. Replacing the location-based fixed charge with a single flat charge of $44 for all rating units reduces the charge for ratepayers in the full area of benefit by $62 (from $106) and in the wider area of benefit by $27 (from about $70) and increases it by $9 (from $35) for the rest of the city. As a percentage of total rates, this reduces rates in Pāpāmoa and Wairakei by up to 2.1% and increases rates over the rest of the city by up to 0.3%.

Option 3:

128. Fund through the general rates.

129. Change funding to the general rate based on value and rating category.

Advantages	Disadvantages
• Simple funding mechanism if considered to benefit the whole community. Flexibility with general rates. • Properties in the same rating category pay the same rate per dollar of capital value, regardless of location.	• May not reflect the level of benefit provided with the new infrastructure. • Higher value residential, commercial and industrial ratepayers will pay more.

Analysis Option 3:

130. Table 7- Pāpāmoa East Interchange targeted rate. The current location-based fixed charge ($35 for the rest of the city, $70 for the wider area of benefit and $106 for the full area of benefit) compared with funding through the general rate, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates. Figures are rounded.

131. Funding through the general rate means the cost follows property value and rating category, not location.

132. Most residential properties pay less: the average residential change is -0.2% in the rest of the city, -0.9% in the wider area of benefit and -1.7% in the full area of benefit, with reductions of up to 3.2% for low-value residential properties. Low-value commercial and industrial properties also pay less, by up to 3.3% and 2.0%. High-value properties pay more, by up to $60 a year for residential properties and up to $3,544 for the highest-value industrial properties (0.8%), and the average commercial and industrial changes are increases of between 0.2% and 0.7%.

Option 4:

133. Fund through a targeted rate

134. Change funding to a targeted rate based on value and rating category.

Advantages	Disadvantages
• Simple funding mechanism if considered to benefit the whole community. • Using the same category differentials as general rates would give the same distribution of costs, collected through a separate targeted rate. • More transparent than general rates.	• May not reflect the level of benefit provided with the new infrastructure. • Higher value residential, commercial and industrial ratepayers will pay more. • Limited public understanding of the rate's purpose.

Analysis Option 4:

135. The impact is the same if the rate is part of the general rate (option 3) or a separate targeted rate with the same differentials. If it is in the general rate this provides Council with more flexibility under a rate capping regime. A targeted rate is more transparent on the invoice.

OPTIONS FOR PYES PA WEST TARGETED RATE

136. The current policy sets a fixed rate of $80 per property in the Pyes Pa area regardless of size or rating category.

Option 1:

137. Status Quo

138. Continue funding through a fixed charge for each rating unit in a geographic location.

Advantages	Disadvantages
• Each rating unit in Pyes Pa West pays the same $80 towards the shortfall, regardless of property value or rating category. • A targeted rate is more transparent.	• Ratepayers in Pyes Pa West may consider this unfair as shortfalls in other growth areas have been entirely funded from rates across the city. • Limited public understanding of the rate's purpose.

Option 2:

139. Fund through the general rates.

140. Change funding to the general rate based on value and rating category.

Advantages	Disadvantages
• Simple funding mechanism if considered to benefit the whole community.	• Properties elsewhere in the city would pay slightly more, even though the infrastructure primarily benefits Pyes Pa West.

Analysis Option 2:

141. Table 8- Pyes Pa West growth targeted rate. The current fixed charge of $80 for every rating unit in Pyes Pa West compared with funding the same amount through the general rate, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates for Pyes Pa West and for the rest of the city. Figures are rounded.

142. If this budget was funded through the general rate over the whole city, residential properties in Pyes Pa West would pay $76 to $79 less each year, a reduction of 1.0% to 2.8% of total rates, with the largest percentage reduction for the lowest-value properties. The average commercial property would pay $69 less (0.3%) and the average industrial property $74 less (0.7%). Properties elsewhere in the city would pay slightly more: $1 to $4 for residential properties and on average $11 for commercial and $5 for industrial properties, which is 0.1% or less of total rates.

Option 3:

143. Fund through a targeted rate with a different basis

144. Change funding to a targeted rate based on value and rating category.

Advantages	Disadvantages
• Within Pyes Pa West, the charge reflects capital value and rating category rather than a flat $80; the low-value residential example pays less.	• Ratepayers in Pyes Pa West may consider this unfair as shortfalls in other growth areas have been entirely funded from rates across the city. • Higher value residential, commercial and industrial ratepayers will pay more. • Limited public understanding of the rate's purpose.

Analysis Option 3:

145. Table 9 - Pyes Pa West growth targeted rate. The current fixed charge of $80 for every rating unit in Pyes Pa West compared with a targeted rate on properties in Pyes Pa West, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates. Figures are rounded.

146. If this budget was funded through a targeted rate set on capital value on the properties within the area of benefit, the cost would be redistributed within Pyes Pa West. The average residential property would pay about $78, close to the current $80, but the amount depends on value. A low-value (1st percentile) residential property would pay $31, which is $48 (1.7% of total rates) less; a median property would pay $75, which is $4 (0.1%) less; and a high-value (99th percentile) property would pay $153, which is $74 (0.9%) more.
The handful of commercial properties would pay on average $422, which is $343 (1.6%) more, and industrial properties $200, which is $120 (1.1%) more.

DIRECT DEBIT PAYMENT POLICY

Current Position:

147. Council offers weekly, fortnightly and monthly periodic direct debits, under which ratepayers build up sufficient credit before each six-monthly rates instalment falls due. Approximately 40% of ratepayers pay by direct debit, with just over half of these, approximately 21% of all ratepayers, using a periodic direct debit.

148. Ratepayers who pay on the statutory instalment dates effectively pay each instalment by the due date. The current periodic direct debit arrangement maintains this principle while allowing advance payments to be spread throughout the year.

149. Council's relatively strong cash position under the current model reduces its borrowing and **associated interest costs.**

Key Issues:

- A payment-in-arrears model would be simpler for customers to understand and for staff to administer and explain.
- It would reduce customer enquiries when annual rates invoices are issued.
- Allowing periodic direct debit customers to pay after instalment due dates without penalty would provide them with a benefit not available to ratepayers who pay on the statutory instalment dates.
- Ratepayers could increasingly move from paying six-monthly instalments in advance to paying weekly, fortnightly or monthly in arrears.
- The lost cash flow would require a permanent increase in Council debt and ongoing interest costs funded by all ratepayers (initially 0.5% rates increase and likely to grow).

- Approximately 10% of properties change ownership each year, and around half of new owners choose to pay by direct debit. The financial impact would therefore be expected to increase over time.
- Any additional rates funding required may become more difficult to accommodate if rates capping is introduced.
- Moving to payment in arrears would not simply shift the timing of receipts within one financial year. It would create a permanent cash-flow shortfall, requiring Council to borrow more and fund the resulting interest costs through future rates.

Option 1:

150. Maintain the Current Payment-in-Advance Model for periodic direct debit payments.

151. Continue requiring periodic direct debit payments to build sufficient credit before each rates instalment due date.

Advantages	Disadvantages
• Avoids any increase in Council debt or interest costs. • Maintains consistency between periodic direct debit customers and ratepayers paying on the statutory instalment dates. • Preserves Council's existing cash-flow position. • Avoids imposing financing costs on ratepayers who do not use periodic direct debit.	• The arrangement is difficult for some customers to understand. • Customers may perceive their direct debit as being significantly ahead of their rates liability. • Generates additional enquiries when rates invoices are issued. • Is more complex for Rates and Customer Services staff to explain and administer.

Option 2:

152. Change the model to Payment-in-Arrears for periodic direct debit payments.

153. Allow any ratepayer on a weekly, fortnightly or monthly payment direct debit to pay in arrears without penalty. This would be included in Council's rates resolution.

154. Approximately 21% of ratepayers pay by periodic direct debit. Providing them with a 6 month payment holiday to switch over from payment in advance to payment in arrears will result in permanent increase in debt of **$32.7m** with first year interest costs of **$1.2m** equivalent to approximately **0.5%** rates increase.

Advantages	Disadvantages
• Provides the clearest and most customer-friendly payment arrangement. • Is simpler for customers to understand and for staff to explain. • Any ratepayer who chooses weekly, fortnightly or monthly direct debit could pay in arrears without penalty. • Would likely reduce rates payment enquiries and administrative complexity.	• Could materially increase Council debt as ratepayers move away from paying six-monthly instalments in advance. • Financing costs would be borne by all ratepayers, including those who continue to pay on the statutory instalment dates. • The additional debt could reduce Council's capacity to borrow for infrastructure and other priorities.

155. If periodic direct debit uptake increased from 21% to 50%, the permanent increase in debt is estimated at approximately **$78.5m**, with first-year interest costs of **$3.0m**, equivalent to approximately **1.2%** rates increase. Ongoing annual interest costs would be approximately **$4.6m**.

156. If all ratepayers ultimately moved to periodic direct debit, the permanent increase in debt could reach approximately **$156.9m**, with first-year interest costs of **$6.0m**, equivalent to approximately **2.3%** rates increase. Ongoing annual interest costs could reach **$9.2m**.

157. The rates equivalent above (0.5%, 1.2% and 2.3%) are first-year figures only. Ongoing interest costs would be higher, as shown for the 50% and 100% scenarios.

POLICY CONSIDERATION

158. The central policy question is whether periodic direct debit customers should be permitted to pay rates in arrears without penalty when the resulting borrowing and interest costs would be funded by all ratepayers, including those who continue to pay their rates in advance.

159. Given the potential financial implications, any change could be considered through the next LTP alongside Council's wider funding, debt and affordability decisions. If Council wishes to consult on the matter, a potential question is:

160. "Do you support allowing ratepayers on weekly, fortnightly or monthly direct debit to pay after instalment due dates without penalty? The estimated first-year cost is equivalent to about a 0.5% rates increase at current uptake, or 1.2% if half of ratepayers use the option. Ongoing interest costs would be higher and funded by all ratepayers."

ONLINE CALCULATOR

161. Staff have undertaken a high-level assessment of a three-year LTP rates calculator.

162. With an estimated cost of **approximately $120,000** and a delivery requirement of around 2 to 2.5 FTE months, plus ongoing annual support. Digital are currently replacing the existing one-year calculator previously linked to Ozone.

163. Given this work is already underway, the additional cost and resource required, and the current uncertainty in the local government sector, **staff recommend retaining the one-year calculator approach at this time** and reconsidering a three-year calculator once the future operating environment is clearer.

FINANCIAL CONSIDERATIONS

164. The 5.3% and 7% rates increases are modelling scenarios, not draft budget figures. Council is asked to select rating policy settings which will then be modelled against the budget when it is presented on 15 December 2026. Council is also being asked to decide which direct debit and rates calculator options to pursue, noting their potential budget implications have not been included in the draft budget figures at this stage.

165. At a given budget, differentials, the UAGC and growth targeted rates change who pays, not how much Council collects. Direct debit in arrears delays receipts and increases borrowing and interest costs. A three-year calculator adds development and support costs. The table below summarises these impacts.

Proposal	Financial impact	Who bears it
General rates differentials	Redistributes general rates between residential, commercial and industrial. At current differentials the split moves to 67.5% / 13.9% / 18.7%.	Categories whose share of general rates increases.
UAGC	Baseline: $295-$300 (UAGC and other fixed targeted rates together at 10% of total rates,	Compared with the baseline, a higher UAGC raises rates

Proposal	Financial impact	Who bears it
	after metered water leaves rates). Option 2: $398-$405 (UAGC alone at 10% of general rates). Option 3: $598-$608 (UAGC alone at 15% of general rates). Had metered water remained in rates, the UAGC would have been $369-$376.	for the low-value examples in all three categories and reduces rates for the highest-value residential example. Commercial and industrial rates are lower on average, even though their low-value examples pay more.
Growth targeted rates	Pyes Pa West is $80 per property. A city-wide flat Pāpāmoa East charge of $44 reduces total rates by up to 2.1% in Pāpāmoa and Wairakei and increases them by up to 0.3% elsewhere.	The wider community or the growth areas, depending on the option.
Direct debit in arrears	At 21% uptake: $32.7m extra debt and $1.2m first-year interest (about 0.5% on rates). At 50%: $78.5m, $3.0m (1.2%) and $4.6m ongoing interest. If all ratepayers use it: $156.9m, $6.0m (2.3%) and $9.2m ongoing interest. Implementation costs have not been modelled.	All ratepayers, through higher rates.
Rates calculator	The one-year calculator is already being replaced within current budgets. A three-year calculator would add an estimated $120,000 in development costs, plus ongoing annual support.	Council operating budget.

166. The direct debit in arrears option would also use debt headroom and may be harder to fund if rates capping is introduced.

167. Staff will model the options Council chooses and report the full financial impact, including debt, interest and rates effects, before any draft policy goes out for consultation as part of the LTP.

RISKS AND LEGAL IMPLICATIONS

168. Specific risks include:

1. Compliance with the Local Government Act 2002, including consultation.
2. Potential Rates Capping Legislation.
3. Subject to final revaluation audit approval from the Valuer-General.
4. Debt headroom with regard to direct debit policy.
5. Legal challenge to targeted rates and differentials.

169. Significant changes to funding allocations may create stakeholder concerns and require robust justification during consultation.

170. Staff will manage these risks by modelling the options Council selects and reporting the full financial impact before any draft policy is released for consultation, by confirming the revaluation results once audit is complete, and by obtaining legal advice. Because rates capping may constrain future flexibility, the report also identifies, for the direct debit option, where the cost would be carried by all ratepayers.

TE AO MĀORI APPROACH

171. The proposed Rating Policy supports Council's Te Ao Māori Approach by seeking equitable and sustainable funding outcomes for all communities, including Māori landowners and tangata whenua.

    Opportunities for tangata whenua input will be provided through LTP consultation processes through direct engagement, and the impacts of rating decisions on Māori interests will be considered as part of policy development.

172. Residential dwelling units on Māori land are generally at the lower end of the property valuations and any increase in the UAGC compared with the current policy will have a greater impact on the rates on these properties.

CLIMATE IMPACT

173. The Rating Policy does not directly impact climate adaptation, emissions, or biodiversity outcomes. However, it provides a funding framework that supports Council's investment in climate resilience, emissions reduction, and environmental initiatives.

CONSULTATION / ENGAGEMENT

174. No consultation has occurred on the matters raised in this report.

175. Should Council wish to proceed with policy changes, consultation would occur through the 2027-37 LTP process.

SIGNIFICANCE

176. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

177. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural well-being of the district or region.

    (b) any persons who are likely to be particularly affected by, or interested in, the proposal.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

178. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the proposal is of **medium** significance.

    This report is assessed as having medium significance because any future policy changes may affect how rates are distributed across sectors and property owners.

ENGAGEMENT

179. Taking into consideration the above assessment, that the proposal is of medium significance, officers are of the opinion that the following consultation/engagement is required under the Local Government Act 2002. Elected Members will engage with the community as part of the LTP consultation.

NEXT STEPS

180. Following Council direction, staff will:

    1. Undertake detailed modelling of rating scenarios as directed for the preferred options.
    2. Prepare draft Revenue and Financing Policy amendments in line with Council's Long-term Plan timetable.

3. Incorporate proposed changes into the LTP consultation material for Council consideration.

ATTACHMENTS

1. Attachment 1 - Rating Policy options tables - A21468064

Rating Policy Supporting Tables

2027-28 Long-term Plan rating model

Supporting document containing the option comparison tables

How to read this document

The tables that follow show the indicative impact on property charges for each of the scenario cases. Each case is a separate block, headed by a light blue bar. These modelled results are indicative only and do not show what any individual property will actually be charged.

- **Case heading:** shows the case number, the scenario being modelled (for example Status Quo or UAGC 10%), the budget percentage used, and when the figures were captured.
- **Property types:** each case has a block for each property type (for example Residential – single dwelling, Commercial and Industrial).
- **Rows:** Low (1%), Median (50%) and High (99%) are capital-value percentiles within each property type. The median is the 50th percentile. The Average row shows the modelled result for the average property in that category.
- **Capital Value 2026:** the capital value of the property at that point in the range.
- **Tauranga City Council (non-water) Rates Increase %:** the combined percentage change across rates (excluding wastewater and stormwater).
- **Negative values:** a minus sign (for example -2.1%) means a decrease.

Table 1- Status Quo differentials at 2.25 for commercial and 2.7 for Industrial compared with 2.1 for commercial and 2.6 for Industrial and 2.4 for commercial and 2.8 for industrial.

Table 1 | Differential options vs Status Quo						
Scenario	Status Quo	Status Quo	Com 2.1 Ind 2.6	Com 2.1 Ind 2.6	Com 2.4 Ind 2.8	Com 2.4 Ind 2.8
Budget increase	5.3%	7.0%	5.3%	7.0%	5.3%	7.0%
General rates allocation						
Residential	67.5%	67.5%	68.5%	68.5%	66.4%	66.4%
Commercial	13.9%	13.9%	13.2%	13.2%	14.5%	14.5%
Industrial	18.7%	18.7%	18.3%	18.3%	19.0%	19.0%
RESIDENTIAL | TCC increase %						
Low (1%)	3.4%	5.0%	4.6%	6.2%	2.3%	3.8%
Median (50%)	5.8%	7.4%	7.2%	8.9%	4.4%	6.0%
High (99%)	8.5%	10.3%	10.2%	12.1%	6.8%	8.6%
Average	6.2%	7.9%	7.7%	9.4%	4.7%	6.4%
COMMERCIAL | TCC increase %						
Low (1%)	-5.8%	-4.3%	-8.8%	-7.4%	-2.9%	-1.3%
Median (50%)	-2.0%	-0.4%	-6.4%	-4.9%	2.2%	3.9%
High (99%)	-1.3%	0.3%	-6.0%	-4.4%	3.1%	4.9%
Average	-1.6%	0.0%	-6.1%	-4.6%	2.8%	4.5%
INDUSTRIAL | TCC increase %						
Low (1%)	0.9%	2.6%	-0.7%	0.9%	2.5%	4.2%
Median (50%)	3.9%	5.6%	1.9%	3.6%	5.8%	7.5%
High (99%)	4.3%	6.0%	2.3%	4.0%	6.2%	8.0%
Average	4.1%	5.9%	2.2%	3.9%	6.1%	7.8%

The effect is:

- In the **status quo – no changes to the current differentials** the revaluation redistributes the allocation of rates to the residential category from the commercial and industrial categories. The residential share of general rates would be 67.5%, against a 65% target. At the 5.3% budget the average residential change is +6.2%, the average commercial change is -1.6% and the average industrial change is +4.1%.
- Lowering the commercial and industrial **differentials to 2.1 and 2.6** shifts the rates burden further onto the residential category. The residential share rises to 68.5% and the average residential change to +7.7%, while the average commercial change falls to -6.1% (median -6.4%) and the average industrial change to +2.2%.
- Increasing the commercial and industrial **differentials to 2.4 and 2.8** offsets the impact of the revaluation and keeps the split close to the existing one (66.4% residential, 14.5% commercial and 19.0% industrial). The average residential change falls to +4.7%, the average commercial change is +2.8% and the average industrial change is +6.1%.

Council can also move to a preferred position over time in the Long-term Plan (phasing).

Table 2- Status Quo differentials at 2.25 for commercial and 2.7 for Industrial compared with 2.6 for commercial and 2.6 for Industrial (combined).

Table 2 | Combined commercial / industrial differential				
Scenario	Status Quo	Status Quo	Com Ind combined 2.6	Com Ind combined 2.6
Budget increase	5.3%	7.0%	5.3%	7.0%
General rates allocation				
Residential	67.5%	67.5%	66.5%	66.5%
Commercial	13.9%	13.9%	15.7%	15.7%
Industrial	18.7%	18.7%	17.7%	17.7%
RESIDENTIAL | TCC increase %				
Low (1%)	3.4%	5.0%	2.4%	3.9%
Median (50%)	5.8%	7.4%	4.5%	6.2%
High (99%)	8.5%	10.3%	7.0%	8.8%
Average	6.2%	7.9%	4.9%	6.6%
COMMERCIAL | TCC increase %				
Low (1%)	-5.8%	-4.3%	2.4%	4.1%
Median (50%)	-2.0%	-0.4%	10.0%	11.8%
High (99%)	-1.3%	0.3%	11.4%	13.2%
Average	-1.6%	0.0%	10.8%	12.7%
INDUSTRIAL | TCC increase %				
Low (1%)	0.9%	2.6%	-3.2%	-1.6%
Median (50%)	3.9%	5.6%	-1.0%	0.6%
High (99%)	4.3%	6.0%	-0.8%	0.9%
Average	4.1%	5.9%	-0.9%	0.8%

The effect is:

- Industrial properties would generally benefit because their current differential (2.7) is higher than commercial (2.25). At the 5.3% budget the average industrial change moves from +4.1% to -0.9%.
- Commercial properties would generally pay more if the new combined differential was 2.6 post revaluation. The average commercial change moves from -1.6% to +10.8%.
- The system would become easier to explain and administer.
- The allocation of general rates would move from the industrial category to the commercial category. The commercial share rises from 13.9% to 15.7% and the industrial share falls from 18.7% to 17.7%, while the residential share falls slightly (66.5%, against 67.5%).

The differential between the Commercial and Industrial categories was established primarily to recognise the Industrial sector's contribution to transportation costs, particularly investment in and maintenance of the roading network.

Consideration was also given to the broader impacts associated with port-related industrial activity, including traffic congestion, environmental effects, and the additional demand placed on Council infrastructure and services arising from population growth that supports port, warehousing, storage, and import-export operations.

Table 3- Status Quo differentials at 2.25 for commercial and 2.7 for Industrial compared with 2.6 for commercial and 2.6 for Industrial (combined) and a new targeted rate of $8 million on the Industrial category for roading.

Table 3 | Combined differential with separate roading				
Scenario	Status Quo	Status Quo	Com Ind 2.6 and Roading	Com Ind 2.6 and Roading
Budget increase	5.3%	7.0%	5.3%	7.0%
General rates allocation				
Residential	67.5%	67.5%	66.5%	66.5%
Commercial	13.9%	13.9%	15.7%	15.7%
Industrial	18.7%	18.7%	17.7%	17.7%
RESIDENTIAL | TCC increase %				
Low (1%)	3.4%	5.0%	-0.5%	1.0%
Median (50%)	5.8%	7.4%	1.4%	3.0%
High (99%)	8.5%	10.3%	3.5%	5.3%
Average	6.2%	7.9%	1.7%	3.4%
COMMERCIAL | TCC increase %				
Low (1%)	-5.8%	-4.3%	-0.8%	0.9%
Median (50%)	-2.0%	-0.4%	6.5%	8.3%
High (99%)	-1.3%	0.3%	7.8%	9.7%
Average	-1.6%	0.0%	7.3%	9.2%
INDUSTRIAL | TCC increase %				
Low (1%)	0.9%	2.6%	8.5%	10.1%
Median (50%)	3.9%	5.6%	13.4%	15.1%
High (99%)	4.3%	6.0%	14.1%	15.7%
Average	4.1%	5.9%	13.8%	15.5%

The effect is:

- Adding an industrial roading targeted rate of $8 million to the combined differential of 2.6 moves cost onto industrial properties. At the 5.3% budget the average industrial change rises from -0.9% under Option 4 to +13.8%, while the average commercial change falls from +10.8% to +7.3% and the average residential change from +4.9% to +1.7%.
- Compared with the status quo, the average industrial change is 9.7 percentage points higher (+13.8%, against +4.1%), the average commercial change is 8.9 points higher (+7.3%, against -1.6%) and the average residential change is 4.5 points lower (+1.7%, against +6.2%). At the 7% budget the averages are +15.5% industrial, +9.2% commercial and +3.4% residential.
- The targeted rate explicitly identifies the purpose for which the additional funding is collected e.g. Roading.

- Industrial category businesses paying the new roading targeted rate can see exactly what services or activities are being funded.
- The connection between funding and benefit becomes more visible than under a broad differential.

Table 4- Status Quo UAGC and other fixed targeted rates at 10% of total rates compared with the UAGC alone at 10% and 15% of general rates.

Table 4 | UAGC 10% and 15% vs Status Quo						
Scenario	Status Quo	Status Quo	UAGC 10%	UAGC 10%	UAGC 15%	UAGC 15%
General rates allocation						
Residential	67.5%	67.5%	68.1%	68.1%	69.4%	69.4%
Commercial	13.9%	13.9%	13.7%	13.7%	13.2%	13.2%
Industrial	18.7%	18.7%	18.2%	18.2%	17.4%	17.4%
RESIDENTIAL | TCC increase %						
Low (1%)	3.4%	5.0%	7.5%	9.1%	15.3%	17.1%
Median (50%)	5.8%	7.4%	7.2%	8.9%	9.9%	11.6%
High (99%)	8.5%	10.3%	6.8%	8.6%	3.5%	5.3%
Average	6.2%	7.9%	7.1%	8.8%	8.9%	10.6%
COMMERCIAL | TCC increase %						
Low (1%)	-5.8%	-4.3%	2.0%	3.6%	16.9%	18.9%
Median (50%)	-2.0%	-0.4%	-3.0%	-1.4%	-4.8%	-3.2%
High (99%)	-1.3%	0.3%	-3.8%	-2.3%	-8.7%	-7.2%
Average	-1.6%	0.0%	-3.5%	-1.9%	-7.1%	-5.6%
INDUSTRIAL | TCC increase %						
Low (1%)	0.9%	2.6%	3.6%	5.3%	8.7%	10.5%
Median (50%)	3.9%	5.6%	1.8%	3.5%	-2.2%	-0.6%
High (99%)	4.3%	6.0%	1.6%	3.2%	-3.7%	-2.1%
Average	4.1%	5.9%	1.6%	3.3%	-3.1%	-1.5%

The effect is:

- The current policy (the UAGC and other fixed targeted rates together at 10% of total rates) would result in a lower UAGC than if metered water had remained in rates.
- At the 5.3% budget, raising the UAGC increases the average residential change from +6.2% under the current policy to +7.1% at 10% of general rates and +8.9% at 15%. The average commercial change moves from -1.6% to -3.5% and -7.1%, and the average industrial change from +4.1% to +1.6% and -3.1%.
- Increasing the UAGC has a larger impact on the rates of lower value properties. At 15%, the increase for a low-value (1st percentile) residential property is 15.3%, against 3.4% under the current policy, while the increase for a high-value (99th percentile) residential property falls to 3.5%, against 8.5%. Low-value commercial and industrial properties also see larger increases (16.9% and 8.7%), while median and high-value commercial and industrial

properties see lower changes than under the current policy. Residential dwellings on Multiple Owned Māori Land tend to be in the lower value group.

- The 7% budget adds roughly 1.5 to 1.8 percentage points to each average figure.

Table 5- examples of combined UAGC and differential changes.

A range of differential and UAGC combinations could be considered. Table 5 models two examples. The first combines the commercial and industrial categories at a differential of 2.6, introduces an industrial roading targeted rate of $8 million, and sets the UAGC alone at 15% of general rates. Because the $8 million reduces the general rates collected, the UAGC dollar amounts in this example differ slightly from those in the UAGC section. The second keeps separate categories, changes the differentials to 2.4 for commercial and 2.8 for industrial, and sets the UAGC alone at 10% of general rates.

Table 5 | Status Quo; combined 2.6 + UAGC 15% + roading; Com 2.4 / Ind 2.8 + UAGC 10% (no roading)						
Scenario	Status Quo	Status Quo	Com Ind 2.6, Roading UAGC 15%	Com Ind 2.6, Roading UAGC 15%	Com 2.4 Ind 2.8	Com 2.4 Ind 2.8
Budget increase	5.3%	7.0%	5.3%	7.0%	5.3%	7.0%
General rates allocation						
Residential	67.5%	67.5%	68.5%	68.5%	67.1%	67.1%
Commercial	13.9%	13.9%	14.9%	14.9%	14.3%	14.3%
Industrial	18.7%	18.7%	16.5%	16.5%	18.6%	18.6%
RESIDENTIAL | TCC increase %						
Low (1%)	3.4%	5.0%	11.1%	12.8%	6.4%	8.0%
Median (50%)	5.8%	7.4%	5.4%	7.1%	5.8%	7.5%
High (99%)	8.5%	10.3%	-1.2%	0.5%	5.1%	6.9%
Average	6.2%	7.9%	4.4%	6.1%	5.7%	7.4%
COMMERCIAL | TCC increase %						
Low (1%)	-5.8%	-4.3%	20.6%	22.6%	4.8%	6.5%
Median (50%)	-2.0%	-0.4%	2.9%	4.7%	1.2%	2.8%
High (99%)	-1.3%	0.3%	-0.3%	1.4%	0.5%	2.2%
Average	-1.6%	0.0%	1.0%	2.7%	0.8%	2.4%
INDUSTRIAL | TCC increase %						
Low (1%)	0.9%	2.6%	16.3%	18.0%	5.1%	6.9%
Median (50%)	3.9%	5.6%	7.9%	9.4%	3.6%	5.4%
High (99%)	4.3%	6.0%	6.8%	8.3%	3.4%	5.2%
Average	4.1%	5.9%	7.2%	8.7%	3.5%	5.2%

The effect is:

- Combining the commercial and industrial categories at 2.6 with the industrial roading targeted rate and a 15% UAGC moves cost onto business. The split of general rates would be 68.5% residential, 14.9% commercial and 16.5% industrial. At the 5.3% budget the

average residential change is +4.4% (status quo +6.2%), the average commercial change is +1.0% (status quo -1.6%) and the average industrial change is +7.2% (status quo +4.1%).

- The 15% UAGC shifts the burden towards lower-value properties. The low-value (1st percentile) residential increase is 11.1%, against 3.4% under the status quo, while the high-value (99th percentile) residential change is -1.2%, against +8.5%.
- The effect is not uniform within a category. At 15%, low-value commercial and industrial properties see larger increases (+20.6% and +16.3%) than under the status quo (-5.8% and +0.9%), while high-value commercial properties see a change of -0.3%, compared with -1.3% under the status quo.
- Keeping separate categories with **differentials of 2.4 and 2.8** and a 10% UAGC gives a split of 67.1% residential, 14.3% commercial and 18.6% industrial. At the 5.3% budget the average residential change is +5.7% (status quo +6.2%), the average commercial change is +0.8% (status quo -1.6%) and the average industrial change is +3.5% (status quo +4.1%). Low-value commercial properties increase by 4.8%, against -5.8% under the status quo.
- The 7% budget adds roughly 1.5 to 1.8 percentage points to each average figure.

Table 6- Pāpāmoa East Interchange targeted rate (fixed rate).

The current location-based fixed charge ($35 for the rest of the city, $70 for the wider area of benefit and $106 for the full area of benefit) compared with a single flat charge of $44 for all rating units, showing the change in annual dollars and as a percentage of total rates. In the table, City is the rest of the city, Wide is the wider area of benefit and Full is the full area of benefit. Figures are rounded.

Table 6 | Growth targeted rates — flat-charge option

Property band	Current City $	Current Wide $	Proposed flat $	City change $	City change %	Wide change $	Wide change %	Full change $	Full change %
RESIDENTIAL									
Low (1%)	$35	$70	$44	$9	0.3%	-$27	-0.9%	-$62	-2.1%
Median (50%)	$35	$70	$44	$9	0.2%	-$27	-0.6%	-$62	-1.5%
High (99%)	$35	$70	$44	$9	0.1%	-$27	-0.2%	-$62	-0.5%
Average	$35	$70	$44	$9	0.2%	-$27	-0.6%	-$62	-1.3%
COMMERCIAL									
Low (1%)	$35	$70	$44	$9	0.3%	-$27	-0.9%	-$62	-2.1%
Median (50%)	$35	$70	$44	$9	0.1%	-$27	-0.3%	-$62	-0.6%
High (99%)	$35	$70	$44	$9	0.0%	-$27	-0.0%	-$62	-0.0%
Average	$35	$70	$44	$9	0.0%	-$27	-0.1%	-$62	-0.3%
INDUSTRIAL									
Low (1%)	$35	$70	$44	$9	0.2%	-$27	-0.6%	-$62	-1.4%
Median (50%)	$35	$70	$44	$9	0.0%	-$27	-0.1%	-$62	-0.3%
High (99%)	$35	$70	$44	$9	0.0%	-$27	-0.0%	-$62	-0.0%
Average	$35	$70	$44	$9	0.0%	-$27	-0.0%	-$62	-0.1%

Table 7- Pāpāmoa East Interchange targeted rate (general rate)

The current location-based fixed charge ($35 for the rest of the city, $70 for the wider area of benefit and $106 for the full area of benefit) compared with funding through the general rate, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates. Figures are rounded.

Table 7 | Growth targeted rates — CV-differentiated option									
Property band	Current	Current	Propos	City	City	Wide	Wide	Full	Full
RESIDENTIAL									
Low (1%)	$35	$70	$12	-$23	-0.8%	-$58	-2.0%	-$93	-3.2%
Median (50%)	$35	$70	$24	-$11	-0.3%	-$46	-1.1%	-$82	-1.9%
High (99%)	$35	$70	$96	$60	0.5%	$25	0.2%	-$10	-0.1%
Average	$35	$70	$28	-$7	-0.2%	-$43	-0.9%	-$78	-1.7%
COMMERCIAL									
Low (1%)	$35	$70	$7	-$28	-0.9%	-$64	-2.1%	-$99	-3.3%
Median (50%)	$35	$70	$63	$27	0.3%	-$8	-0.1%	-$43	-0.4%
High (99%)	$35	$70	$1,356	$1,321	0.8%	$1,286	0.8%	$1,250	0.7%
Average	$35	$70	$154	$119	0.6%	$83	0.4%	$48	0.2%
INDUSTRIAL									
Low (1%)	$35	$70	$18	-$18	-0.4%	-$53	-1.2%	-$88	-2.0%
Median (50%)	$35	$70	$171	$136	0.6%	$101	0.4%	$65	0.3%
High (99%)	$35	$70	$3,579	$3,544	0.8%	$3,508	0.8%	$3,473	0.8%
Average	$35	$70	$432	$397	0.7%	$362	0.7%	$327	0.6%

Table 8- Pyes Pa West growth targeted rate. (general rate)

The current fixed charge of $80 for every rating unit in Pyes Pa West compared with funding the same amount through the general rate, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates for Pyes Pa West and for the rest of the city. Figures are rounded.

Table 8 | Pyes Pa West — general-rate option							
Property band	Capital value $	current rates	CV charge $	West change $	West change %	City change $	City change %
RESIDENTIAL							
Low (1%)	$410,000	$2,842	$1	-$79	-2.8%	$1	0.0%
Median (50%)	$995,000	$4,689	$2	-$77	-1.7%	$2	0.0%
High (99%)	$2,022,400	$7,934	$4	-$76	-1.0%	$4	0.1%
Average	$1,026,000	$4,787	$2	-$77	-1.6%	$2	0.0%
COMMERCIAL							
Average	$2,474,100	$21,319	$11	-$69	-0.3%	$11	0.1%
INDUSTRIAL							
Average	$974,700	$11,071	$5	-$74	-0.7%	$5	0.0%

Table 9- Pyes Pa West growth targeted rate. (targeted rate – capital value)

The current fixed charge of $80 for every rating unit in Pyes Pa West compared with a targeted rate on properties in Pyes Pa West, set by capital value and rating category, showing the change in annual dollars and as a percentage of total rates. Figures are rounded.

Table 9 | Pyes Pa West — targeted CV charge					
Property band	Capital value $	current rates	Proposed charge $	Change $	Change %
RESIDENTIAL					
Low (1%)	$410,000	$2,842	$31	-$48	-1.7%
Median (50%)	$995,000	$4,689	$75	-$4	-0.1%
High (99%)	$2,022,400	$7,934	$153	$74	0.9%
Average	$1,026,000	$4,787	$78	-$2	-0.0%
COMMERCIAL					
Average	$2,474,100	$21,319	$422	$343	1.6%
INDUSTRIAL					
Average	$974,700	$11,071	$200	$120	1.1%

11.8 Update - AIP Summaries and Financial Information

File Number: **A21307979**

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Authoriser: **Christine Jones, General Manager: Strategy, Partnerships & Growth**

PURPOSE OF THE REPORT

1. At the City Future Committee meeting of 13 October 2026, Elected Members requested a further summary of all Action and Investment Plans (AIPs) with financial implications included. This report and Attachment A provides the requested information.

RECOMMENDATIONS

(a) Receives the report – Update – AIP Summaries and Financial Information

EXECUTIVE SUMMARY AND BACKGROUND

2. At the City Future Committee meeting of 13 October a "Strategy Stocktake – Wrap-Up" report was presented. This report gave an overview of the Strategy Stocktake undertaken to inform the upcoming Long-Term Plan ("LTP").

3. Following consideration of that report, the Committee resolved that it requires "a brief summary of all 35 Action and Investment Plans to be produced with a focus on what direction they are setting for Tauranga together with the cost of implementation in the Draft 2027-37 LTP".

4. Because there were no further City Future Committee meetings available this year once the information was collated, and because of the LTP nature of the request, the information requested by that Committee has been brought back to Council. This report will also be shared with City Future Committee Tangata Whenua Representative Arthur Flintoff for his information.

5. Attachment A presents the overview.

Summary findings

6. Summary financial implications (in the current iteration of the draft LTP) are set out in the table below.

LTP Period	Capex ($m)	Opex ($m)
FY28 (Year 1)	117.552	8.160
FY29 (Year 2)	38.517	7.593
FY30 (Year 3)	17.271	9.411
FY31-37 (Years 4-10)	330.881	94.535
Total LTP Period	**$504.221**	**$119.699**

7. For capital projects, the figures provided include the capital cost of the projects; the opex figures do not include the interest costs, depreciation costs, or operating costs of those capital projects.

8. A large proportion of this proposed spending comes from the Spaces and Places programme, for example the City Centre Action and Investment Plan encompassing finalisation of Te Manawataki o Te Papa and waterfront projects (e.g. FY28 - $73.6m Capex).

9. **While this spending is aligned to AIPs it is not mandated by them.** AIPs provide strategic direction and identify potential actions and investments required to achieve desired outcomes. They do not, in themselves, commit Council to funding or delivery. Funding decisions will continue to be refined through the LTP process.

10. AIPs excluded from the scope of this report include Waters (due to formation of Tāheke – Bay Waters Limited), Transport, and Economic Development (to be discussed in another paper at the 01 December council meeting).

Methodology, caveats and limitations

11. To align with Council report deadlines, the financial information in the attachment was gathered in early November 2026. At this stage (and as at the 01 December council meeting) discussions around LTP budget were and are ongoing and subject to change. These numbers therefore indicate a **ballpark** figure for each AIP rather than a precise number.

12. Due to the way different areas undertake their activity planning, some AIPs align more directly to specific budgets and actions than others. However, the table sets out the assumptions and method for arriving at the stated figure (for example “x” actions funded from specific AIP for years 1-3).

13. Budget assigned to AIPs should be for projects / actions that are **new, discrete and strategic rather than Business as Usual (BAU).**

14. When Council has approved the LTP, the AIP’s will be updated to reflect funded actions.

STATUTORY CONTEXT

15. Under the Local Government Act 2002 (LGA), Council must ensure its activities are financially prudent, sustainably funded, and aligned with the outcomes and investment priorities set through the LTP. This report provides an update on the financial implications of endorsed Actions and Investment Plans, assessing their affordability, funding requirements, and implications for current and future LTP budgets to support informed decision-making and statutory planning obligations.

STRATEGIC ALIGNMENT

16. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	✓
We are a vibrant city that embraces events	✓

17. Council’s strategic framework (including AIPs) gives effect to all of the community outcomes.

OPTIONS ANALYSIS

18. As this is an update on a previous request no options are presented and no decision is sought.

FINANCIAL CONSIDERATIONS

19. Council's strategies and AIPs underpin the direction for many of the investment decisions through the LTP. Attachment A gives a summary of LTP implications including whether the impacts of each AIP are primarily opex, capex, both, or neither.

RISKS AND LEGAL IMPLICATIONS

20. Under the LGA, Council must make decisions in a financially prudent manner and ensure forecast expenditure is appropriately considered through the Long-term Plan process. Failure to adequately assess, prioritise, or fund actions and investment plans may result in affordability pressures, unfunded liabilities, infrastructure delivery risks, misalignment with adopted strategic priorities, and potential challenges regarding compliance with statutory planning, consultation, and decision-making requirements.

TE AO MĀORI APPROACH

21. The Strategy Stocktake Wrap-up paper of October 13 explained how a Te Ao Māori approach is integral to Council's strategic framework. This paper is a follow-up to that report so does not have any further implications in relation to Te Ao Māori.

CLIMATE IMPACT

22. The Strategy Stocktake Wrap-up paper of October 13 explained how consideration of climate impact is integral to Council's strategic framework. This paper is a follow-up to that report so does not have any further climate implications.

CONSULTATION / ENGAGEMENT

23. Consultation and engagement was undertaken around development of Our Direction from 2020-2022. Where a minor refresh of strategies and plans is recommended this would not involve further consultation or engagement. More substantive changes will be developed in conjunction with stakeholders and tangata whenua.

24. Any significant budgetary implications arising from AIPs will be considered through the LTP process, including statutory public consultation requirements under the LGA, where changes are material to Council's budgets, funding, or levels of service.

SIGNIFICANCE

25. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

26. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the issue.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

27. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the issue is of low significance.

28. While AIPs contain outcomes of significance to the community, this paper is primarily an update on a workstream (i.e. stocktake process).

ENGAGEMENT

29. Taking into consideration the above assessment, that the issue is of low significance, officers are of the opinion that no further engagement is required prior to Council making a decision to receive this report.

NEXT STEPS

30. No further steps are proposed specifically in relation to the Strategy Stocktake, however AIPs and the overall strategic direction they set will continue to inform development and finalisation of the LTP budget.

ATTACHMENTS

1. Strategy Stocktake AIPs Summary Table - Financial Info added (PDF) - A21492400

AIP Stocktake Findings and Next Steps **October 2026**

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
City Centre AIP *(Tauranga Tātai Whenua)*	This AIP guides the transformation of Tauranga's city centre into a vibrant place to live, work, learn, and play.	Council workshop - 23 October 2026 (City Centre Incentives); 17 November Council meeting (CCAIP stocktake); 19 November 2026 (City Centre Development Incentive Fund)	City Planning and Growth; Spaces and Places; Major Projects	**Stocktake findings** Spatial mapping stocktake of AIP alongside Priority One CBD Blueprint stocktake proposed. **Next steps** Further consideration following the CCAIP stocktake.	FY28 Year 1 - $73.6m FY29 Year 2 - $2.5m FY30 Year 3 - $0.3m Years 4-10 - $110.7m	For S&P City Centre AIP: FY28 Year 1 - $1.7m FY29 Year 2 - $20k FY30 Year 3 - $1.4m Years 4-10 - $18.7m	Finalisation of TMoTP and waterfront projects, Baycourt upgrade, Strand South, Tauranga and Wharepai Domain improvements, community stadium, Fishermans Wharf, Hamilton Street upgrade, Strand Railway crossing (Spring Street), footpath upgrades
Community Centres AIP *(Tauranga Tātai Whenua)*	This AIP provides a roadmap for improving and expanding Tauranga's network of community centres to better meet the needs of current and growing communities.	Council workshop - 27 August 2026 (Action & Investments Plans); 3 September 2026 (Network of Community Centres); Council workshop - 22 October 2026 (Network of Community Centres)	Spaces and Places	**Stocktake findings** Strategically sound. Recommended update to remove completed actions, update status and identify BAU actions. **Next steps** Continue developing budget in line with EM feedback.	FY28 Year 1 - $111k FY29 Year 2 - $97k FY30 Year 3 -$119k Years 4-10 - $19.1m	FY28 Year 1 - $0 FY29 Year 2 - $0 FY30 Year 3 -$0 Years 4-10 - $98k	Delivering on or contributing to 13 actions.
Historic Village Strategic Plan *(Tauranga Mataraunui)*	This Plan sets the direction for developing The Historic Village as a unique community hub that celebrates Tauranga's history, culture, arts, and creativity while bringing people together through events, services, and shared spaces.	Council workshop - 27 August 2026 (Action & Investments Plans)	Historic Village	**Stocktake findings** Planned, staged investment needed; Master Plan sets out proposed projects and delivery. **Next steps** Continue developing budget in line with EM feedback.	Capex (uninflated and excluding renewals) FY28 Year 1 – $3 m FY29 Year 2 - $1.38m FY30 Year 3 - $450K Years 4-10 - $1.6m	Opex Projects (Uninflated) FY28 Year 1 – $60K FY29 Year 2 - $0 FY30 Year 2 - $0 Years 4-10 - $0	Delivering on 13 actions including 1 opex action
Mount to Arataki Spatial Plan *(Tauranga Tātai Whenua)*	This Plan provides a 30-year blueprint for managing growth in the Mount to Arataki area, ensuring future development protects local character while improving housing, transport, community facilities, and the natural environment.	Council workshop - 27 August 2026 (Action & Investments Plans); Council workshop - 24 September 2026 (Intensification)	Spaces and Places; Transport; City Planning and Growth	**Stocktake findings** The Plans are strategically sound, with level of investment in various projects to be confirmed **Next steps** Review actions in 2027 against LTP outcomes and Council/partner funding priorities. Subject to Council direction, engage Council, partners and community on post-2030 actions.	Spaces and Places FY28 Year 1 - $1.1m FY29 Year 2 - $1.2m FY30 Year 3 - $1.2m Years 4-10 - $13.9m	Nil	Spaces and Places supporting intensification budgets across Te Papa, Otumoetai, and Mount to Arataki. Note, the spatial plans include a range of other projects as actions, such as Cameron Road stage 2, Transport Systems Plan (TSP) transport projects, community centres, and resilience projects. These projects are not included as they also form part of wider

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
							Council programmes for delivery.
Otumoetai Spatial Plan	This Plan provides a long-term framework for managing growth across the Otumoetai Peninsula, ensuring infrastructure, housing, transport, community facilities, and the natural environment keep pace with future needs.				Spaces and Places: Refer above Transport Years 4-10 - $23.2m	Nil	Spaces and Places Refer above Brookfield Road network improvements to support OSP outcomes
Te Papa Spatial Plan	The Plan provides a long-term framework for managing growth across the Te Papa Peninsula, balancing increased housing and development with improved transport, infrastructure, community amenities, and neighbourhood character.				Spaces and Places Refer above	Nil	Spaces and Places Refer above
Nature and Biodiversity AIP *(Tauranga Taurikura)*	This AIP provides a roadmap for protecting, restoring, and enhancing Tauranga's natural environment, with a focus on increasing biodiversity, ecological resilience, and community stewardship of nature.	Council workshop - 27 August 2026 (Action & Investments Plans); Council workshop - 22 October 2026	Spaces and Places	**Stocktake findings** No major changes needed. **Next steps** Continue developing budget in line with EM feedback.	FY28 Year 1 - $241k FY29 Year 2 - $193k FY30 Year 3 -$202k Years 4-10 - $481k	FY28 Year 1 - $890k FY29 Year 2 - $890k FY30 Year 3 -$890k Years 4-10 - $5.8m	Delivering on or contributing to 33 actions.
Play, Active Recreation and Sport AIP *(Tauranga Tātai Whenua)*	This AIP provides a roadmap for investing in parks, open spaces, recreation facilities, and sports infrastructure that support an active and connected community.	Council workshop - 27 August 2026 (Action & Investments Plans); 3 September 2026 (Sport and Recreation Investment); Council workshop - 22 October 2026 (Community Stadium)	Spaces and Places	**Stocktake findings** Remains strategically sound. **Next steps** Continue developing budget in line with EM feedback.	Play: FY28 Year 1 - $3.5m FY29 Year 2 - $447k FY30 Year 3 -$1.9m Years 4-10 - $18.5m Active Recreation: FY28 Year 1 - $6.6m FY29 Year 2 - $3.9m FY30 Year 3 -$8.3m Years 4-10 - $90.9m Major facilities: FY28 Year 1 - $27.5m FY29 Year 2 - $26.1m FY30 Year 3 -$2m	Play: FY28 Year 1 - $555k FY29 Year 2 - $657k FY30 Year 3 -$717k Years 4-10 - $7.9m Active Recreation: FY28 Year 1 - $862k FY29 Year 2 - $648k FY30 Year 3 -$786k Years 4-10 - $20m Major facilities: FY28 Year 1 - $0 FY29 Year 2 - $952k FY30 Year 3 -$991k	Delivering on or contributing to 25 actions.

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
					Years 4-10 - $0	Years 4-10 - $8.4m	
Reserves and Open Space AIP *(Tauranga Tātai Whenua)*	This AIP provides a roadmap for developing and enhancing Tauranga's parks, reserves, and public open spaces to meet the needs of a growing city.	Council workshop - 27 August 2026 (Action & Investments Plans); 3 September 2026 (Sport and Recreation Investment); Council workshop - 22 October 2026	Spaces and Places	**Stocktake findings** Remains strategically sound. **Next steps** Continue developing budget in line with EM feedback.	Year 1 - $1.9m Year 2 - $2.7m Year 3 - $2.8m Years 4-10 - $38m	Year 1 - $791k Year 2 - $899k Year 3 - $1m Years 4-10 - $14m	Delivering on or contributing to 18 actions.
BOP Land Transport Plan* *(Tauranga Tātai Whenua)*	This Plan sets the strategic direction and investment priorities for the region's transport network, ensuring it can support population growth, economic development, safety, and environmental sustainability.	City Future report - 18 August 2026 ('Transport System Operating Framework Endorsement' report); Regional Transport Committee workshop – 2 October 2026	Transportation	**Stocktake findings** Provides a strong regional framework. Continued alignment between the RLTP, TSP, UFTI, and local authority LTPs will be important. **Next steps** Continue developing budget in line with EM feedback.	[Excluded]	[Excluded]	*Excluded as investment requirements are subject to separate statutory planning, business case, and funding approval processes. Financial implications already considered through transport planning and LTP transport programme development and therefore have not been reassessed as part of this paper.
BOP Public Transport Plan* *(Tauranga Tātai Whenua)*	This is the key statutory document for public transport planning and investment in the region. It guides the design and delivery of public transport services, information and infrastructure in the Bay of Plenty region.	City Future report - 18 August 2026 ('Transport System Operating Framework Endorsement' report); Regional Transport Committee workshop – 2 October 2026	Transportation	**Stocktake findings** Provides a strong regional framework. Continued alignment between the RLTP, TSP, UFTI, and local authority LTPs will be important. **Next steps** Continue developing budget in line with EM feedback. Commence engagement on TSOF	[Excluded]	[Excluded]	Per row above
WBoP Transport System Plan* *(Tauranga Tātai Whenua)*	The Western Bay of Plenty Transport System Plan identifies the right activities to support urban development and provide people with more viable travel choices. It sets out a 30-year transport programme to support Tauranga's growth by improving how people and goods move around the city and wider western Bay of Plenty.	City Future report - 18 August 2026 ('Transport System Operating Framework Endorsement' report)	Transportation	**Stocktake findings** Provides a strong regional framework. Continued alignment between the RLTP, TSP, UFTI, and local authority LTPs will be important. **Next steps** Continue developing budget in line with EM feedback.	[Excluded]	[Excluded]	Per rows above

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
Tauranga Parking Strategy *(Tauranga Tātai Whenua)*	The Tauranga Parking Strategy provides the framework for managing parking across the city to support growth, improve access to key destinations, and make better use of limited public space.	City Future Committee paper – 13 October ('17th Ave Parking Intervention')	Transportation	**Stocktake findings** Remains strategically sound; any changes can sit in Parking Management Plans (PMPs). **Next steps** Progress PMP development/approvals for Mount and Tauranga South/Hospital. Discuss Mount PMP in March 2027.	Nil	Nil	High lever of user funding (parking fees and infringement revenue). No funding attached to Strategy directly; Parking Management Plans separately funded
Draft Waters Strategies • Stormwater • Water Supply • Wastewater *(Tauranga Taurikura, Tauranga Tatai Whenua)*	Together, the three draft waters strategies establish the long-term direction for investment in water infrastructure and services to meet growth, resilience, environmental, regulatory and service level objectives across the city	(N/A)	(N/A)	Consider in light of development of Water Services Strategy (Local Water Done Well)	[Excluded]	[Excluded]	Excluded from this assessment as future water service delivery will transition to Tāheke – Bay Waters Limited
Accessible Tauranga AIP *(Tauranga Mataraunui)*	This AIP provides a roadmap for removing barriers and improving access to places, services, information, and opportunities across Tauranga, particularly for older people and people living with disabilities.	Council workshop - 27 August 2026 (Action & Investments Plans)	Community Development	**Stocktake findings** Strategically sound; minor tidy-up of actions and greater clarity regarding the level of investment is needed **Next steps** Develop budget reflecting EM feedback for Accessible Tick, Universal Design, and improved accessibility of local marae/community facilities.	NA	Current budget is $115,000 LTP Yr 1 – $365,000 LTP Yr 2 – $365,000 LTP Yr 3 – $365,000 LTP Yrs 4-10 -$365,000	To support the implementation of the 11 priority actions. An increase of investment was sought for three actions presented to elected members at the AIP workshop as indicated under next steps.
Arts, Culture & Heritage AIP *(Tauranga Mataraunui)*	This AIP provides a roadmap for supporting and celebrating Tauranga's arts, culture, and heritage, recognising their role in strengthening the city's identity and wellbeing. Its core community outcome is a vibrant and inclusive city, where people can connect with local culture, history, creativity, and shared stories, enhancing social, cultural, and economic wellbeing.	City Future report - 18 August 2026 ('Strategy Stocktake – A Vibrant City That Embraces Events' report); Council workshop - 22 October 2026 (Future of Baycourt; Community Stadium)	Museum; Libraries and Community Hubs; Baycourt	**Stocktake findings** Major refresh needed to align content with current action and investment planning. **Next steps** Review underway. Commence comprehensive refresh in early 2027. Will seek early engagement and direction from City Future Committee.	<u>Baycourt refurb</u> LTP Yr 1 – n/a LTP Yr 2 – n/a LTP Yr 3 – n/a LTP Yrs 4-10 – $14.5m	<u>Baycourt refurb</u> Operating expenditure requirements have not yet been determined and will be developed through the detailed business case for Council's preferred refurbishment option. The extent of any increase in operating costs will depend on the scale and scope of the refurbishment	<u>Baycourt refurb</u> Delivers on Action 7 "Ensure new and refurbished community facilities are developed to best practice standards for arts, culture and heritage use." Also delivers on the host/custodian aspiration "A network of fit-for-purpose venues for artistic, cultural and creative activity and enterprise to happen and prosper."

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
						ultimately selected and is expected to be offset, at least in part, by additional revenue generated through increased venue utilisation and commercial and community event activity.	The AIP specifically identifies a significant refurbishment of Baycourt as part of Te Manawataki O Te Papa, stating this would allow Baycourt to meet the needs of a wider range of users and audiences. It would also contribute to the AIP's associated measure of success to increase bookings for arts and culture purposes at Baycourt and community centres
Climate AIP *(Tauranga Taurikura)*	This AIP provides a roadmap for helping Tauranga respond to climate change by reducing greenhouse gas emissions and building resilience to the impacts of a changing climate.	Council workshop - 27 August 2026 (Action & Investments Plans)	Adaptation (Climate & Resilience)	**Stocktake findings** Review recommends alignment with national legislation/policy and local funding constraints. **Next steps** New focus reflected in Climate & Resilience Activity Plan for the 2027-37 LTP; refresh Climate AIP after LTP adoption.	N/A	LTP Yr 1 – $865,000 LTP Yr 2 – $1,090,000 LTP Yr 3 – $1,190,000 LTP Yrs 4-10 - $1M p.a. Budget sits within Adaptation (Climate & Resilience) Activity Plan.	Focus is on delivery of legislative requirements to understand natural hazard risks and develop adaptation plans for priority high-risk areas.
Kāinga Tupu - WBOP Homelessness Strategy *(Tauranga Mataraunui)*	This Strategy provides a coordinated, multi-agency approach to preventing and reducing homelessness across the WBOP through collaboration, evidence-based action, and improved housing support..	Council workshop - 27 August 2026 (Action & Investments Plans)	Community Development	**Stocktake findings** Strategy sound; Council's role needs direction. **Next steps** Continue to develop budget in line with EM feedback to deliver the TCC actions with the current BAU budget allocation.	NA	LTP Yr 1 – $40,000 LTP Yr 2 – $40,000 LTP Yr 3 – $40,000 LTP Yrs 4-10 - $40,000	To support the implementation of the four TCC actions within the Kainga Tupu Strategy and Action Plan (a sub-regional-multi-agency taskforce).
Safer Communities AIP *(Tauranga Mataraunui)*	This AIP provides a roadmap for improving community safety through better urban design, stronger community connections, emergency preparedness, and partnerships with organisations that support public safety. A key goal is safe and inclusive communities, where people feel secure, connected, and confident to participate in neighbourhood and city life	Council workshop - 27 August 2026 (Action & Investments Plans)	Community Development	**Stocktake findings** Strategically sound; minor tidy-up of actions and greater clarity regarding the level of investment is needed. **Next steps** Continue to develop budget in line with EM for a city safety team model, a formalised approach to working with safety groups, a strategic safety forum and Crime Prevention Through Environmental Design training.	NA	Current budget is $162,000 LTP Yr 1 – $312,000 LTP Yr 2 – $312,000 LTP Yr 3 – $312,000 LTP Yrs 4-10 -$312,000	To support the implementation of the 12 priority actions. An increase of investment was sought for five actions presented to elected members at the AIP workshop as indicated under next steps.

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
Tauranga Events AIP *(Tauranga Mataraunui)*	This AIP provides a roadmap for growing and supporting events across the city through strategic investment, partnerships, venue development, and event attraction. A core outcome is a vibrant city, where events foster community pride, celebrate local culture and identity, strengthen the economy, and enhance Tauranga's reputation as a destination.	City Future report - 18 August 2026 ('Strategy Stocktake – A Vibrant City That Embraces Events' report); Council workshop - 22 October 2026 (Events Venue Network Plan)	Events	**Stocktake findings** AIP to be refreshed as needed following completion of Events Strategy **Next steps** Updates to Events AIP to be finalised; Eventful City Framework to be implemented. Decisions on final update to be made by City Future Committee at a later date.	N/A	This has already been captured within the Activity Planning work and budget overview. The stocktake found that many of the original goals have now been achieved and embedded into the team's business-as-usual operations, with ongoing resourcing and budget provisions incorporated into existing work programmes.	To support the ongoing implementation of all 6 goals in the AIP.
Welcoming Communities WBOP Plan *(Tauranga Mataraunui)*	This Plan provides a framework for creating a more inclusive and welcoming community for newcomers, including migrants, former refugees, international students, and new residents, across the Western Bay of Plenty.	Council workshop - 27 August 2026 (Action & Investments Plans)	Community Development	**Stocktake findings** TCC actions not consistently embedded; draft 2025–2028 plan prepared. Resourcing decisions will be made through the LTP. **Next steps** Continue programme within current BAU allocation, as per EM feedback from 27 August.	NA	LTP Yr 1 – $20,000 LTP Yr 2 – $20,000 LTP Yr 3 – $20,000 LTP Yrs 4-10 - $20,000	To support the implementation of the nine TCC actions within the multi-agency and community plan, and continue with BAU allocation.
BOP Spaces and Places Strategy *30 June 2026 (Tauranga Tātai Whenua)*	This Strategy provides a regional framework for planning and prioritising investment in sport, recreation, and active recreation facilities to meet the needs of a growing population.	Council workshop - 29 October 2026 (Sub-Regional Parks)	Spaces and Places	**Stocktake findings** Recently updated joint strategy; strategically sound. **Next steps** None.	Nil	Nil	Regional strategic planning document that provides a framework for collaboration and prioritisation across multiple councils and agencies. It does not, in itself, commit Council to specific projects or expenditure
Our Public Places Strategic Plan *30 June 2026 (Tauranga Tātai Whenua)*	This Strategic Plan provides the overarching direction for Tauranga's network of parks, reserves, community facilities, libraries, open spaces, and other public places, ensuring they support a growing and changing city.	Council workshop - 22 October 2026	Spaces and Places	**Stocktake findings** Review would help distinguish actions from other Spaces & Places AIPs, e.g. Reserves and Open Space. **Next steps** None.	Nil	Nil	Most LTP projects and opex deliver on this plan, as opposed to budget being allocated to the plan directly

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
Urban Design AIP *30 June 2026 (Tauranga Tātai Whenua)*	This AIP provides a framework for improving the quality, functionality, and liveability of Tauranga's built environment through stronger design leadership and urban design excellence. Its core community outcome is a well-planned city.	N/A	City Planning and Growth; Regulatory Support	**Stocktake findings** Remains relevant; foundational work largely completed or embedded in practice. **Next steps** No significant focus/funding changes anticipated; will seek Council guidance as appropriate.	Nil	Nil	Continued to be championed by staff.
Waste Management and Minimisation Plan *(Tauranga Taurikura)*	The statutorily required Waste Management and Minimisation Plan provides a roadmap for reducing waste, increasing resource recovery and recycling, and moving Tauranga towards a more circular and sustainable approach to waste management.	Waste Infrastructure Network workshops (Drop off facilities, Organics system) Waste Strategic Direction	Solid Waste	**Stocktake findings** Most WMMP actions underway. A full review will commence in 2027. **Next steps** Waste Infrastructure Network Plan will be presented for decision early 2027; commence full WMMP review in 2027 to be adopted in 2028.	WIN investments, Kerbside innovation, and closed landfill investments as per activity plan and capital prioritisation LTP process.	Information provided through activity plans across waste operations including kerbside collections, existing drop offs, closed landfills, public place waste and demand reduction. Waste Levy budget to deliver specific WMMP actions related to demand reduction $1.7M/year of LTP	Mixture of compliance required (e.g. closed landfill), future growth (e.g. WIN) and demand management. Waste Levy is specifically provided to councils to deliver those actions in their WMMPs that are related to keeping waste out of landfill through avoidance, recovery, reuse and recycling. New WMMP to be developed in 2027/28.
Kaituna Action Plan – Te Tini a Tuna *(Tauranga Taurikura)*	This Plan provides a collaborative programme of actions to restore, protect, and enhance the health and wellbeing of the Kaituna River and its tributaries. Led by Te Maru o Kaituna River Authority, it brings together tangata whenua and local authorities	N/A	Waters Organisation	**Stocktake findings** Joint strategy; no changes required. **Next steps** None.	Nil	Nil	No direct budget allocation. To consider approach in light of Tāheke – Bay Waters Limited
Wairoa River Valley Strategy *(Tauranga Taurikura)*	This Strategy, developed jointly by Tauranga City Council, Western Bay of Plenty District Council, tangata whenua, landowners, and the local community, provides a long-term framework for protecting and enhancing the Wairoa River Valley.	N/A	Waters Organisation	**Stocktake findings** Review previously considered; would require Western Bay, hapu and iwi engagement. **Next steps** None.	Nil	Nil	No direct budget allocation. To consider approach in light of Tāheke – Bay Waters Limited
Smartgrowth Housing Action Plan	This Plan provides a coordinated, sub-regional response to housing	Council workshop - 24 September 2026 (Affordable Housing)	City and Infrastructure Planning	**Stocktake findings** Joint refresh underway; TCC on working group.	Nil	Nil	Delivered through SmartGrowth

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
(Tauranga Mataraunui)	affordability and supply challenges across Tauranga and the Western Bay of Plenty, bringing together councils, iwi, government agencies, community housing providers, and the private sector.			**Next steps** Reflect any updated TCC housing commitments in LTP budget considerations.			
Tauranga Harbour Integrated Management Strategy *(Tauranga Taurikura)*	This Strategy provides a coordinated framework for managing the environmental health and sustainable use of Tauranga Harbour, bringing together regional and local councils, iwi, and community groups.	N/A	Marine Facilities	**Stocktake findings** Dated but has not been superseded; not TCC-owned. **Next steps** None.	Nil	Nil	Small amount of funding for pest control (e.g. Canadian geese), via nature and biodiversity budgets by other activities (e.g providing boat ramps). But not directly allocated to the strategy.
Tauranga Harbour Recreation Strategy *(Tauranga Taurikura)*	The Strategy, developed by BOPRC, TCC, and WBOPDC, provides a coordinated approach for managing recreational use of Tauranga Harbour, ensuring growing demand for boating, fishing, swimming, and other water-based activities is balanced with safety, access, and environmental protection.	N/A	Marine Facilities	**Stocktake findings** Dated but has not been superseded; not TCC-owned. **Next steps** None.	Nil	Nil	Many activities support the plan but funding not directly allocated to it
Tauranga Airport Masterplan *(Tauranga Tātai Whenua)*	The Master Plan provides a long term (20 year) strategic framework for managing a key regional transport asset that sits centrally within a rapidly growing urban area. It focuses on guiding integrated, staged development of airport infrastructure and land to meet future demand while avoiding ad hoc growth.	Council workshop – 4 August 2026 ('CCOs Strategic Cohesiveness Review' report); Council meeting – 22 September ('Consultation on Options for a New Governance and Delivery Model for Tauranga Airport' report)	Airport	**Stocktake findings** Strategically sound; drafted update extends horizon to 50 years. **Next steps** Continue options analysis, due diligence and engagement on a potential new airport governance/delivery model.	Nil	Nil	Budgeted airport capex is maintenance and not strategic in purpose – not directly tied to Master planning
TBOP Visitor Economy Strategy *(Tauranga a te kura)*	Developed by Tourism Bay of Plenty, this Strategy focuses on a growth-oriented visitor economy, targeting to increase the visitor economy and create more jobs. It was prepared before major events	N/A	Economic Development	**Stocktake findings** Outdated context; retained as reference only pending an update. **Next steps** Tourism Bay of Plenty to determine timing for an updated strategy.	[Excluded]	[Excluded]	Excluded from this paper – to be discussed through Economic Development Partnerships Agreement paper at Council meeting of same date (01 December).

AIP/Strategic Plan	AIP summary	Workshop or report coverage to date	Activity plan(s) and budget(s) where most impacts will be seen	Stocktake findings and next steps	Proposed LTP Investment CAPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Proposed LTP Investment OPEX LTP Year 1 (FY28) LTP Year 2 (FY29) LTP Year 3 (FY30) Years 4-10 (FY31-37)	Rationale for LTP investment (e.g. x number of actions from AIP = funded)
	that materially affected the region's tourism environment, (e.g. Whakaari eruption and the Mount Maunganui landslides)						Also noting that covered by commercial rather than general rate.
Western Bay of Plenty Economic Strategy *(Tauranga a te kura)*	Developed and led by Priority One, the purpose of this Strategy is to grow the value of our economy in an intelligent way; creating a prosperous, sustainable region that contributes to improved social, cultural and environmental outcomes benefiting everyone in our rohe.	City Delivery Committee report – 15 September 2026 ('Priority One Annual Report); Council workshop – November; council paper 01 December	Economic Development	**Stocktake findings** Priority One to lead refresh focused on regional delivery and current economic conditions/opportunities. **Next steps** Refresh completed and included in Priority One Annual Report presented to Council on 15 September 2026.	[Excluded]	[Excluded]	Per row above
Western Bay of Plenty International Strategy *(Tauranga a te kura)*	This Strategy, developed by Priority One, seeks to further leverage the collaborative efforts of councils and community partners to target investment, business and skills attraction that generates more local jobs, creates a wider range of employment opportunities, and retains more skills in the local community.	N/A	Economic Development	**Stocktake findings** Updated for 2026–2028; supports economic/education outcomes and partner collaboration. **Next steps** Continue implementing the updated strategy.	NA	NA	A narrative monitoring report only. TCC has no priority actions to lead, this is led by Priority One.

11.9 Allocation of Elder Housing sale proceeds

File Number: **A21446835**

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Please note that this report contains confidential attachments.

Public Excluded Attachment	Reason why Public Excluded
Item 11.9 - Allocation of Elder Housing sale proceeds - Attachment 1 - Attachment 1 - Additional investments in the BOP HEF - confidential	s7(2)(b)(ii) - The withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information.

PURPOSE OF THE REPORT

1. To seek Council approval regarding the allocation of available Elder Housing sale proceeds.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Allocation of Elder Housing sale proceeds".

(b) Approves no further budget allocations towards grants for the development contributions on Papakāinga housing and the development contributions on Community Housing, noting that once the existing funds allocated for these purposes have been paid out, these funding programmes will cease, and approves, at this point, for the two policies governing this grant funding to be rescinded.

(c) Approves, with respect to the previous allocation of $5,000,000 of the Elder Housing Sale proceeds towards supporting Accessible Properties Limited to deliver increased housing density in Te Papa:

  (i) Rescinding of the 4 March 2024 resolution CO4/24/15 (b) (i) and 26 May 2026 resolution CO/25/14/21

  (ii) Returning, as of 1 December 2026, $4,800,000 of this $5,000,000 allocation to the Elder Housing Sale proceeds reserve, making it available for investment in alternative initiatives focussed on delivering increases in affordable, social, public and elder housing in Tauranga

  (iii) $200,000 remains available to be used to support Accessible Properties Limited in completing master planning work focused on Te Papa, with commitment of these funds subject to a Memorandum of Understanding between Council and Accessible Properties Limited.

(d) Approves investing an additional $6,000,000, sourced from the proceeds of the Elder Housing sale, into the Bay of Plenty Housing Equity Fund, for the purposes of increasing affordable, social, public and elder housing in Tauranga.

(e) Approves that returns on Council's investment into the Bay of Plenty Housing Equity Fund will be reinvested in the Fund, with the value of Council's original investment and reinvested returns remaining available for deployment into eligible housing projects within Tauranga city.

(f) Delegates to the Interim Chief Executive the approval and execution of the legal documentation required for the $6,000,000 investment, and for the reinvestment of returns into the Bay of Plenty Housing Equity Fund, subject to the Interim Chief Executive being satisfied that those actions will not trigger the creation of a Council Controlled Organisation.

(g) Approves for the purposes of supporting the delivery of Papakāinga housing within the Tauranga City Council area:

(i) $2,500,000 from the proceeds of the Elder Housing sale being designated for Papakāinga and held within the Elder Housing sale reserve with the intent of investing these funds into the Bay of Plenty Housing Equity Fund for the delivery of Papakāinga housing; and

(ii) Council working collaboratively with Bay of Plenty Housing Equity Fund, iwi and hapū over the upcoming 18 months to identify viable Papakāinga development opportunities within Tauranga, followed by a report back to Council with next steps and a recommended investment approach (if identified).

(h) Notes, in accordance with Section 80 of the Local Government Act, that:

(i) The decision in (d) and (e) above is inconsistent with Council's Treasury policy as the Housing Equity Fund does not have an approved credit rating; and

(ii) It is not intended to amend Council's Treasury policy to accommodate this decision.

(i) Attachment 1 can be transferred into the open following review of the information in 6 months' time, and dependent on the information no longer being commercially sensitive at that time.

EXECUTIVE SUMMARY

2. This report seeks Council approval to allocate available Elder Housing sale proceeds towards increasing affordable, social, public and elder housing in Tauranga.

3. Approximately $3.8m remains uncommitted in the Elder Housing sale proceeds reserve. There is an additional $4.8m which was previously allocated by Council towards the delivery of infrastructure to support increased density in Te Papa (in response to the significant number of properties that area which are owned by Accessible Properties Limited – a Community Housing Provider). However, as no suitable infrastructure projects have been identified, it is recommended that this previous resolution is rescinded and the funds are freed up for an alternative use.

4. In total this means there is approximately $8.6m available for allocation towards housing initiatives in Tauranga.

5. The recommendations of this report respond to the direction provided by Elected Members at the 24 September 2026 housing workshop, and as such, are focussed on investment opportunities rather than further grant funding.

6. The report also seeks a decision from Council regarding the future of the development contributions grant programmes for Community Housing Providers and Papakāinga. The recommendation, in response to Elected Member informal direction, is for no further funding to be allocated towards these initiatives from the Elder Housing Sale proceeds. If Council approves this, the grant programmes will be wound-up once the previously allocated funding is spent.

7. The recommended investment vehicle is the Bay of Plenty Housing Equity Fund (HEF), as it:

- Has a proven track record
- Has already been through an intensive due diligence process

- Is supported by other investors and debt equity provided by lending from Kiwibank, meaning that the impact of the funds contributed by Council to the BOP HEF is increased.

8. Specifically, this report recommends investing a further $6m and seeks Council delegation to the Interim Chief Executive to finalise and execute the required legal documentation.

9. This report also recommends setting aside $2.5m specifically for the delivery of Papakāinga initiatives, with the intent of investing these funds into the BOP HEF at a future date for this purpose. Given the known challenges facing Papakāinga housing, further work would be completed by Council and the BOP HEF, in partnership with iwi and hapū, to identify viable projects. Council staff will report back to Council on the outcomes of this work.

10. Council has already committed $20m to the BOP HEF as a Founding Shareholder. As at September 2026, $9.5m of Council funding had been called and Council's investment carried a value of $9.9m, with a 5.5% return in FY26. As the BOP HEF is still in its establishment phase, returns are expected to increase as more projects are completed.

11. The BOP HEF has already enabled $105.4m of local development activity in Tauranga across seven projects, funding 133 homes and generating approximately $4m in development contributions revenue for TCC. The recommended additional investment will build on this delivery record.

12. Finally, this report seeks a formal decision from Council regarding returns on investment generated by the HEF. Previous Council reports have contemplated the reinvestment of returns back into the HEF, to deliver ongoing and growing housing outcomes for Tauranga. This report seeks to formalise this intention.

13. The identified risks are:

- investment concentration in one organisation
- the possibility that additional Council investment could create a Council-controlled organisation if other investors do not increase their contributions. This is assessed as unlikely (refer to confidential Attachment 1 for further information).

14. The decisions of this report are assessed as having low to medium significance, and no further consultation or engagement is required.

BACKGROUND

15. Council approved the sale of the Elder Housing portfolio to Kāinga Ora: Homes and Communities in October 2021. Two sites were identified for sale separately, to private developers (Pitau Road Village, sold, and Hinau Street Village, yet to be sold).

16. The sale proceeds from all the of Elder Housing villages were set aside, in an Elder Housing sale proceeds reserve, and the Commission adopted the following principles to guide reinvestment of the funds (CO14/22/17, 25 July 2022).

Funds will be used in such a way as to:

(i) Deliver an increase in public, social, affordable and elder housing for Tauranga.

(ii) Minimise private individual profit.

(iii) Provide opportunity to leverage for additional external funds.

(iv) Ensure funds remain within non-profit entity control (i.e. if reinvestment does return a profit, the resulting profit will be reinvested to deliver further public and/or affordable housing and would not return to Council).

(v) Result in community benefit being retained long term.

17. The Elder Housing sale proceeds have since been allocated towards a range of housing initiatives, including:

- Development contribution grants for Community Housing Providers and Papakāinga ($6m in total).
- Student accommodation for the University of Waikato.
- Accommodation for the Tauranga Women's Refuge.
- Support for Accessible Properties Limited.
- Development and investment into the Bay of Plenty Housing Equity Fund.

18. Council's investment into the Bay of Plenty Housing Equity Fund (BOP HEF), as a Founding Shareholder, represents the most significant allocation of the Elder Housing sale proceeds, $20m to-date. This funding has been leveraged, and together with debt equity and contributions from other Founding Shareholders (BayTrust and Manawa Trust, formerly TECT) has led to seven housing projects being initiated across Tauranga to-date. Some of these are now complete and tenanted. As of September 2026:
    - The $9.5m of Council funds called to-date now carries a value of $9.9m, as at end of September 2026. Performance in FY26 was a 5.5% return (March 2026).
    - BOP HEF has enabled $105.4m of local development activity across seven projects.
    - This has generated approximately $4m in development contributions across the 133 homes funded.
19. These developments also deliver an increase to Council's rate base, e.g. at Devonport Road, two existing dwellings have been replaced with 20 new homes. Additionally, although Council's investment is ring-fenced to local projects, return and risk are spread across all the BOP HEF's developments throughout the Bay of Plenty, reducing concentration risk and improving return dynamics.
20. There are still funds available in the Elder Housing sale proceeds reserve. Approximately $3.8m is uncommitted and there is an additional $4.8m which was allocated to infrastructure improvements in Te Papa to support increased density but for which no specific projects have been identified (see the section of this report titled 'Quantum of available funds' for further information).
21. Together this provides a total of approximately $8.6m available for allocation towards the delivery of housing outcomes for Tauranga at this time (noting that the sale of Hinau Village is expected to provide additional funds in the future).
22. A Council workshop focussed on housing was held on 24 September 2026. At this workshop Elected Members expressed support for allocating Elder Housing sale proceeds towards investment opportunities, such as the BOP HEF, rather than towards grant funding.
23. This report responds to the direction given by Elected Members. It recommends investing a further $6m into the BOP HEF, as it:
    - Has a proven track record
    - Has already been through an intensive due diligence process
    - Is supported by other investors and debt equity provided by lending from Kiwibank, meaning that the impact of the funds contributed by Council to the HEF is increased.
24. This report also recommends setting aside $2.5m of the Elder Housing sale proceeds, with the intent of investing these funds into the HEF at a future date, specifically for the delivery of Papakāinga initiatives. Given the known challenges facing Papakāinga housing, it is proposed that further work is completed by Council and the BOP HEF, in partnership with iwi and hapū, to identify viable projects. Council staff will report back to Council on the outcomes of this work.
25. Finally, this report seeks a formal decision from Council regarding returns on investment generated by the BOP HEF. Previous Council reports have contemplated the reinvestment of

returns back into the BOP HEF, to deliver ongoing and growing housing outcomes for Tauranga. This report seeks to formalise this intention.

26. Further background information regarding the BOP HEF is provided by the Bay of Plenty Housing Equity Fund agenda report for the City Future Committee, 25 June 2025.

STATUTORY CONTEXT

27. Council's involvement in the BOP HEF, and commitment to delivering housing outcomes for the city, aligns with local governments' responsibility under the Local Government Act 2002 to meet the current and future needs of communities for good-quality, cost-effective and local infrastructure, and to support local economic growth and development.

STRATEGIC ALIGNMENT

28. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	☐
We are a well-planned city that is easy to move around	☐
We are a city that supports business and education	✓
We are a vibrant city that embraces events	☐

29. Council's ongoing support of the BOP HEF contributes to increasing affordable housing in the city for those who need it most and to the delivery of housing developments.

QUANTUM OF AVAILABLE FUNDS

30. A previous Council workshop identified approximately $3.8m in funding available for investment from the Elder Housing Process.

31. The 4 March 2024 Council resolution CO4/24/15(b)(i) approved $5m to support Accessible Properties Limited (APL) through the delivery of infrastructure capital projects. A subsequent Annual Plan resolution, CO/25/14/21, on 26 May 2026 approved retaining the $5m and allocated $200,000 of this funding for supporting infrastructure investigations and planning to assist APL in delivering higher-density housing outcomes.

32. No specific infrastructure capital projects have been identified that are required to enable APL's planned developments. However, it is the staff view that there remains value in retaining the $200,000 allocation to support coordinated infrastructure planning and opportunities for higher-density housing within Te Papa.

33. The retained funding will enable Council to continue working with APL to investigate opportunities for higher-density housing across its existing property portfolio, particularly in Gate Pā and Merivale. The funding will support integrated planning and technical investigations across three waters, transport and open space to identify infrastructure requirements, development constraints and opportunities for residential intensification. This work will inform APL's future development planning and help Council identify opportunities to coordinate infrastructure planning and investment to support housing growth. As outlined in the original resolution, a memorandum of understanding will be established with APL before committing expenditure of the $200,000.

34. Having regard to the above, it is proposed that the previous resolutions are rescinded and $4.8m from the $5m is redirected to investment in the BOP HEF.

35. If the recommendations re the previous APL resolutions are rescinded, this change brings the funds available to reinvest from $3.8m to $8.6m.

OPTIONS ANALYSIS

Recommended options

36. Invest $6m into the BOP HEF, for the purposes of increasing affordable, social, public and elder housing in Tauranga.

37. Key risks: That other investors do not increase their investments alongside Council, increasing the risk of inadvertently creating a Council-controlled organisation (CCO).

Advantages	Disadvantages

• Will encourage additional investment into the Housing Equity Fund by other investors.
• Delivers long-term housing outcomes for the city, with the potential for fund recycling to over time provide greater benefits than one-off grants or investments.
• Relatively low ongoing time and cost burden for Council, as Council is not directly delivering projects.
• Invests funds into an organisation:
  ○ established to deliver housing outcomes not being provided by the market
  ○ which has been through an intensive due diligence process.
  ○ with a proven track record of delivering successful projects within Tauranga.
• Allows Council's funding to be leveraged (with debt equity and funds from other investors), increasing its impact.
• Council's investment will grow over time.
	• Risk is passed to third party so reliance on due diligence and ongoing monitoring is high
	• Capital and control is passed over to a third party, limiting Council's influence over outcomes.
	• Most of the Elder Housing sale proceeds are invested in a single organisation, exposing Council to greater risk than a diversified investment approach.

38. Designate $2.5m from the proceeds of the Elder Housing for the delivery of Papakāinga initiatives by the BOP HEF, with this funding held within Elder Housing sale reserve whilst Council staff, iwi and hapū work with the BOP HEF to identify viable Papakāinga development/s.

39. Key risk: That time and effort is spent by Council staff, the BOP HEF and iwi and hapū, without identifying any viable projects.

Advantages	Disadvantages
• Does not fully commit funds until a viable project(s) is identified. • Once the development is approved there is relatively low ongoing time and cost burden for Council, as the BOP HEF is responsible for delivery. • Invests funds into an organisation with a proven track record of delivering successful projects within Tauranga. • Allows Council's funding to be leveraged (with debt equity and funds from other investors), increasing its	• There is no guarantee that viable projects will be identified.

impact. • This opens up the potential for alternative financing arrangements for Papakāinga, for which traditional financiers are reluctant to provide borrowing as generally Papakāinga land cannot be used as security.	

40. Reinvest the returns on Council's investment into the Bay of Plenty Housing Equity Fund into the Fund, with the value of Council's original investment and reinvested returns remaining available for deployment into eligible housing projects within Tauranga city.

41. Key risk/s

Advantages	Disadvantages
• Reinvestment generates a perpetual benefit and increases to housing outcomes on an ongoing basis. • Reinvested funds benefit from the leveraging of other investment and debt funding so every $1 of Council's reinvestment generates more than $1 of investment.	• Returns could be 'cashed in' and used for other operational expenditure within Council, potentially reducing rates.

Alternative options

42. Alternative option 1 - Allocate the $8.5m towards Council's capex programme, reducing debt and/or increasing capacity.

43. Key risk: there is a minimal impact on Council's financial position, whilst housing outcomes are not delivered.

Advantages	Disadvantages
• A one off $8.5m reduction in debt could reduce interest costs by $0.5m per year (based on 5% interest rate).	• The option does not align with the outcomes adopted at the time of the Elder Housing Village divestment. • This approach does not support the growth of the BOP HEF and delivery of housing outcomes for Tauranga.

44. Alternative option 2 – Split the $8.5m equally across the existing Community Housing and Papakāinga housing development contributions grant programme.

45. Key risk: The Elder Housing sale proceeds are spent, but no ongoing benefit is achieved.

Advantages	Disadvantages
• Provides financial assistance for Community Housing and Papakāinga, which are both financially challenging to deliver.	• Does not deliver a return on investment, meaning that the benefit provided by the sale proceeds is a 'one-off' • Papakāinga housing is difficult to deliver, and it may take a prolonged period for funding to be paid out via the grants programme.

46. Alternative option 3 – Retain the $8.5m within the Elder Housing sale proceeds reserve, and complete further work on identifying alternative opportunities to increasing affordable, social, public and elder housing in Tauranga.

47. Key risk: That time, effort and funds are spent investigating alternatives without identifying any option that meets or exceeds the benefits provided by the BOP HEF.

Advantages	Disadvantages
• Funds will be available for investment if a new opportunity arises. • There is no concentration of investment in one investment (i.e. reduces risk).	• Housing outcomes are delayed while awaiting alternative opportunities. • The BOP HEF took a significant amount of staff time and external legal costs to develop the proposed model in conjunction with the other Founding Shareholders, and to work through due diligence and legal agreements. This time and cost would be incurred again and erode some of the funds available for investment.

48. Alternative option 4 – Do not reinvest any returns on Council's investments into the BOP HEF back into the BOP HEF, instead either return them to the Elder Housing sale proceeds reserve or use them to pay down Council debt.

49. Key risk: the ability to achieve cumulative housing outcomes over time is lost.

Advantages	Disadvantages
• Returns could be used to offset other operational costs and reduce rates.	• No perpetual benefit achieved.

FINANCIAL CONSIDERATIONS

50. The proposed investment options are funded from the Elder Housing Sale Reserve, established when the villages were sold. The reserve is not held as cash, as the proceeds have been used for other expenditure. Drawing on it will therefore increase Council debt, offsetting the debt reduction achieved at the time of sale, with no rates impact.

51. A total of $8.5m is proposed for investment through the BOP HEF: $6m to increase affordable, social, public and elder housing in Tauranga, and $2.5m for Papakāinga initiatives. The $2.5m will remain in the Elder Housing sale reserve while Council staff, iwi and hapū work with the BOP HEF to identify viable Papakāinga developments.

RISKS AND LEGAL IMPLICATIONS

Risks

52. There are two primary risks relating to the recommendations of this report.

- That additional investment by Council, who is already the majority shareholder, pushes Council's investments over the threshold[1] to create a Council-controlled organisation (CCO). This risk is assessed as unlikely, refer to confidential Attachment 1 for further detail.
- Investing the majority of the Elder Housing sale proceeds in one organisation creates higher risk than if there was a diversified investment approach. However, the BOP HEF is an innovative model and there are no known alternatives operating in Tauranga

[1] If a council (or councils, collectively) contributes more than 50% of funding (or controls more than 50% of board members) an entity becomes a Council-controlled organisation under legislation.

which could deliver the same outcomes. The BOP HEF has now successfully delivered several projects and has been through due diligence processes prior to Council's initial investment. Additionally, Council has invested alongside other established Bay of Plenty organisations, such as BayTrust and Manawa Trust (formerly TECT), in the BOP HEF. These organisations have experience and a strong track record in impact investment and were involved, along with Council, in the development of the BOP HEF model.

Legal documentation

53. If Council decides to invest a further $6m into the BOP HEF, and to commit to returns on Council's investment into the Bay of Plenty Housing Equity Fund being reinvested in the Fund, legal documentation will be drafted to formalise these arrangements. This will be based on existing agreements with the BOP HEF and will be reviewed by Council's legal advisors prior to execution. The report recommends delegating the responsibility for this work to the Interim Chief Executive.

Treasury Policy

54. Investment in the BOP HEF does not adhere to investment guidelines in Council's Treasury policy as the BOP HEF does not have an approved credit rating. Whilst the BOP HEF will aim to provide commercial returns of 4% per year (plus CPI), it is motivated by social outcomes rather than financial returns (impact investment) and this is reflected by its adopted mission statement and impact objectives (www.bophef.info).

55. Overall, investment in the Housing Equity Fund carries a higher level of risk than Council's typical investments, which are governed by the Treasury policy. However, given the intent of this investment, which is motivated by outcomes rather than financial return, and Council's awareness of the risk, an exemption from the Treasury policy is considered acceptable in this instance.

TE AO MĀORI APPROACH

56. Setting aside $2.5m specifically for investment into Papakāinga recognises the unique challenges faced by iwi and hapū who wish to develop housing on Māori land and supports Council to deliver on Te Ao Māori principles of Manaakitanga (duty of care), Rangatiratanga (self determination), and Tūmanako (the objectives and aspirations of the community).

57. The BOP HEF are committed to working alongside Council staff, and iwi and hapū to identify viable projects over the upcoming 18 months.

58. An update regarding the recommendations of this report has been provided to Te Rangapū Mana Whenua o Tauranga Moana Partnership.

CLIMATE IMPACT

59. The BOP HEF values sustainable, energy efficient design and works to integrate these concepts within the projects they deliver.

CONSULTATION / ENGAGEMENT

60. Council publicly consulted on its proposal to invest the Elder Housing sale proceeds in the BOP HEF in 2023. Council received 67 responses, and 70% of these supported Council using the sale proceeds for housing outcomes. Of this 70%, 89% supported investment into the BOP HEF.

61. Council staff have contacted Accessible Properties Limited and discussed the recommendations of this report with them.

62. No further consultation is required or recommended if the proposed recommendations are approved. If Council prefers to invest in areas other than housing, community consultation is recommended as this approach would differ to what was previously consulted and decided on.

SIGNIFICANCE

63. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

64. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the decisions.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

65. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the decisions are of low to medium significance.

66. The decisions of this report have medium significance for certain groups within Tauranga, notably community housing providers and iwi and hapū, as this report proposes committing no further funding towards the current development contribution grant programmes.

67. However, the decisions have a strong and logical flow from Council's previous decision to become a Founding Shareholder of the BOP HEF and the results of previous engagement.

ENGAGEMENT

68. Taking into consideration the above assessment, that the decisions are of low to medium significance, officers are of the opinion that no further engagement is required prior to Council making a decision (subject to paragraph 57 above).

NEXT STEPS

69. If Council approves the recommendations of this report, the next steps will be:

- Drafting and executing the required legal documentation.
- Initiating work with the BOP HEF, and iwi and hapū to identify and investigate Papakāinga opportunities.

ATTACHMENTS

1. Attachment 1 - Additional investments in the BOP HEF - confidential - A21470962 - Public Excluded

11.10 Establishment of Ratepayer Assistance Scheme (RAS)

File Number: **A21419477**

Author: **Frazer Smith, Manager: Strategic Finance & Growth**

Authoriser: **Craig Rice, Chief Operating and Financial Officer**

PURPOSE OF THE REPORT

1. To seek Council's approval to consult in the 2027 LTP about establishment of the Ratepayer Assistance Scheme (RAS), including:
   (a) Becoming a shareholder in RAS - a yet to-be-established council-controlled organisation (CCO)
   (b) Investing up to $0.57m in called-up paid RAS shares and $1.24m in uncalled unpaid RAS shares, noting that TCC has already contributed $0.67m development funding which will be converted into RAS equity, so that TCC's total equity investment will be up to $1.24m, representing 3.5% of RAS total equity.
   (c) Joining RAS as a member, requiring it, among other things to enter into a joint and several guarantee in favour of creditors to RAS including LGFA.

RECOMMENDATIONS

That Council:

(a) Receives the report "Establishment of Ratepayer Assistance Scheme (RAS)".

(b) Approves community consultation as part of the Long-Term Plan 2027-2037 Consultation Document on:

(i) Becoming a shareholder in RAS - a yet to-be-established council-controlled organisation (CCO)

(ii) Investing up to $0.57m in called-up paid RAS shares and $1.24m in uncalled unpaid RAS shares, funded from debt.

(iii) Committing to joining RAS as a member, requiring, among other things to entering into a joint and several guarantee in favour of creditors to RAS including LGFA.

(c) Notes that:

(i) The RAS has been proposed as a financing tool to support ratepayers

(ii) TCC has already contributed $0.67m development funding which will be converted into RAS equity, so that TCC's total equity investment will be up to $1.24m, representing 3.5% of RAS total equity.

(iii) Total drawdown of Council's equity will not occur until the Steering Group is satisfied that the necessary commitments of all three key stakeholders has been received

(iv) The RAS requires $35 million equity capital.

(d) Approve, subject to confirmation by the Steering Group that it is sufficiently confident that RAS establishment will proceed, $x to be available out of TCC's equity contribution to fund time critical establishment workstreams prior to LTP adoption on or before 30 June 2027.

EXECUTIVE SUMMARY

2. TCC, a group of other metro councils, LGFA and LGNZ (the Steering Group) have developed a scheme (RAS) that is able to provide very low-cost financing to ratepayers to support:
   (a) local government charges (eg rates and water service charges)
   (b) new, flexible funding products (such as Deferred Development Contributions (DCs) – discussed below)
   (c) new property improvement loans which provide public and private benefits.
3. The RAS itself and the development process is based heavily on the New Zealand Local Government Funding Agency (**LGFA**), taking advantage of scale and specialisation benefits. It will be a local government national shared service that is:
   (a) Off-balance sheet and an operational organisation only with no discretion in what it can lend money for (which will be determined by Local Authorities and central government)
   (b) A flexible omnibus platform with multiple applications possible. The focus has been on - rates postponement (**RP**); deferred Development Contributions (**Deferred DCs**) and property improvement loans (**IMPACT loans**), which are each discussed in more detail below.
4. Significant work has been undertaken developing the RAS by the Steering Group supported by Cameron Partners (project leadership and commercial advice), Simpson Grierson (legal advice on structure and operating requirements) and PwC (accounting / tax advice and IT systems advice). This has involved development of a detailed business case in late 2025 which was submitted to central government. While there are complex issues to address, no insurmountable red flags have been raised.
5. The RAS will require establishment capital of $35 million from three key stakeholders - central government, LGFA and local authorities. It is anticipated that central government and LGFA will each contribute $7 million and the remaining $21 million will be provided by councils.
6. In addition, the support of the three key stakeholders is required as follows:
   (a) Central Government – policy, enabling legislation, liquidity standby facility
   (b) LGFA – debt / treasury management, subscription to RAS debt and preference shares
   (c) Councils – agreement to make products available / RAS membership arrangements.
7. The explicit support of all three stakeholders, to a level satisfactory to the Steering Group, is required before any equity will be drawn down and spent.
8. With appropriate support from central government, LGFA and local authorities, establishment will take ~12 months once the Steering Group makes the decision to implement RAS.

BACKGROUND

9. New Zealand is facing a range of challenges including a cost-of-living crisis, changing demographics (in particular the growing cohort of elderly New Zealanders on fixed incomes), the infrastructure deficit, the quality and health /safety of homes, the housing deficit, climate change impacts and decarbonisation of the economy.
10. Local Authorities have a critical role to play addressing these challenges:
    (a) As organisations delivering critical services and infrastructure;
    (b) By supporting ratepayers themselves to directly address the challenges that affect them; and
    (c) Providing flexibility in the way ratepayers choose to pay Local Authority charges to meet Local Authorities' funding requirements.

11. In this regard, a group of metro councils (Auckland Council, Hamilton City Council, Tauranga City Council, New Plymouth District Council, Palmerston North District Council, Hutt City Council, Wellington City Council, Queenstown Lakes District Council), LGNZ and LGFA have formed a Steering Group to develop a scheme that is able to provide low-cost financing to ratepayers for approved purposes, including:

    (a) Local government charges (e.g. rates and water service charges);

    (b) New, flexible funding products (such as Deferred DCs); and

    (c) New property improvement loans (IMPACT loans) which provide public and private benefits.

12. Local Authorities individually lack the scale and capabilities to administer these ratepayer loans efficiently and effectively, and generally, do not have the financial capacity to do so, given their constrained balance sheets.

13. The requirements are common to all councils and therefore there are potentially significant economies of scale and scope for all councils from coordinated approach to obtain the benefits of aggregation and specialisation.

14. To date TCC has already invested $670,000 towards the RAS. The most recent contribution ($500,000) was resolved by Council based on a Council report on 10 June 2027 (A18238862). This payment was loan funded.

THE RATEPAYER ASSISTANCE SCHEME (RAS)

15. The RAS will be a national shared service available to all Local Authorities.

16. The RAS will be structured much like the LGFA to get the benefits of scale (see appendix for a diagram setting out its workings). RAS will;

    (a) Be a new entity, owned by central government, LGFA and Local Authorities (a CCO)

    (b) Have the power to impose a ‘rate-like’ levy as the means of repayment of RAS financing. The levy is expected to rank pari passu with rates and ahead of mortgages to ensure it gets repaid (enabling it to achieve a very high ‘sovereign’ credit risk weighting – broadly in-line with the LGFA)

    (c) Raise low-cost financing from LGFA and the debt capital markets and pass this on to ratepayers at interest rates expected to be c.2% below standard floating mortgage rates

    (d) Be off-balance sheet for Local Authorities

    (e) Undertake all the operational requirements associated with the ratepayer loans through an “IT heavy” platform (to minimise costs and benefit from economies of scale)

    (f) Be an operational organisation only, with no discretion in what it could lend money for which will be determined by Local Authorities and central government collectively.

17. The use of the RAS will be optional for qualifying ratepayers.

18. Councils will also decide whether their ratepayers can use the RAS’ services and if so which products.

19. The RAS operations and processes will be structured so that there is a seamless interface with Local Authorities, for example ratepayers will access information and apply for RAS loans through a portal on Local Authorities’ websites.

20. RAS will process ratepayers’ applications and once a loan is approved, will invoice the ratepayer directly at the appropriate time to ensure that the outstanding loan principal and interest is repaid.

21. In the event a ratepayer defaults on payments, RAS will follow a prescribed process to obtain repayment including providing an option for the relevant Local Authority to become involved in rectifying the situation.

22. It is expected that each RAS levy will be flagged on the property's LIM report and in the Local Authority's rating information database (RID) to ensure it is transparent, including during the conveyancing process when a property is sold.

23. The RAS will be a flexible omnibus platform, and multiple applications are possible (essentially any loan to property owners that Local Authorities / central government collectively decide to make available).

24. To date the focus has been on three applications:

    (a) Rates postponement

    (b) Deferred development contributions

    (c) Property improvement loans (IMPACT loans – Investment for Modernising Properties And Community Transformation)

Rates Postponement (RP)

25. RP provides flexibility regarding the timing of payments for Local Authority charges and will be a valuable tool for Local Authorities and option for ratepayers given:

    (a) There is a major demographic change underway in New Zealand (increasing elderly population with fixed incomes)

    (b) New Zealanders are facing cost-of-living challenges

    (c) Local Authority rates are significant (even with rates capping)

    (d) Other charges (e.g. IFF levies and water charges) are likely to increase over time

    (e) The current administration of RP arrangements, where provided, are inefficiently undertaken by each Local Authority individually and uses up their limited financing capacity

26. The RAS will make the equivalent payment to Local Authorities upfront on behalf of the ratepayer and get repaid from the proceeds on sale of the property (or earlier repayment if chosen by the ratepayer)

27. RP operates like a reverse mortgage but at significantly lower cost (negligible fees and interest rates c.4%-5% lower)

28. British Columbia (population c.6 million) in Canada has had a successful Property Tax Deferral Scheme for many years – with 83k+ users, C$2.7 billion in loans in 2024 (it has almost quadrupled in size from ~C$670 million in 2016 and now includes ~3.9% of British Columbia households).

29. A number of Local Authorities already have RP policies in place with low uptake (although this is thought to be due to a combination of factors including low awareness, relatively high interest rates and "clunky" application processes).

Deferred DCs

30. There has been significant inbound inquiry to Local Authorities regarding alternative funding mechanisms to upfront DCs.

31. The RAS will provide an alternative to upfront DCs by making the one-off payment required to Local Authorities and converting it into a RAS levy charged to the property so that Local Authorities are indifferent to DCs or Deferred DCs.

32. The RAS levy will be paid by the future property owner(s) via a periodic charge over c.30 years or alternatively fully repaid at the discretion of the property owner.

33. It is expected that property buyers will pay a lower price because of the RAS levy that they will have to pay over time. This is likely to have an impact on the developer, equivalent to the cost if the developer paid a DC.

However, it will reduce the cash flow demands on the developer. It will be financed at lower cost than the interest a developer will get from a bank. Lower financing demands on developers will have a marginal positive impact on development.

34. DCs in New Zealand total c.$900 million p.a. (including Watercare's Infrastructure Growth Charges (IGCs) c.$200 million p.a. in IGCs, broadly equivalent to Council DCs). Feedback from industry peak bodies and larger developers has been positive and it is expected that a large proportion of developers will take advantage of a deferred DC offering.

IMPACT loans

35. Current legislation facilitates Local Authorities providing financing to ratepayers that can be repaid via voluntary targeted rates. Several councils currently use this mechanism to provide loans to ratepayers for property improvements such as insulation and double glazing, but historically there have been Credit Contracts and Consumer Finance Act (CCCFA) and other issues that have limited uptake of this model across the country. Many LA schemes have been discontinued.

36. IMPACT loans would achieve the same result, but at a national scale, facilitated by specific legislation for RAS. In principle, IMPACT loans could be utilised to support a wide range of policy goals that provide both private and public benefits including:

    (a) Improving housing quality – e.g. insulation, double glazing

    (b) Supporting de-carbonisation efforts – e.g. solar panels, EV chargers, home batteries

    (c) Enhancing the health and safety of homes – seismic strengthening, chimney removal, septic tanks replacement

    (d) Developing infrastructure that mitigates the impacts of climate change – e.g. water storage tanks

37. The business case assumes RAS will initially offer IMPACT loans for solar panels, home batteries, heat pumps and water heat pumps.

Development to date

38. Significant work has been undertaken developing the RAS by the Steering Group supported by Cameron Partners, Simpson Grierson and PwC.

39. RAS development has been based on the establishment process for the LGFA which incorporates several stage gates - seeking to progressively identify key issues, confirm RAS viability and test interest from key stakeholders.

40. The most recent final development stage completed has involved:

    (a) Identifying critical workstreams

    (b) Executing these workstreams with appropriate personnel from the Steering Group councils and expert advisors as appropriate

    (c) Development of a business case incorporating detailed:

        (i) Product definition and criteria

        (ii) Credit rating analysis

        (iii) Business model, governance and capital structuring

        (iv) Process and operations confirmation

        (v) IT system strawman development and market testing

        (vi) Business plan development including financial and scenario analysis with assumptions based on objective data, precedents and expert input

    (d) Legal, accounting and tax review

Current support

41. Before RAS establishment can formally commence, approval will be required from central government, LGFA and councils as:
    (a) Shareholders – to provide the necessary equity funding
    (b) Stakeholders (in addition to the equity) – i.e.:
        (i) Central Government – policy, supporting legislation, liquidity standby facility
        (ii) LGFA – debt / treasury management, subscription to RAS debt and preference shares
        (iii) Councils – agreement to make products available / RAS membership arrangements

Government support

42. The business case was provided to central government in late 2025 although given the multiple agencies involved and competing priorities, officials' final advice wasn't provided to Ministers until late July 2026.

43. Central government support is expected to be confirmed following the formation of a new government. In this regard, four political parties have formally announced approval of all, or aspects of the RAS within their manifestos:
    (a) Labour, Greens, TOP and Te Pati Māori have indicated they will implement the RAS as per the business case
    (b) National has announced its intention to establish the Home Energy Fund providing energy loans to ratepayers using the RAS model, including providing the full government equity contribution as outlined in the business case which is based on RP, Deferred DCs and IMPACT loans.

44. MCERT has recently been instructed by ministers to complete due diligence on RAS with all three products and is engaged with the Steering Group and its advisors in this regard.

LGFA support

45. LGFA approval is subject to both the LGFA Board approval and an ordinary resolution of shareholders:
    (a) The LGFA Board continues to support RAS, and the necessary LGFA approvals will be considered by directors at the November Board meeting
    (b) The shareholder resolution is expected to be informed by councils' decisions on participation in RAS, reflecting the significant overlap between LGFA's 30 current council shareholders and the councils expected to become shareholders in RAS

Council support

46. Including the eight Funding Councils that have provided funding for RAS development to date, 24 councils have now obtained formal approval at Council Meetings to confirm their in-principle support:
    (a) To date, every council that has sought approval have successfully obtained it (i.e. 24 of 24 councils)
    (b) A further five councils that have made enquiries are progressing council support for RAS
    (c) The 24 approved councils represent 62% of NZ ratepayers and, when combined with the other five councils, this represents over 76% of NZ ratepayers.

ANALYSIS AND ADVICE

Commercial analysis

47. Preparation of the detailed business case has involved development of a comprehensive financial model analysing multiple scenarios based on objective data and input from Steering Group members (in particular LGFA), the British Columbia Property Tax Deferment Scheme team, IT service providers (IT costs and system requirements) and independent experts.

48. The scenarios analysed make assumptions about establishment and ongoing operational costs and cover various combinations of RAS products and levels of uptake by ratepayers.

49. The basic economics of the RAS are that it will generate a net interest margin of ~1% (i.e. it will make loans to ratepayers at ~1% above what it borrows at). Ultimately its net interest will need to cover its operating costs in order to breakeven (e.g. if operating costs are $8 million p.a. the RAS requires a loan book of $800 million to breakeven).

50. This can be achieved across all the products that the RAS offers and various data points support the RAS reaching breakeven in a relatively short timeframe (e.g. in 2024 the British Columbia scheme had ~C$2.7 billion in loans growing at ~C$300 million pa); nationwide DCs total ~$900 million pa; IMPACT loan uptake assumptions are based on overseas experience and are considered conservative by Rewiring Aotearoa and EECA.

51. Based on the analysis reviewed, it is expected that the RAS will be able to generate a surplus and provide a strong return to its shareholders. The Base Case scenario indicates breakeven after 4 years, initial equity fully paid back after 11 years, dividend yield on initial investment of 22% in year 10 and by year 15, 2.5x the initial investment will have been returned through dividends.

52. Funding from both central government, LGFA and Local Authorities will be required to capitalise the RAS at establishment.

53. It has been assumed that c.$35 million will be required from founding shareholders. The proposed $35 million:

    (a) Is a “catch all” amount (covering all transaction / establishment costs and initial operating losses before scale is achieved) on the basis that it is better to be over-capitalised rather than under-capitalised and need to go back to Local Authorities for additional capital; and

    (b) Is based on a scenario with all three products being made available at establishment (ie RP, deferred DCs and IMPACT loans) and is considered to be conservative

54. The establishment capital will be provided by all shareholders at establishment. There is a constraint on the investment of any single investor at 20% of total capital (otherwise there is a risk that the RAS will be on-balance sheet for that investor) - so the maximum individual shareholders can take will be c.$7 million of the $35 million total equity being raised.

55. It is anticipated that central government and LGFA will take the maximum shareholding possible – c.$7 million each with the remaining c.$21 million being provided by councils.

56. Funding already provided and any further development funding provided by the Funding Councils and LGNZ prior to the broader capital raise (**Early Capital**) will count as establishment equity.

57. Early Capital (currently C.$3.9 million) will receive a preferential return to compensate the providers of that capital for the development risk taken.

    (a) The preferential return will be 10% from the time that the funding was provided though until all establishment capital is formally committed (expected to be 30 June 2027 once councils formally adopt their LTPs) reducing to a 5% return until the return is paid.

    (b) The return on the Early Capital will be repaid before any return is provided to the ordinary shareholders.

    (c) Once the return is paid the Early Capital will convert into ordinary shares.

58. Analysis indicates that once breakeven is achieved, large surpluses could be generated and subject to board and shareholder approval, used to either:

    (a) Provide returns to shareholders (the return on investment is potentially high); and/ or

    (b) Reduce the interest rate charged to ratepayers even further; and / or

    (c) Be retained in the business for other purposes.

59. All councils are being offered the opportunity to invest in RAS equity. The actual amount invested by each council will depend on individual appetite (For example, of the $25 million LGFA establishment capital, the Crown took $5 million, 9 LAs took $2 million each and another 8 split the remaining $2 million between them).

60. As with LGFA there is merit in getting the widest shareholding spread possible to support uptake.

61. In addition to paid up share capital the RAS will benefit from:

    (a) Additional funding support from LGFA in the form of preference shares that are subscribed for / repaid as the RAS balance sheet changes in size (in much the same way as Borrower Notes work for LGFA)

    (b) Unpaid shares subscribed for on a 1:1 basis by LGFA and shareholder councils (similar to the LGFA uncalled capital arrangements

62. LAs will also need to provide limited joint and several guarantees on a proportionate basis to their ratepayers' use of the RAS (based on the limited joint and several guarantee that Local Authorities provide to the LGFA).

Legal advice

63. Legislation will be required to enable the RAS to have the powers to impose a "rate-like" levy and, among other things, to;

    (a) provide for an optimal regulatory treatment for RAS - such as a similar Credit Contracts and Consumer Finance Act 2003 (CCCFA) exemption that currently applies to Local Authorities that provide voluntary targeted rates schemes; and

    (b) require real estate agents and conveyancing lawyers involved in a property sale to confirm to buyers if there is a RAS levy attached to the property.

64. Simpson Grierson has advised that there are strong precedents for the required legislation provided by the LGFA and IFF respectively and consequently this won't involve "breaking new ground"

Accounting and tax advice

65. PwC has identified accounting and tax issues that will need to be addressed / confirmed including off-balance sheet treatment, guarantees being recognised as liabilities, income tax exemption and potential technical RAS insolvency from an inability to recognise multi-year levies.

66. PwC notes that none of the issues identified are considered insurmountable and will be resolved through an iterative process in final establishment stage.

IMPLICATIONS OF JOINING RAS

67. The establishment of RAS will require councils to apply resources to enable membership requirements to be completed – eg

    (a) Information sharing arrangements (between councils and RAS) – eg ratepayer details, property valuation details and processes to flag RAS levies on LIM / RID

    (b) Origination arrangements via councils' websites

    (c) Joint and several guarantees.

68. The RAS will be off-balance sheet so there will be no balance sheet implications for councils from their ratepayers using RAS products and a key objective will be to minimise ongoing council resourcing.

69. Council will need to decide (once RAS is established) which of the products/ services the Council will make available to its ratepayers.

70. Councils will not need to consider “in-house” capacity and capabilities to develop a RP scheme.

71. To the extent that DCs are not covering the full cost of development related infrastructure, deferred DCs provide scope to increase DC revenue accordingly.

72. If IMPACT loans are made available councils will need to develop and maintain a list of certified suppliers either on their own or in conjunction with an Implementation Partner such as EECA.

STATUTORY CONTEXT

73. Council is under no obligation to invest in the RAS.

74. The Crown will need to pass legislation (similar to LGFA legislation) to enable the RAS to be established. Investment will not be required before the legislation is passed.

STRATEGIC ALIGNMENT

75. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	☐
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	☐
We are a city that supports business and education	☐
We are a vibrant city that embraces events	☐

76. The persons who are affected by or interested in this matter are ratepayers (particularly those facing difficulty paying rates or energy bills), developers, solar installation and heating businesses, and other councils and organisations involved in establishing the RAS.

77. The IMPACT loans are expected to improve household resilience which is likely to enhance the environment.

OPTIONS ANALYSIS

Option 1

Agree to invest in the RAS

78. The recommendation is to make a further investment of $570,000, taking TCC ownership to around $1.24m (3.5% shareholding). However, Council can proceed with any further investment amount it wishes – from nothing to the maximum possible $7m (being 20% of the total investment sought).

79. Under this option, this funding is considered to be capital in nature (purchase of shares) and is appropriate to be debt funded. It is recommended that Council establish a reserve for the RAS. This reserve would have the upfront investment costs and any subsequent costs.

Risk Analysis

80. There is a risk that the RAS business case is not met as there is no assurance that ratepayers and developers will utilise the RAS. If that occurs, then there may need to be further calls for investment to keep the RAS afloat until it breaks even (which would be subject to further Council decisions) and/or the investment may need to be written off if the RAS does not continue.

81. To mitigate this risk, the business case is based on conservative assumptions and the investment funding sought reflects the Base Case scenario. For Council, if it determines to invest further, then the best mitigation is to promote the use of the RAS products within the District.

82. Table 1 outlines the advantages and disadvantages of this approach.

Table 1: Advantages/ Disadvantages of investing in the RAS

Advantages	Disadvantages
• Supports establishment of RAS and the benefits available to council and ratepayers • Provides a potential long-term return based on RAS forecast financial performance • Provides voting rights on RAS decisions. • Gain a return on investment (once profitable) on our earlier investment. • Improved collection of Rates and Development Contributions as TCC will receive the funding up front from RAS customers.	• Uses capital that would otherwise be available for other purposes • Exposes council to the success of RAS

Option 2

Do not agree to investment in the RAS

83. There would be no additional expenditure on the RAS by Council.

Risk Analysis

84. There is a risk that insufficient investment is raised, resulting in the RAS being unavailable.

85. Table 2 outlines the advantages and disadvantages of this approach

Table 2: Advantages/ Disadvantages of not investing in the RAS

Advantages	Disadvantages
• Does not require any investment to be made. • Does not expose council to the success or otherwise of RAS	• Does not support RAS establishment which requires equity from councils • Does not provide any financial return from RAS success • Does not provide voting rights in regard to RAS decisions • We will need to provide for the repayment of debt incurred for previous contributions.

FINANCIAL CONSIDERATIONS

86. Overall, the RAS requires $35 million equity to be set up. This investment covers the costs of establishing the RAS and supports the initial operational costs until breakeven is achieved. Central Government and LGFA are each expected to invest to the maximum possible $7 million (20% each), leaving $21 million for the local government sector to invest. Council may, but need not, invest into the RAS.

87. The table below outlines some illustrative different investment amounts and their implications.

Table 1: Potential TCC Contribution levels to RAS

Pro rata multiple (based on 2025 rates revenue)	**0**	**1x**	**2x**	**3x**	**4x**	**Max**
Amount	$0	$617,689	$1,235,377	$1,853,066	$2,470754	$7m
% of RAS equity	0%	1.8%	3.5%	5.3%	7.1%	20%
Additional Investment required *	$0	$0	$565,377	$1,183,066	$1,800,754	$6.33m
Rationale	No investment required to use RAS	TCC's pro rata share Supports RAS establishment	Helps ensure establishment. Greater future returns	Helps ensure establishment. Greater future returns	Helps ensure establishment. Greater future returns	Maximum possible amount

* TCC has already contributed $670,000 in establishment costs. This will be converted to equity (and additional return) on establishment

88. Once breakeven is reached, RAS will generate a surplus. This surplus can be used to provide a return to shareholders, to reduce charges to ratepayers, or to reinvest into the RAS, or a mixture.

89. It is recommended that TCC subscribe for $1.235m of equity in the RAS, which requires input of an additional $0.56m of funds, which would make up 3.5% of RAS equity. This level of equity supports establishment of the scheme and is recommended because;

    (a) There are several smaller Councils that may struggle to get traction on this issue, similar to the establishment of LGFA (TCC put in $2m leading to 8% ownership).

    (b) The higher level of investment increases the likelihood of the RAS getting sufficient share capital to meet its establishment requirements.

    (c) The higher level of investment will give TCC improved returns if the RAS is financially successful.

90. Council could consider a higher level of investment to increase the likelihood of achieving the total amount of equity required to establish the RAS.

91. If Council determines that it will include an investment in the RAS within the Draft LTP then there are several options for funding this. Council's most recent contribution ($500K) was funded by loans. Table 4 outlines the funding options (based on $570,000 option to invest).

Table 4: Options for Funding an investment in the RAS

#	Option	Rates Cost per property
1	Rate fund Investment	$9.20 - 1 off
2	Debt fund Investment (rates fund interest only)	$0.46 - per annum
3	Debt fund Investment (repay over 10 years)	$1.18 - 10 years
4	Debt fund Investment (capitalise interest)	$0

* Based on 62,101 ratepayers (2025)

92. Higher investment levels would increase the rates contribution required but potentially increase any future dividend streams.

93. The recommendation to Council is Option 2. This approach balances the ongoing funding of interest while relying on future dividends from the RAS to repay the debt.

94. The proposed funding approach is to place all investment costs into a dedicated reserve. This reserve would incur interest charges over time and be repaid based on the funding option above. Under options 2 and 4, the dividend would first be used to repay this reserve until it is no longer in deficit. At that time, Council could determine its approach to using further dividends.

95. As noted above there is potentially an indirect financial benefit for Council receiving rates and/ or Development Contributions up-front from RAS customers.

RISKS AND LEGAL IMPLICATIONS

Full stakeholder support

96. Support from all three key stakeholders (Central Government, LGFA and councils) is required to progress to establishment of RAS.

97. Confirmation of sufficient support is expected to be an iterative process – e.g. councils and LGFA progressing approvals while awaiting final government approval.

98. All equity commitments from stakeholders will be conditional on equity commitments from a sufficient number of stakeholders being received + the Steering Group being satisfied as to commitments for the other specific stakeholder requirements – e.g.:

    (a) Central Government – policy, enabling legislation, liquidity standby facility.

    (b) LGFA – debt / treasury management, subscription to RAS debt and preference shares.

Lack of demand

99. To be economically successful and sustainable the RAS will require ratepayers to use it.

100. Maximising the number of councils making RAS available to their ratepayers and launching the RAS with all three products, RP, deferred DCs and IMPACT loans will maximise the likelihood of the RAS achieving breakeven in a reasonable timeframe.

101. Central government and Local Authorities will be able to influence demand through policy support and raising awareness of RAS products through websites, invoice advertising etc. Longer term, word of mouth is expected to underpin awareness and normalise use of RAS products.

Loan defaults

102. As with all financing arrangements there is risk of loan defaults.

103. Notwithstanding, full recovery of ratepayer loans is almost certain due to various safeguards that are being developed for RAS, including minimum equity requirements, property insurance requirements and the "super senior" ranking of RAS levy charges (which ensures RAS receives payment before other creditors).

104. In addition, there are multiple safeguards in the RAS' proposed capital structure and guarantee and liquidity arrangements to protect the RAS from default (in a similar manner to how the LGFA operates).

Operating costs higher than forecast

105. The most material cost item over which there is the greatest uncertainty is IT:

    (a) Significant independent IT input has been received during preparation of the Business Case.

    (b) IT supplier procurement is a critical workstream during establishment and will be supported by a "Big 4" IT consultant with oversight from an independent IT advisor.

106. Operating expenses have been estimated with objective data points where possible (eg LGFA comparisons and HR consultant input) with an additional minimum 20% contingency applied in all cases.

TE AO MĀORI APPROACH

107. The RAS scheme has general applicability and accordingly there has not been any consultation undertaken directly Māori. All community views and preferences will be sought during the Long-Term Plan consultation process.

CLIMATE IMPACT

108. IMPACT loans will be approved for purposes that have both private and public benefits.

109. IMPACT loans will initially be made available for solar panels, home batteries, heat pumps and water heat pumps) – products which can support the decarbonisation of New Zealand and mitigate the impacts of climate change.

CONSULTATION / ENGAGEMENT

110. The investment provides a shareholding into the RAS as a CCO. Because of this, Council is legally required to consult the community (s56 Local Government Act 2002). While the legal requirement strictly only applies to becoming a shareholder, Officers consider that it would be appropriate for the consultation to include all matters decisions are sought on.

111. It is recommended that Council consult the community as part of the 2027 – 2037 LTP.

SIGNIFICANCE

112. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

113. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the decision.

(c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

114. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the decision is of **medium** significance. While the cost is not significant, there is a requirement to publicly consult on this investment.

ENGAGEMENT

115. Taking into consideration the above assessment, that the decision is of medium significance, officers are of the opinion that the following consultation/engagement is suggested/required under the Local Government Act 2002.

NEXT STEPS

116. TCC approves the recommendations in this paper to enable commencement of consultation.

117. The next step is to undertake community consultation on the proposals contained in this report. Council will then be presented with the consultation outcomes to make a final decision.

118. If Council approves joining the RAS following community consultation, then Officers would undertake the necessary steps to transfer funds, receive a shareholding, and continue to participate in the RAS establishment process.

119. In terms of the RAS itself, the next steps are:

(a) Confirming key stakeholder support – i.e. Central Government, LGFA and councils

(b) Finalising council equity commitment

(c) Legislation

(d) Establishment

(e) Operation

120. Given the level of development already completed it is thought that with appropriate support from Local Authorities and central government that the RAS could be established within 12 – 18 months.

ATTACHMENTS

Nil

11.11 Local government reform functions analysis - approval of next steps

File Number: **A21334005**

Author: **Anne Payne, Principal Strategic Advisor**

Authoriser: **Gareth Green, Interim Chief Executive**

PURPOSE OF THE REPORT

1. To seek Council's approval for the proposed methodology and intended output from joint Bay of Plenty councils' functions analysis work, and direction on Council's preferred approach and next steps.
2. To highlight to the Council any opportunities and/or risk, and any significant changes since the last report on 6 August 2026, and subsequent submission of the Council's joint Head Start (local government reform) proposal.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Local government reform functions analysis - approval of next steps".

(b) Approves in principle the proposed functions analysis methodology (as set out in the background section of this report*) which aims to produce a consistent Bay of Plenty evidence base identifying the geographic scale options for the governance, management and delivery of individual functions under future unitary authority model(s).

*The proposed methodology comprises a two-stage approach to first *understand the current state* then to *identify the practicable future options for* the funding, governance, management and delivery of each function included in the analysis process. This work would proceed only once results from the Ministry of Cities, Environment, Regions and Transport's community of practice work on regional functions are known (currently signalled as after February 2027). Financial modelling and further work to test the feasibility of geographic delivery options may follow the initial analysis process.

(c) Approves the approach to collectively progressing functional analysis work with regional partners as being:

(i) Option One: To assess all functions (both regional and territorial authority), in general accordance with the methodology set out in this report (and summarised in Recommendation b), noting that councils can opt out of the programme at any stage.

OR

(ii) Option Two: To assess regional functions only in general accordance with the methodology set out in this report (as summarised in Recommendation b), with the priority focus being:

(1) Narrow range: Transportation, spatial planning, catchment management and biosecurity only, OR

(2) Mid-range: All functions currently delivered by regional councils, OR

(3) Broad range: All functions with potential for regional delivery.

OR

(iii) Option Three: To pause and wait for further direction from Government/MCERT

(d) Directs the Chief Executive to contribute to preparation of a draft Terms of Reference for an intended regional working party with elected member representation from each of the participating councils across the region, for approval by Council prior to the working group's proposed commencement in 2027.

EXECUTIVE SUMMARY

3. Following the government's September announcement that it was pausing the Head Start process until early 2027, Bay of Plenty councils have continued the joint work already underway at the direction of the Mayoral Forum to develop an approach to region-wide functions analysis. This work is led by the chief executives and delivered by a joint councils' staff working group, with one or more representative from each council in the region.

4. This work aims to ensure the Bay of Plenty councils are in a well-informed position to proceed when the strongly signalled continuation of local government structural reform commences, regardless of which parties form the new government.

5. The Ministry for Cities, Environment, Regions and Transport (MCERT) recently advised that it intends to establish a community of practice for functions analysis work to be undertaken between December 2026 and February 2027. Staff see value in seeking involvement for the Bay of Plenty in this work, although it is as yet unclear what form this might take.

6. This report seeks Council's in-principle approval of a proposed process and methodology for a joint councils' analysis of the current and potential future funding, governance, management and delivery mechanisms for specific council functions. It is intended that planning and preparation for this work could continue at this stage, with implementation commencing only once the MCERT community of practice results are known in or after February 2027.

7. This report also seeks Council's direction on the scope and scale of council functions to be included in this joint councils' analysis work. Options provided include assessing all regional council and city/district council functions (option one), or assessing regional functions only (option two, which includes three sub-options), or to pause the planning and preparation currently underway until further direction is received from central government.

8. The functions analysis work is anticipated to be delivered from early to mid-2027 via existing council staff resources and a joint councils' elected member working party. The Bay of Plenty Regional Council has allocated funding for an independent workshop facilitator and any other specific external expertise that may be required.

9. A similar report will be considered by each of the councils in the Bay of Plenty region prior to the next Mayoral Forum meeting on 17 December 2026.

BACKGROUND

Head Start pathway

10. Government announced its Simplifying Local Government Head Start Pathway on 5 May 2026. This included:

(a) A voluntary Head Start Pathway – intended for councils that are willing and able to reorganise quickly. It allowed territorial authorities to submit an outline proposal to establish one or more new unitary authorities (a council that performs both regional council and territorial authority functions within the same geographic area). Outline proposals were required to be submitted by 9 August 2026.

(b) A compulsory Back Stop process – for councils that did not progress through the Head Start Pathway. The Government has indicated that detail on the backstop approach will

be developed in 2027 and that it is likely to include a standard approach to local government reorganisation.

11. The Government's overarching intent was to simplify local government through creation of unitary councils to simplify governance, reduce duplication and improve regional coordination. The intention was that regional council governance would be disestablished from the 2028 local elections.

12. Through the Head Start process, the territorial local authorities (TLAs) in the Bay of Plenty respectively proposed to establish three sub-regional unitary authorities for the region. The proposed unitary authorities would deliver the functions currently delivered by both the TLAs and the Bay of Plenty Regional Council (BOPRC). While BOPRC was unable to submit, they have still undertaken modelling and external consultation of potential unitary models, resulting in a preference for a single unitary council for the Bay of Plenty.

13. Tauranga City Council (TCC) and Western Bay of Plenty District Council (WBOPDC) elected members worked together to jointly develop an outline proposal for a western Bay of Plenty sub-regional unitary council, comprising both councils' geographic areas.

14. Whilst TCC approved the TCC/WBOPDC outline proposal, WBOPDC ultimately decided not to approve the proposal, preferring the Back Stop Pathway. However, TCC and Rotorua Lakes Council lodged an outline proposal seeking the establishment of two sub-regional unitary authorities, effectively pulling WBOPDC into the proposal as a non-consenting council.

15. On 24 September 2026, Cabinet decided that it would not make any Head Start decisions before Parliament rose, as originally intended. The next steps signalled include:

    (a) Further engagement between Head Start councils and MCERT on key design issues. These were not unique to any one proposal and relate to:

        - Ensuring fair and effective local representation
        - Integrated catchment management
        - Affordability and long-term financial sustainability
        - Upholding Treaty of Waitangi settlement arrangements
        - Transfer and delivery of regional services and functions.

    (b) Decisions about Head Start now being anticipated in early 2027 following, and subject to, the general election.

    (c) Intention that regional council governance will not be elected in 2028.

    (d) Intention to continue the Back Stop process.

Functions Analysis

16. The TCC/WBOPDC Head Start outline proposal signalled that one of the key aspects requiring further analysis and decision-making related to how regional functions would be transferred and delivered. The outline proposal deliberately left this unresolved, signalling that it would be a key focus for the next phase of the process, as well as the intent to progress this collectively as a region. It recognised the criticality of this substantive piece of work, and that could not be effectively achieved in the short three-month window to develop Head Start proposals. There was a desire to consider all regional and territorial functions through this process.

17. On 6 August 2026, as part of its decision-making on Head Start pathway options, Council resolved (CO/26/0/3 (g)), along with most other TLAs in the region, that Council:

    'agrees to work with other councils to consider wider regional and cross boundary function delivery and shared services where appropriate in future unitary delivery models.'

18. The Bay of Plenty Mayoral Forum of 10 September 2026 (pages 3 - 6) considered progress on shared services and functional review work and requested that the Chief Executives report back on options at the next Mayoral Forum, scheduled for 17 December 2026.

19. MCERT has recently signalled its intention to establish communities of practice to identify 'what good looks like', including lessons learned and possible methodologies or frameworks from MCERT's perspective, for three of the issue areas noted above, being: representation, regional council functions, and financial sustainability. While still early in the development phase, the intention is that these communities of practice would commence in December 2026 through to February 2027. Their aim would be to provide advice and guidance to councils to support the progress of reform once the incoming government gives its direction, rather than mandatory 'rules' for the next steps. At this stage, it is unclear what, if any, role councils or groups of councils might be able to take in this work. However, it is considered worthwhile for our Bay of Plenty region to seek involvement in whatever form is possible.

Proposed Bay of Plenty functional assessment methodology and process

20. A working group has been formed with staff representatives across each of the councils in the region (including BOPRC), to give some initial consideration to a proposed approach to collectively progressing this work.

21. The proposed methodology recognises and builds on other relevant work progressed to date in the region and wider local government sector. There are a range of reports that have been commissioned by the regional councils across New Zealand to consider how to undertake assessment of future functional arrangements:

    - Heuser Whittington report: Grounded (August 2026)
    - Winder Wilde Report: Local Government Futures (August 2021) (refer pp 29-81)
    - Castalia report: Functions of regional and unitary authorities (November 2025)

    BOPRC also commissioned Castalia to apply the broader methodology for the Bay of Plenty in February 2026.

22. The working group has sought to develop an approach that is easily understood, simple to replicate across the different function areas and translates well into our decision-making requirements. It also needs to be a good fit with our BOP context.

23. We intend to seek involvement in MCERT's community of practice work on regional functions, to share learnings both ways and ensure alignment as we continue to develop our Bay of Plenty methodology.

24. Once MCERT's community of practice work is completed, currently signalled for February 2027, our intention is to continue to develop the Bay of Plenty methodology with an elected members' working party. We also intend to peer review the methodology and assessment criteria with an independent, external consultant with expertise in large-scale amalgamation / business transformation (which BOPRC has offered to fund).

Assessment methodology

25. The proposed assessment methodology is intended to be a two-stage approach, commencing once results from MCERT's community of practice work are known in or after February 2027, and being:

    (a) Firstly, to understand what *current state* looks like as a region – develop functional overviews to clearly set out how the function is currently funded, governed, managed and delivered. This would create base line information to undertake the next stage of assessment.

    (b) Secondly, to understand what the *practicable future options* are – these would be explored through independently facilitated functional analysis workshops, focusing on one function at a time. The workshops would consider which geographic area (local, sub-regional, regional, interregional or national) is a practicable option for the specific

function in terms of funding, governance, management and delivery. This may result in more than one geographic scale being practicable (local, sub-regional, regional, inter-regional, national) across each functional component (funding, governance, delivery, management), and can be applied within a future one, two or three unitary model for the BOP.

26. Following these workshops, we may also undertake financial modelling, and further work to test the feasibility of geographic delivery options. The intended output is a consistent Bay of Plenty evidence base identifying the viable geographic scale options for the governance, funding, management and delivery of individual functions under future unitary authority model(s). Where several options are viable, it will outline their benefits and trade-offs to inform decision-making, without recommending or selecting a preferred approach. It is critical to undertake this work, prior to developing the future operating model.

27. Staff subject matter expertise is envisaged for both stages (a) and (b) above, to ensure that there is accurate and robust information at a specific function level.

28. A regional working party of elected members is also envisaged for stage (b), functional analysis workshops. The working party's role would be to engage in the process and share their perspectives, build understanding of functional areas not currently delivered by their existing council, represent their community's views within the process, and to enable them to advocate within their own council for the outcomes of the process.

STATUTORY CONTEXT

29. The recommendations of this report comply with the Local Government Act 2002 provisions for decision-making and community engagement principles. The recommendations seek Council's direction to progress further work signalled through government's Simplifying Local Government Head Start Pathway process.

30. The Simplifying Local Government – Head Start Pathway does not currently have a legislative basis, however the Head Start policy framework presumes that 'bespoke legislation' will be progressed for councils that are part of this process.

31. A subsequent legislative process will be required after the 2028 local government elections to mandate any changes required as part of the Head Start and/or Backstop process.

STRATEGIC ALIGNMENT

32. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	✓
We are a vibrant city that embraces events	✓

33. Local government form and function is critical to local democracy, and as such will impact on all community outcomes for the city.

OPTIONS ANALYSIS

34. The options presented in this section relate to which functions should be included in the functions analysis process (either all functions (option one) or regional functions only (option two)); or whether to pause completely and await further direction from central government (option three).

Option One: Assess all functions (both regional and territorial authority)

35. Each functional analysis would include all aspects of the function relevant to the Bay of Plenty region, regardless of how it is currently delivered and by which council.

36. Under this option, councils would retain ability to opt out of the functional analysis programme at any stage, recognising:

    (a) Uncertainty arising from the general election in November 2026, and any potential change in policy direction that may arise if there is a change in Government

    (b) A stronger focus on regional council functions under the Head Start policy to date, and in the messaging from Cabinet decisions on areas for further consideration

    (c) Resourcing considerations to involve subject matter expert staff and elected members amongst other work programme priorities.

37. Under this option, the work would proceed as a coordinated programme in the following order:

	What it includes	Rationale
A	Catchment management Spatial planning Transportation	Identified in Head Start policy as priority regional functions for consideration
B	Remaining regional council functions	Needed to understand functional design of potential unitary council(s)
C	City and district council functions	Some councils have signalled an appetite to consider all functions in the same way, rather than presuming that current functional arrangements are the most appropriate going forward. This tranche is a lower priority than considering regional functions, therefore can take place at a later stage.

38. Advantages and disadvantages of this option are outlined in the following table:

Advantages: Option One	Disadvantages: Option One
Full picture of functions and service delivery across all councils in the BOP Delivery in tranches enables consideration of political context and any changes to reform programme prior to committing to a subsequent tranche of work (and associated resource) Builds on existing robust work progressed locally and in the regional sector Messaging from Ministers and MCERT note that regional functions is a key design issue requiring further consideration within the Head Start context Outcomes of the work can inform organisation service design for a one, two or three unitary council model for the BOP	Uncertainty for local government reform arising from general election and deferral of Head Start decision by Cabinet. MCERT has not yet issued guidance in relation to carrying out functions analysis. Financial impacts - We may commit resourcing to progress work that we need to change later on, when there is further direction from Government/MCERT. This is primarily in the form of staff and elected member time, rather than direct costs. BOPRC has allocated budget that can fund the independent facilitator or other required external resources.

Option Two: Assess regional functions only

39. In general accordance with the methodology set out in this report, with a provisional anticipated completion date of 30 July 2027.

40. Each functional analysis will include all aspects of the function relevant to the Bay of Plenty region, regardless of how it is currently delivered and by which entity (i.e. which council or government agency).

41. While this option does not include all city/district council functions, a decision is also sought on the scope of regional functions to be included. Sub-options are outlined in the table below:

Scope	What it includes	Rationale
Narrow range	Transportation Spatial planning Catchment management Biosecurity	Functions included in Head Start policy as priority functions for consideration plus biosecurity, which was also identified a requiring further consideration for centralisation through government's rapid review of regional council functions undertaken November 2026 – February 2026.[2]
Mid-range	All functions delivered by regional councils	To improve councils' shared understanding of all regional council functions prior to the government's signalled cessation of region councils' governing bodies from the October 2028 local government elections.
Broad range	All functions delivered by regional councils or with potential for regional delivery	To ensure any obvious city/district council functions are also included in this analysis.

42. Advantages and disadvantages of this option are outlined in the following table:

Advantages: Option Two	Disadvantages: Option Two
Focus on regional functions is aligned with Government's policy intentions to date, to create unitary authorities and disestablish regional council governance from the 2028 local election. The region will need to understand how it will transfer and deliver regional council functions. Builds on existing robust work progressed locally and in the regional sector Messaging from Ministers and MCERT note that regional functions is a key design issue requiring further consideration within the Head Start context Outcomes of the work can inform organisation service design for a one, two or three unitary council model for the BOP	Uncertainty for local government reform arising from general election and deferral of Head Start decision by Cabinet. MCERT has not yet issued guidance in relation to carrying out functions analysis. Financial impacts - We may commit resourcing to progress work that we need to change later on, when there is further direction from Government/MCERT. This is primarily in the form of staff and elected member time, rather than direct costs. BOPRC has allocated budget that can fund the independent facilitator or other required external resources.

[2] MCERT, Simplifying local government, downloaded 16 November 2026: Outcome of the rapid review of regional council functions

Option Three: Pause and wait for further direction from Government/MCERT

Advantages: Option Three	Disadvantages: Option Three
We wait to commit time and resource once we have clear direction from Government/MCERT Other work programme priorities can be delivered without resource being directed to this work. Financial impacts: No costs incurred in the short term whilst we await further direction.	If the current Government is re-elected, timeframes could be significantly compressed to do this work well post-election. Work is not progressed in response to an identified key design issue that's common to all Head Start proposals. Potential financial impacts: There is a risk that additional resource may be required if work is required to be compressed within a tight timeframe due to Government direction.

FINANCIAL CONSIDERATIONS

43. This project is anticipated to be delivered through existing staff resources.

44. BOPRC has allocated funding for the independent facilitator for the workshops and any other specific external expertise that may be required.

RISKS AND LEGAL IMPLICATIONS

45. There is a risk that local government reform might not proceed or might proceed in a significantly different manner and/or pace, under the new government post-November 2027 election. If this did occur, there is a risk that work towards a region-wide functions analysis might be targeted incorrectly or might not prove useful.

46. The likelihood of this risk being realised is considered to be low, as both the previous coalition government and opposition have signalled their intention to continue with local government reform (amalgamations) in some form.

47. Additionally, by seeking involvement in MCERT's community of practice work and by ensuring that the delivery phase of the functions analysis proceeds only after the results of MCERT's work are known, councils' investment will be limited to minimal staff time until the new government's next steps are communicated.

TE AO MĀORI APPROACH

48. Tauranga City Council commenced engagement with Tangata Whenua regarding the Head Start Pathway earlier in the year. Ongoing engagement is anticipated should the sub-regional proposal (or a revised alternative proposal) proceed further. This will include engagement with Iwi Chairs and Te Rangapū Mana Whenua o Tauranga Moana (Te Rangapū) to enable the council to understand mana whenua views as to the future governance and operational arrangements for Tauranga and the western Bay of Plenty.

49. While development of the proposed functions analysis methodology has not sought specific mana whenua input to date, refinement of the planned process and delivery of the functions analyses would seek input from mana whenua, through Te Rangapū in the first instance.

50. Council recognises the importance of regional council functions to all of our communities, and to mana whenua in particular.

CLIMATE IMPACT

51. Regional council functions have a critical role in determining how well Tauranga, the western Bay of Plenty and the wider Bay of Plenty region is able to:

(a) Adapt to the changing climate – for example through identifying and managing natural hazard risks and flood management, and

(b) Enhance nature and biodiversity – e.g. through biodiversity protection and freshwater management.

52. The proposed functions analysis methodology and process seek to allow sufficient time for robust assessment and options identification, avoiding the potentially tight timeframes faced during the Head Start outline proposal development process.

CONSULTATION / ENGAGEMENT

53. Council undertook initial community engagement as part of the Head Start Pathway process, which generated 1,338 responses to council's online survey.

54. Headline results from our Tauranga city community were that over 85% of respondents supported reducing the number of councils through merging, and over 79% of respondents would prefer us to design a future structure rather than leave it to the government to do this. Just over half of respondents (54%) said Western Bay of Plenty District Council is the preferred merger partner, ahead of 27.2% preferring Whakatane District Council. Top priorities for any future structure are to keep rates low and efficient delivery of council functions and infrastructure. The full community survey report is available on TCC's Simplifying Local Government webpage.

55. The more detailed functions analysis proposed in this report is intended to inform the next stages of the local government reform process. While there is uncertainty on the specific process and timeframes for the next phases Head Start Pathway from Government, it is anticipated that the outcomes of this work would be considered through future community engagement on local government reform.

SIGNIFICANCE

56. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

57. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

(a) the current and future social, economic, environmental, or cultural needs of the district or region

(b) any persons who are likely to be particularly affected by, or interested in, the decision.

(c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

58. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the **issue** of the funding, governance, management and delivery of regional (council) functions is **of high significance**.

59. However, the **decision** is considered to be **of low significance**, because the recommendations of this report seek approval to undertake further analysis to inform future decision-making about functional delivery, rather than make these decisions at this point in time.

ENGAGEMENT

60. Taking into consideration the above assessment, that the decision is of low significance, officers are of the opinion that no further engagement is required prior to Council making a decision.

NEXT STEPS

61. On 4 December 2026, the joint councils' staff working group will meet to consider general direction provided by individual councils in response to reports similar to this one. Proposed next steps, if any, will be drafted for consideration by the Bay of Plenty Mayoral Forum in the first instance.

62. On 17 December 2026, the chief executives will provide feedback from all councils on the proposed functions analysis work to the Bay of Plenty Mayoral Forum, and next steps will be determined.

ATTACHMENTS

Nil

11.12 Tāheke – Bay Waters Limited: Setting & Collection of Charges

File Number: **A21375304**

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Authoriser: **Christine Jones, General Manager: Strategy, Partnerships & Growth**

PURPOSE OF THE REPORT

1. The purpose of this report is to:
   (a) confirm the approach to setting and collecting charges for drinking water, wastewater and stormwater;
   (b) explain how the proposed approach responds to Council's February 2026 resolutions regarding charging for stormwater; and,
   (c) confirm how the agreed approach will be reflected in the Statement of Expectations, Transfer Agreement and Billing and Collections Agreement with Tāheke – Bay Waters Limited.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Tāheke – Bay Waters Limited: Setting & Collection of Charges".
(b) Approves the following approach for the setting and collection of Tāheke – Bay Waters Limited's charges within Council's area for the transition period of 1 July 2027 to 30 June 2029:
   (i) Tāheke – Bay Waters Limited determines the level of revenue required to be covered by charges for all waters services.
   (ii) Drinking water charges set by Tāheke – Bay Waters under the Local Government (Water Services) Act 2025.
   (iii) Wastewater and stormwater charges set by Tauranga City Council under the Local Government (Rating) Act 2002.
   (iv) Tauranga City Council collects the charges for all water services.

EXECUTIVE SUMMARY

2. Decisions are required to be made on the approach to the setting and collection of charges within TCC's service area for the 2-year period from 1 July 2027 when Tāheke – Bay Waters Limited (**Tāheke – Bay Waters**) commences operations to 30 June 2029. From 1 July 2029, it is intended that Tāheke – Bay Waters will have its own single billing platform and will undertake the setting and collection of charges itself.
3. Tauranga City Council (**TCC**) staff recommend the following approach to setting and collecting charges for Tāheke – Bay Waters within the TCC area for the period 1 July 2027 to 30 June 2029.

Service	Who determines level of revenue required to be covered by charges	Who Sets Charges (within TCC's service area)?	Under what legislation are charges set?	Who Collects Charges (within TCC's service area)?
TCC Drinking Water	Tāheke – Bay Waters	Tāheke – Bay Waters	LG(WS) Act 2025	TCC
TCC Wastewater	Tāheke – Bay Waters	TCC	LG (Rating) Act 2002	TCC
TCC Stormwater	Tāheke – Bay Waters	TCC	LG (Rating) Act 2002	TCC

4. The main reasons for the recommended approach are:
   (a) there is no viable option for Tāheke – Bay Waters to collect charges on its own behalf when it commences operations;
   (b) minimises implementation cost, complexity and operational risk by avoiding significant changes to Council's highly integrated SAP rating, banking and collections systems for a short transitional period;
   (c) preserves the existing basis for stormwater charging, including the use of property rateable values, rather than immediately commencing the statutory transition away from that basis;
   (d) provides continuity for customers while Tāheke - Bay Waters develops a single billing platform, expected to be operational from 1 July 2029; and
   (e) is acceptable in principle to LGFA and manageable from an accounting and long-term planning perspective.
5. The key risks for the recommended approach are:
   (a) creates a mixed charging framework, with Tāheke - Bay Waters setting drinking water charges while TCC continues to set wastewater and stormwater rates; and
   (b) requires continued reliance on TCC to set wastewater and stormwater rates and to collect and transfer revenue.
6. The recommended approach responds to TCC's February 2026 resolutions relating to stormwater charging and largely reflects the intended "pass-through" model. Importantly, TCC retaining responsibility for setting stormwater charges allows those charges to continue to be based on property rateable values during the transition period.
7. Western Bay of Plenty District Council (**WBOPDC**) staff recommend the following approach to setting and collecting charges for Tāheke – Bay Waters within the WBOPDC area. This is intended to be confirmed by WBOPDC at its Council meeting on 19 November 2026.

Service	Who determines level of revenue required to be covered by charges	Who Sets Charges (within WBOPDC's service area)?	Under what legislation are charges set?	Who Collects Charges (within WBOPDC's service area)?	Transition Date
WBOPDC Drinking Water	Tāheke – Bay Waters	Tāheke – Bay Waters	LG (WS) Act	WBOPDC	1 July 2029
WBOPDC Wastewater	Tāheke – Bay Waters	Tāheke – Bay Waters	LG (WS) Act	WBOPDC	1 July 2029
WBOPDC Stormwater	Tāheke – Bay Waters	Tāheke – Bay Waters	LG (WS) Act	WBOPDC	1 July 2029

8. The incoming board for Tāheke – Bay Waters (**Incoming Board**) has endorsed the recommended approach for TCC and WBOPDC.

9. If Council approves the approach, it will be reflected in the Statement of Expectations, Transfer Agreement and Billing and Collections Agreement between TCC and Tāheke – Bay Waters.

10. Where a council is responsible for setting charges on behalf of Tāheke – Bay Waters Limited (as is the case for TCC in respect of wastewater and stormwater), the Local Government (Water Services) Act 2025 (**LG(WS) Act**) requires the council to set charges for each financial year at a level that enables Tāheke – Bay Waters Limited to:

    (a) Undertake the capital and operating investment programme in its water services strategy for that year; and

    (b) Comply with all relevant regulatory requirements; and

    (c) Be financially sustainable.

BACKGROUND

11. The LG (WS) Act requires TCC and Tāheke – Bay Waters to enter a Transfer Agreement. One topic that must be covered within the Transfer Agreement is the agreed approach to the setting and collection of charges within TCC's service area. WBOPDC and Tāheke – Bay Waters will also enter into a Transfer Agreement, which shall also set out the agreed approach to setting and collection of charges within WBOPDC's service area.

12. Specifically, the Transfer Agreement must clarify who will be responsible for final decisions regarding Tāheke – Bay Waters' level of charges and who will be responsible for Tāheke – Bay Waters' revenue collection (including any arrangement for TCC or WBOPDC to collect on Tāheke – Bay Waters' behalf).[3]

    (a) If Tāheke – Bay Waters holds these responsibilities, then the charges must be set under the LG(WS) Act. Under this legislation, charges "*must not be based on, or take into consideration, a property's rateable value*" (other than the first five years, where rateable values can be used as a diminishing factor in setting charges).[4]

    (b) If TCC hold these responsibilities, then:

        (i) The charges must be set under the Local Government Rating Act 2002 (**Rating Act**). Under this legislation, rateable property values can be used when setting charges.

        (ii) Strict parameters apply to ensure that TCC pass through sufficient funds. TCC must provide sufficient revenue for Tāheke – Bay Waters to meet its operating and investment program, meet all regulatory requirements and be financially sustainable.[5]

13. The LG(WS) Act provides a great deal of flexibility:

    (a) The legislation does not prevent TCC and WBOPDC from taking different approaches. As set out in the Executive Summary, WBOPDC is likely to adopt a different approach, with Tāheke – Bay Waters setting charges for drinking water, wastewater and stormwater under the LG(WS) Act, and WBOPDC collecting those charges on Tāheke – Bay Waters' behalf.

    (b) The legislation does not prevent a different approach being taken for each water service (such that drinking water charges could be set by Tāheke – Bay Waters, but collected by TCC, with wastewater / stormwater charges set by TCC and collected by TCC).

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[3] Local Government (Water Services) Act 2025 Schedule 2, clauses 6 and 7.
[4] The charging method must be adjusted annually to decrease reliance on a property's rateable value, and by year 6 rateable values cannot be used in any way. During the five year transition period (even in the first year) charges "*must not rely entirely on a property's rateable value*". See LG(WS) Act Section 89.
[5] See Local Government (Water Services) Act 2025 Schedule 2, clause 6(b) at Appendix 1.

(c) The legislation does not prevent a transition of responsibilities over time. So that if Tāheke – Bay Waters is unable to undertake certain functions from 1 July 2027, TCC can undertake those responsibilities for a period of time until Tāheke – Bay Waters is ready to take over.

(d) The responsibility to set and collect charges can be re-visited over time. As examples, the charging arrangement for each water service can be revisited once Tāheke – Bay Waters has developed appropriate IT platforms to collect charges. Or the arrangement could be revisited if / when the national water industry develops an acceptable approach to stormwater charges in the absence of rateable values.

February 2026 resolutions

14. On 10 February 2026, TCC resolved to transfer responsibility for the delivery of stormwater services to Tāheke – Bay Waters. At the same time, TCC passed the following resolutions:

> (g) Supports the inclusion of a 'carve out' in the founding documents and that Council discusses with the other partners the ability for TCC elected members to directly set stormwater charges for its residents.
>
> (h) Notes that Council may consider a pass-through model whereby the Water Organisation invoices Tauranga City Council for stormwater services and Council recovers those costs via targeted rates. Requests the Chief Executive to report back with issues and options, including compliance with the Local Government (Water Services) Act 2025, affordability and equity impacts, and mechanisms to avoid double-charging.

15. Regarding the requested "carve-out", the Shareholders' Agreement allows TCC to provide operational direction to Tāheke – Bay Waters regarding the setting and collection of charges for all water services, including stormwater charges.

16. With respect to a consideration of a "pass-through model", the options presented in this paper largely reflects the intent of the pass-through model, although the legal mechanics are slightly different from those originally contemplated. One option in this paper discusses Tāheke – Bay Waters setting a stormwater charge under the LG (WS) Act. The other option (recommended by staff) is that for a transition period of 2 years, TCC will retain responsibility for setting and collecting stormwater rates under the Rating Act, based on the revenue requirements determined by Tāheke – Bay Waters, and TCC will transfer the resulting revenue to Tāheke – Bay Waters. This option also allows TCC to continue using property rateable value as the basis for its stormwater rate during the transition.

17. Finally, regarding "affordability and equity impacts, and mechanisms to avoid double-charging", these points will be addressed in the "advantages and disadvantages" section of this paper. The option recommended by staff maintains existing wastewater and stormwater charging methodologies during a 2-year transition, reducing the risk of unintended affordability or equity impacts from introducing new charging methodologies at the same time services transfer to Tāheke - Bay Waters. The arrangements will also be structured to avoid double charging: where TCC sets or collects amounts relating to water services on behalf of Tāheke - Bay Waters, those amounts will fund Tāheke - Bay Waters' revenue requirement rather than being additional charges retained by TCC.

OPTIONS ANALYSIS

18. The intention is that from 1 July 2029, Tāheke – Bay Waters will have its own single billing platform and will undertake the setting and collection of charges itself. However, for reasons that will be explained further below, it is not viable for Tāheke – Bay Waters to collect charges on its own behalf from 1 July 2027.

19. For a transitional period of 2 years, Tāheke – Bay Waters will need to rely on TCC for the collection of water charges in TCC's area. There is simply no viable second option in this regard – and neither of the options below present an alternative to TCC collection water charges.

20. However, during the 2-year transitional period there are two viable options for the setting of charges:

    (a) **Option 1:** Tāheke – Bay Waters sets charges for drinking water under the **LG(WS) Act**, while TCC sets charges for wastewater and stormwater **under the Rating Act**. TCC would collect all charges. This is the approach recommended by staff.

    (b) **Option 2:** Tāheke – Bay Waters sets charges for drinking water, wastewater and stormwater **under the LG(WS) Act**. TCC would collect all charges. This is the approach likely to be adopted by WBOPDC.

    (To reiterate, these options are only proposed for a 2-year transitional period)

21. **Option 1:** ***Recommended***

- **Tāheke – Bay Waters sets charges for drinking water under the LG(WS) Act**
- **TCC sets charges for wastewater and stormwater under the Rating Act.**
- **TCC would collect all charges.**

Advantages	Disadvantages
• Minimises implementation cost and risk by avoiding significant changes to TCC's highly integrated SAP rating, banking and collections systems during the transitional period. • Avoids approximately $300,000 (+/-30%) of estimated SAP development costs, plus potential remedial or development costs. • Provides a lower-disruption transition. • Using the Rating Act for both stormwater and wastewater avoids making additional changes to TCC's billing systems to accommodate a different statutory charging approach for wastewater, only for those arrangements to change again when responsibility for setting charges ultimately transfers to Tāheke – Bay Waters. • Maintains the existing wastewater and stormwater charging methodologies during the two-year transition, reducing the risk of unintended affordability or equity impacts from introducing new charging bases at the same time as services transfer to Tāheke - Bay Waters. • LGFA has confirmed that it is comfortable in principle with this approach. This includes LGFA taking security over Tāheke – Bay Waters drinking water charges while TCC continues to set wastewater and stormwater charges under the Rating Act. • Advice from the Audit Office also indicates that the proposed arrangement should be manageable from an accounting and long-term planning perspective. TCC's collection and transfer of the relevant amounts to Tāheke – Bay Waters would be treated as an agency arrangement, with the LTP reflecting that arrangement until Tāheke – Bay Waters takes over direct collection.	• Creates a mixed charging framework, with drinking water charges set by Tāheke – Bay Waters under the LG(WS) Act, while wastewater and stormwater charges continue to be set by TCC under the Rating Act. • Differs from the approach currently being taken elsewhere in New Zealand, where water organisations are generally moving to set their own charges. • Delays Tāheke – Bay Waters assuming full responsibility for its charging arrangements, meaning further changes will be required when Tāheke – Bay Waters takes over responsibility for all three waters. • Requires continued reliance on TCC during the transition, including TCC setting wastewater and stormwater rates and collecting and transferring the associated revenue to Tāheke.

22. **Option 2: Tāheke – Bay Waters sets all water-services charges. TCC would collect all charges**

Advantages	Disadvantages
• Provides a consistent charging framework, with Tāheke – Bay Waters setting drinking water, wastewater and stormwater charges under the LG(WS) Act. • Aligns responsibility for setting charges with responsibility for delivering the services, providing clearer accountability for revenue and charging decisions. • Moves earlier towards the intended long-term charging model, rather than maintaining an interim Rating Act arrangement for wastewater and stormwater. • Is more consistent with the approach being taken elsewhere in New Zealand, with the water organisation responsible for setting its water-services charges. • Provides Tāheke - Bay Waters with greater flexibility to develop consistent charging methodologies across all three waters that take account of affordability and equity considerations. The billing and collection arrangements can also ensure that charges collected by TCC on Tāheke - Bay Waters' behalf are applied to Tāheke - Bay Waters' revenue requirements, rather than being additional to TCC charges, thereby avoiding double-charging.	• Requires significant SAP changes for a transitional arrangement, with estimated implementation costs of approximately $300,000 (+/-30%), and potentially further changes when Tāheke – Bay Waters subsequently assumes direct responsibility for collection. This is considerable for what is expected to be a relatively short transitional period (i.e. before Tāheke – Bay Waters establishes its own system entirely). • Would trigger the Act's transitional five year progressive reduction requirements for the use of rateable value in setting charges. • A significant concern for TCC is the risk associated with modifying its highly automated rating system, which is still undergoing optimisation following the SAP implementation.[6] Given the level of integration within SAP, changes to accommodate a relatively short-term transitional arrangement could create risks not only for water services billing, but for TCC's rating and revenue collection more generally, as well as potential customer and reputational impacts if issues arise. • The changes would also require specialist TCC and SAP resources that are currently supporting and optimising the existing system. Additional work to implement and support Tāheke – Bay Waters charging would divert those resources from the existing work programme and may require TCC to reprioritise other work. • Any decision by Tāheke – Bay Waters to change the basis of charging from rates may increase TCC's exposure to costs or losses, particularly if the change disrupts TCC's existing rating and collections functionality and requires additional development or remedial work. TCC could, in theory, seek an indemnity from Tāheke – Bay Waters for any costs or losses arising from such a change. However, Tāheke – Bay Waters may, understandably, be reluctant to provide such an indemnity, and the allocation of this risk would need to be agreed between the parties.

[6] SAP's rates, banking and collections functions are highly integrated. Changes to accommodate Tāheke – Bay Waters charges therefore have the potential to affect TCC's wider rating, revenue and collection processes if issues arise.

FURTHER EXPLANATION OF RECOMMENDED APPROACH

23. The recommended approach is primarily driven by two considerations.

    - First, retaining stormwater as a rate allows TCC to continue using property rateable value as the basis for the charge, without immediately triggering the requirement under the LG(WS) Act to progressively move away from rateable value.
    - Secondly, TCC's finance and revenue team has raised concerns about the cost, complexity and risk of making changes to the SAP system to accommodate Tāheke – Bay Waters charges during what is intended to be a transitional period.

    These considerations are interrelated and together support retaining the current arrangements during the transition.

24. For clarity, the Incoming Board has accepted and endorsed the above approach.

Documenting the agreed approach

25. The Shareholders' Agreement establishes the overarching framework for how the parties will agree the approach to setting and collecting water service charges. It provides that the shareholders (TCC and WBOPDC) may give operational direction on these matters. In particular, the Statement of Expectations may include requirements or expectations regarding the setting and collection of charges for each water service, consistent with section 228(4) of the LG(WS) Act. The detailed approach for each water service will then be recorded in the relevant Transfer Agreement.

26. The Shareholders' Agreement also records the long-term intention for Tāheke – Bay Waters to assume responsibility for setting and collecting all water service charges, likely from 1 July 2029, while recognising that the shareholders may retain some responsibilities during the initial years of operation.

27. The agreed approach will therefore be documented and implemented through the following:

    (a) **Statement of Expectations:** will set the shareholders' requirements and expectations for the approach to setting and collecting charges for each water service, providing operational direction to Tāheke – Bay Waters in accordance with section 228(4) of LG(WS) Act;

    (b) **Transfer Agreement:** will formalise the respective responsibilities of TCC, WBOPDC and Tāheke – Bay Waters, including who is responsible for setting charges and collecting revenue; and,

    (c) **Billing and Collections Agreement:** will set out the detailed operational arrangements where TCC provides billing and collection services on behalf of Tāheke – Bay Waters, including the billing, collection and transfer of revenue between the parties.

DIGITAL CONSIDERATIONS

Current arrangement

28. The current systems and methodology used by TCC to collect water service charges are detailed below. Current charges are all raised under the Rating Act.

Service	Methodology	System	Comments
TCC Drinking Water	Quarterly on volumetric meter reads.	Ozone	Ozone is end of life and TCC is actively exiting. Billing must transition to an alternative platform by 1st July 2029.
TCC Wastewater	Fixed charge per property.	SAP	SAP was commissioned for rates on 1st July 2025.

Service	Methodology	System	Comments
TCC Stormwater	Based on property rateable value	SAP	As above.

What will not change

29. For day 1 charging (and during a transitional period of 2 years), no changes to the existing digital charging methodologies or systems are proposed. This minimises change for customers and applies irrespective of the decisions made on responsibility for setting and collecting charges.

What will need to change

30. Branding of bills:

    (a) Drinking water volumetric bills for both TCC and WBOPDC are expected to be branded Tāheke – Bay Waters, irrespective of who is responsible for setting and collecting the charges. The changes required are relatively minor (estimated at less than $50,000) and are limited to changes to the branding of bills.

    (b) The approach to branding wastewater and stormwater bills will depend on the decisions made about responsibility for setting and collecting those charges.

31. Digital platform - changes to digital billing platforms will be required irrespective of the approach adopted. The extent and cost of the changes required to TCC's SAP system differ materially depending on whether the charges are set under the LG (WS) Act or the Rating Act:

    (a) if Tāheke – Bay Waters sets wastewater and stormwater charges under the LG (WS) Act, approximately $300,000 (+/- 30%) of technical work is estimated to be required to modify SAP; and

    (b) if TCC sets wastewater and stormwater charges under the Rating Act, approximately $100,000 (+/- 30%) of technical work is estimated to be required.

32. A new Tāheke – Bay Waters billing system is expected to be commissioned by 1 July 2029. However, it is simply not viable from a digital perspective to establish that platform prior to 1 July 2027. Therefore, the recommended approach is that Tāheke – Bay Waters will rely on TCC's billing platform for a transitional arrangement, running for two years from 1 July 2027.

FINANCE CONSIDERATIONS

33. The recommended approach is not expected, of itself, to have a material financial impact on TCC. TCC would collect the relevant drinking water charges, and wastewater and stormwater rates and transfer the resulting revenue to Tāheke – Bay Waters, with the arrangement treated as an agency arrangement for accounting purposes.

34. The recommended approach would also reduce the cost of transitional changes to TCC's SAP system (refer paragraph 32 (a) above).

35. Under the recommended approach, TCC would bill and collect the relevant charges and allocate or transfer the resulting revenue to Tāheke – Bay Waters. TCC would also follow up unpaid amounts. It is expected that Tāheke – Bay Waters would ultimately bear the cost of any amounts that remain uncollectable. Accordingly, the proposed approaches are not expected, of themselves, to have a material financial impact on TCC.

36. The recommended approach also accounts for the cost and delivery risks associated with the changes required to the SAP system for Tāheke – Bay Waters to set charges for wastewater and stormwater under the LG (WS) Act. These changes can be avoided if

wastewater and stormwater charges continue to be set by TCC under the Rating Act during the transition.[7]

37. One issue with this transitional approach is whether TCC continuing to set wastewater and stormwater charges under the Rating Act, rather than Tāheke – Bay Waters setting those charges under the LG (WS) Act, could affect the security available to LGFA for lending to Tāheke – Bay Waters. Staff have therefore engaged directly with LGFA to confirm whether the proposed arrangement would be acceptable from a lending and security perspective. LGFA has confirmed that it is comfortable in principle with taking security over Tāheke – Bay Waters' drinking water charges while TCC continues to set charges for wastewater and stormwater based on the Rating Act, with the arrangement to be addressed through Tāheke – Bay Waters' LGFA accession documentation. LGFA's current position is that Tāheke – Bay Waters should have a functioning billing system for all three waters by 1 July 2029. TCC has asked LGFA to consider limiting this requirement to drinking water and wastewater, given that the longer-term approach to stormwater charging remains under consideration. There are therefore two possible transition pathways:

    (a) if LGFA maintains its current position that Tāheke – Bay Waters must have billing capability for all three waters by 1 July 2029, the TCC stormwater arrangement will need to transition or otherwise be revisited by that date; or

    (b) if LGFA agrees that the requirement can be limited to drinking water and wastewater, there may be greater flexibility around the timing of any transition of TCC stormwater charging.

38. Written confirmation of LGFA's final position will therefore be important before the longer-term billing and transition arrangements are settled.

Funding needs analysis

39. As a result of TCC continuing to set rates for wastewater and stormwater during the transition, the basis for those rates need to continue to be supported by an appropriate funding needs analysis. The existing analyses remain broadly applicable but need to be updated to reflect the transitional arrangements. As wastewater and stormwater will no longer be separate activities, the relevant funding needs analysis will instead be incorporated into the "Other" activity in TCC's Revenue and Financing Policy. This may need to be adjusted over the first three years as the transition to Tāheke – Bay Waters progresses.

STRATEGIC ALIGNMENT

40. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	☐
We are a city that supports business and education	☐
We are a vibrant city that embraces events	☐

41. The recommended approach supports the transition of drinking water, wastewater and stormwater services to Tāheke – Bay Waters, while maintaining continuity of charging arrangements for customers. The establishment of a financially sustainable water organisation supports the continued delivery of essential water services and the effective management of water infrastructure and the natural environment.

[7] This would, however, require TCC to set those rates, based on the funding requirements determined by Tāheke, and incorporate them into its LTP and associated consultation processes.

RISKS AND LEGAL IMPLICATIONS

42. The LG(WS) Act expressly provides for the responsibility for setting and collecting water-services charges to be allocated between Tāheke – Bay Waters and TCC through the transfer agreement. The recommended approach would result in Tāheke – Bay Waters setting drinking water charges under the LG(WS) Act, while TCC continues to set wastewater and stormwater rates under the Rating Act during the transition.

43. The mechanics of passing through revenue from TCC to Tāheke - Bay Waters shall be set out in the Billing and Collection Agreement, including matters relating to existing direct debits with customers.

44. The principal implementation risk associated with the alternative approach is the need to modify TCC's highly integrated SAP rating, banking and collections systems. These changes could affect TCC's wider rating and revenue functions and would require specialist resources currently supporting and optimising the system.

45. LGFA has confirmed that it is comfortable in principle with TCC continuing to set wastewater and stormwater rates while LGFA takes security over Tāheke – Bay Waters' drinking water charges. However, LGFA's final position on Tāheke – Bay Waters' longer-term billing capability, particularly for stormwater, remains to be confirmed. The arrangements will therefore need to be reviewed as Tāheke develops its own billing capability.

TE AO MĀORI APPROACH

46. The decision in this report is limited to the transitional administrative and financial arrangements for setting and collecting water-services charges. It does not change water-service levels, environmental outcomes or the substantive relationship between TCC, Tāheke – Bay Waters and Tangata Whenua. Accordingly, no specific impacts on the principles of TCC's Te Ao Māori approach have been identified from the recommended charging arrangement.

CLIMATE IMPACT

47. The recommended approach concerns the administrative and financial arrangements for setting and collecting water-services charges during the transition to Tāheke – Bay Waters. It does not determine water-service levels, infrastructure investment or environmental outcomes. Accordingly, no material direct impact on climate adaptation, emissions, nature or biodiversity has been identified.

CONSULTATION / ENGAGEMENT

48. No specific community consultation has been undertaken on the transitional charging arrangements. If TCC continues to set wastewater and stormwater rates, the relevant rates and revenue requirements will be incorporated into TCC's LTP and associated processes as required.

SIGNIFICANCE

49. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

50. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the matter.

(c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

51. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the matter is of medium significance.

ENGAGEMENT

52. Taking into consideration the above assessment, that the matter is of medium significance, officers are of the opinion that no further engagement is required prior to Council making a decision.

NEXT STEPS

53. Subject to Council approval, the recommended charging arrangements will be reflected in the Statement of Expectations, the Transfer Agreement between TCC and Tāheke – Bay Waters, and the accompanying Billing and Collection Agreement between TCC and Tāheke – Bay Waters.

ATTACHMENTS

Nil

11.13 Proposed Private Plan Change 40 - Mount Maunganui Golf Club Incorporated Rezoning - Adoption of Recommendations and Notification of Decision

File Number: **A20991598**

Author: **Brent Musk, Intermediate Planner (Policy)**

Authoriser: **Christine Jones, General Manager: Strategy, Partnerships & Growth**

PURPOSE OF THE REPORT

1. The purpose of this report is to seek adoption of the recommendations and reasons of the Independent Hearing Commissioner (IHC) on Proposed Private Plan Change 40 – Mount Maunganui Golf Club Incorporated Rezoning (PPC40).
2. This report is the next stage in the plan change process to enable the Council to make a decision on the recommendations of the IHC.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Proposed Private Plan Change 40 - Mount Maunganui Golf Club Incorporated Rezoning - Adoption of Recommendations and Notification of Decision".

(b) Pursuant to clause 29(4) of Schedule 1 of the Resource Management Act 1991, accepts and adopts as its decision the recommendations and reasons of the Independent Hearing Commissioner on Proposed Private Plan Change 40 included as Attachment 1 – Commissioner Recommendation Report, and Attachment 2 – Summary of Decisions Requested and Recommendation on the Submissions.

(c) Delegates authority to the General Manager: Strategy, Partnerships and Growth to notify the decision in accordance with clause 10 of Schedule 1 of the Resource Management Act.

EXECUTIVE SUMMARY

3. PPC40 seeks to rezone approximately 4,378m^2 of land near the western corner of the Mount Maunganui golf course from Passive Open Space Zone to Medium Density Residential Zone.
4. The PPC40 request was accepted by Tauranga City Council (Council) in May 2026. Public notification of PPC40 and the submission period occurred from July to August, with a further submission period occurring August to September.
5. A hearing on PPC40 was held on 4 November 2026 and was conducted by an Independent Hearings Commissioner (IHC). The IHC has made recommendations to the Council to approve the plan change. Pursuant to clause 29(4) of Schedule 1 of the Resource Management Act 1991, the Council is required to make a decision on those recommendations.
6. The request is for a private plan change, and therefore all costs associated with the request can be recovered from the applicant (including notification and hearing).

BACKGROUND

7. Mount Maunganui Golf Club Incorporated requested a change to the Tauranga City Plan (City Plan) in accordance with clause 25(2)(b) of Schedule 1 of the Resource Management Act 1991 (RMA). This private plan change request was accepted by Council on 12 May 2026.

8. This request sought to rezone approximately 4,378m^2 of land near the western corner of Mount Maunganui Golf Course from Passive Open Space Zone to Medium Density Residential Zone. Approximately 2,780m^2 is proposed to be utilised for the purposes of medium density residential housing. The remaining land is proposed to be utilised for carparking, access and manoeuvring. This equates to a potential practical yield of up to 15 dwellings. A maximum potential yield of 36 dwellings was also tested as part of the plan change process.

9. The request seeks to adopt the Medium Density Residential Zone provisions in the City Plan without amendments to the provisions. The only amendments proposed to the City Plan are the planning maps to rezone the land to Medium Density Residential Zone and to remove the scheduled site overlay from the site (retaining the scheduled site overlay over the remainder of the golf course). The scheduled site provides for a multi-level development incorporating a golf clubhouse, proshop, residential accommodation, and accessory buildings in a specific area[8] of the golf course.

10. PPC40 was publicly notified on 3 July 2026. The summary of decisions requested by submitters was notified on 31 August 2026, with the period for further submissions closing on11 September 2026.

11. A total of 26 submissions and two further submissions were received on PPC40. Several submitters requested to be heard, and therefore Council was required to hold a hearing.

12. A report pursuant to section 42A of the RMA (s42A report) was prepared by staff and released on 2 October 2026. The s42A report considers the matters raised by submitters and provides recommendations in response to those submissions. Its purpose is to assist the IHC in making recommendations to Council in relation to the submissions and further submissions received on the proposed plan change.

13. The hearing for PPC40 was held on 4 November 2026. The hearing considered matters raised through submissions, hearing evidence and legal submissions. The IHC was satisfied that sufficient information was available to enable recommendations to be made on PPC40.

14. The IHC issued his recommendations on PPC40. Attachment 1 includes the full IHC recommendation report for this proposed plan change. In summary, the IHC recommends that Council approve PPC40, with no amendments to the proposed Medium Density Residential Zone provisions and no amendments to the requested rezoning extent. The Commissioner concluded that the site is suitable for residential development, that infrastructure, transport, stormwater and natural hazard matters can be appropriately managed through the existing planning framework, and that the matters raised by submitters do not warrant amendments to the proposed plan change.

15. The IHC was not delegated the power to make a final decision on the proposed plan change, hence the IHC's recommendations are required to go to Council to make a decision.

16. Several matters raised through submissions were considered in detail through the hearing process, including infrastructure capacity, loss of open space, flooding, and boundary interface effects. The IHC agreed with Council staff's response to the issues raised in submissions concluding that that there is sufficient capacity within the infrastructure network to service the site, that the loss of open space is minor, and that matters such as flooding and site layout can be appropriately managed through the existing City Plan framework. The IHC concluded that site-specific provisions are not necessary.

STATUTORY CONTEXT

17. Tauranga City is a Tier 1 urban environment under the National Policy Statement on Urban Development (NPS-UD). Council, as a Tier 1 local authority, must satisfy the requirements of the NPS-UD with respect to providing sufficient development capacity within the city to meet the expected demand for housing in existing and new urban areas in the short term, medium

[8] Lot 1 DPS 62591

term, and long term. Current growth planning evidence indicates that Council does not presently provide sufficient feasible development capacity to meet projected residential demand in the short, medium or long term. PPC40 contributes to provided housing supply within an existing urban area.

18. PPC40 seeks to rezone land located on Fairway Avenue within the jurisdictional boundary of Council. Under section 34A of the RMA, Council appointed an IHC to exercise and perform the functions, powers or duties required to hold a hearing under the RMA and make recommendations to the Council. The terms of this appointment did not include the approval of the proposed plan change under clause 29(4) of Schedule 1 of the RMA. The IHC's recommendations have now been provided, and the Council can proceed to make a decision under clause 29(4) of Schedule 1 of the RMA.

19. The Council's decision is required to be made in accordance with the processes and statutory considerations under the RMA, as set out in the IHC report. However, the Council's usual decision-making requirements have been addressed below for completeness.

STRATEGIC ALIGNMENT

20. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	☐
We value, protect and enhance the environment	☐
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	☐
We are a vibrant city that embraces events	☐

21. PPC40 contributes to the outcome by enabling additional residential development within an existing urban area that is well connected to employment, community facilities, public transport and active transport networks. The IHC concluded that the proposal provides additional housing capacity in a location supported by existing infrastructure and is consistent with achieving a compact urban form.

OPTIONS ANALYSIS

22. Council has two options:

    a) Accept the IHC's recommendations.

    b) Not accept the IHC's recommendations. Any departure from the IHC's recommendations would require further legal and planning advice, given the IHC heard and assessed the evidence and submissions presented through the hearing process.

23. Option a) is recommended as the IHC has carefully weighed up the evidence including matters raised through submissions in coming to the recommendations before Council.

FINANCIAL CONSIDERATIONS

24. There are limited financial considerations associated with this report. PPC40 is a private plan change and all costs incurred from the processing of this are recoverable from the applicant of this plan change. This was a matter considered by Council in May 2026, where it was resolved that full cost recovery in adherence with Council policy was to occur.

RISKS AND LEGAL IMPLICATIONS

25. PPC40 has been prepared and notified to meet the legislative requirements of Schedule 1 of the RMA. In accordance with clause 29(4) and 10 of Schedule 1 of the RMA, Council is required to make and then notify a decision on this proposed plan change.

TE AO MĀORI APPROACH

26. Consultation with relevant hapu and iwi was undertaken by the plan change proponent as part of the preparation of the plan change, as required by the RMA. Consultation was also undertaken by the Council prior to notification and prior to appointment of the IHC.

27. No issues were identified through the hearing process that would warrant amendments to PPC40 from a mana whenua perspective.

CLIMATE IMPACT

28. Climate impacts and the effects of climate change are important considerations under the RMA, reinforced through national direction including the National Policy Statement on Urban Development and the recently released National Policy Statement on Natural Hazards.

29. The effects of climate change have been considered in terms of stormwater disposal for the request and the future platform level of dwellings. All relevant natural hazards have been considered in the request which takes into account climate change.

30. The request supports a compact urban form, is well serviced by both public and active modes of transport and utilises an existing land resource supporting the reduction of carbon emissions.

31. The hearing considered concerns relating to flood storage displacement and overland flow paths. The IHC accepted the technical evidence that these matters can be appropriately managed through detailed design and existing controls at the resource consent stage.

32. PPC40 enables additional housing capacity within an existing urban area already serviced by transport and three-waters infrastructure. The proposal supports a compact urban form and efficient use of urban land resources.

CONSULTATION / ENGAGEMENT

33. Schedule 1 of the RMA requires plan changes to be publicly notified for submissions and further submissions. This is in addition to the engagement process by the applicant as part of the development of PPC40.

34. The applicant undertook consultation with relevant hapu and iwi prior to the proposed plan change being submitted to Council. All parties then had the opportunity to participate in the submission and hearing process in accordance with the RMA.

SIGNIFICANCE

35. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

36. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural well-being of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the decision.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

37. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the decision is of medium significance.

ENGAGEMENT

38. Given the assessment above that the decision is of medium significance, and recognising that public engagement has already occurred through the submission and hearing process, officers are of the opinion that no further engagement is required prior to Council making its decision.

NEXT STEPS

39. Council's decision on the proposed plan change is publicly notified.

40. There is a 30-working day period where a submitter can appeal Council's decision to the Environment Court.

41. If no appeals are received, then the plan change is beyond challenge, and it is made operative and incorporated into the City Plan. In that instance, a report will come to Council in early 2027, seeking approval of the plan change to make operative.

42. If the plan change becomes operative, any future development of the site will still be subject to the relevant resource consent and subdivision approval processes. These processes will consider matters such as site design, access arrangements, servicing, stormwater management, infrastructure requirements and compliance with the Tauranga City Plan and Infrastructure Development Code. Consistent with matters raised through submissions and the hearing process, opportunities to consider issues relating to pedestrian access and local connectivity can also be explored through any future development and consenting processes, should a development proposal proceed.

ATTACHMENTS

1. **Commissioner Recommendation Report - A21454370** ⇩
2. **Summary of Decisions Requested and Recommendation on the Submissions - A21418240** ⇩

TAURANGA CITY COUNCIL

OPERATIVE CITY PLAN

Private Plan Change 40

Mount Maunganui Golf Club Rezoning

Hearing Commissioner's Recommendation Report

18 November 2026

Abbreviations

The table provides abbreviations for terms used throughout this Recommendation Report.

Abbreviations	Meaning
ADT	Average Daily Traffic
City Plan	Operative Tauranga City Plan
Council	Tauranga City Council
IDC	Infrastructure Development Code
IHC	Independent Hearings Commissioner
ITA	Integrated Transport Assessment
MDRZ	Medium Density Residential Zone
MMGC	Mount Maunganui Golf Course
MMGCI	Mount Maunganui Golf Club Incorporated
MMIS	Mount Maunganui Intermediate School
POSZ	Passive Open Space Zone
PPC40	Proposed Private Plan Change 40
RMA	Resource Management Act 1991
Section 32 report	Section 32 evaluation report: Proposed Private Plan Change 40
Section 32AA	Section 32AA of the Resource Management Act 1991
Section 42A	Section 42A of the Resource Management Act 1991
The site	The portion of land proposed to be rezoned at 11 Fairway Avenue
veh/d	Vehicles per day

Contents

1 Executive Summary and Overall Recommendation on Private Plan Change 40. 6
2 Overview, Purpose and Format of this Report. 7
2.1 Overview 7
2.2 Delegation 7
3 Background 8
3.1 Site Description 8
3.2 Proposed Private Plan Change 9
4 Hearing and Process matters 10
4.1 Hearing 10
4.2 Excusing Expert Witness 10
5 Summary of the Applicant's Legal Submissions and Expert Evidence 11
5.1 Legal Submissions 11
6 Summary of the Submitters' Evidence Presented at the Hearing 15
7 Summary of the Section 42A Author's Opinion Having Heard the Evidence and Addressed the Submissions 17
8 Submissions and Evidence – Overview 19
8.1 Submissions Received 19
8.2 Further Submissions Received 19
8.3 Evaluation and Recommendation of the Submissions 19
9 Evaluation of Submissions 20
9.1 General 20
9.1.1 Introduction 20
9.1.2 Submissions received and relief sought 20
9.1.3 Evaluation 21
9.1.4 Recommendation 24
9.2 Natural Hazards and Stormwater 25
9.2.1 Introduction 25
9.2.2 Submissions received and relief sought 25
9.2.3 Evaluation 25
9.2.4 Recommendation 26
9.3 Traffic and Transport 27
9.3.1 Introduction 27
9.3.2 Submissions received and relief sought 27
9.3.3 Evaluation 27
9.3.4 Recommendation 28
9.4 Open Space, Green Space and Landscaping 29

9.4.1 Introduction....29
9.4.2 Submissions received and relief sought....29
9.4.3 Evaluation....29
9.4.4 Recommendation....31
9.5 Reverse Sensitivity and Construction Effects....32
9.5.1 Introduction....32
9.5.2 Submissions received and relief sought....32
9.5.3 Evaluation....32
9.5.4 Recommendation....34
10 Conclusion and Recommendations....35

Appendices

Appendix 1 Summary of Decisions Requested and Recommendation on the Submissions.

Appendix 2 City Plan Proposed Map L17

1 Executive Summary and Overall Recommendation on Private Plan Change 40.

Mount Maunganui Golf Club Incorporated (MMGCI) seeks to rezone approximately 4,378m^2 of land at 11 Fairway Avenue from the Passive Open Space Zone (POSZ) to the Medium Density Residential Zone (MDRZ). In doing so, it seeks to enable the delivery of residential housing, with maximum potential yield of 36 dwellings.

Twenty-six submissions and two further submissions were received to PPC40; in support and opposition. The significant matters raised in the submissions relate to:

- General matters, including opposition and support for PPC40, requests for further information, process and consultation matters, and access/connectivity considerations;
- Natural hazards and stormwater;
- Traffic and transport;
- Open space and green space; and
- Reverse Sensitivity.

The hearing of Plan Private Plan Change 40 (PPC40) was held on 4 November 2026.

Overall, it is the recommendation of the Independent Hearing Commissioner that:

- Pursuant to clause 10 of Schedule 1 to the RMA, that PPC40 be **approved** by the Council with no amendments to the requested MDRZ; and
- The submissions be either accepted, accepted-in-part or rejected as set out in this report and **Appendix 1.**

2 Overview, Purpose and Format of this Report.

2.1 Overview

PPC40 was requested by Mount Maunganui Golf Club Incorporated (MMCGCI or the requestor) and seeks to rezone approximately 4,378m^2 of land near the western corner of the golf club from Passive Open Space Zone (POSZ) to Medium Density Residential Zone (MDRZ) without amendments to the provisions of the MDRZ.

The only amendments proposed to the City Plan are the planning maps to rezone the land to MDRZ and to remove the scheduled site overlay from the site (retaining the scheduled site overlay over the remainder of the MMGC) as set out in **Appendix 2.**

2.2 Delegation

Pursuant to sections 34 and 34A of the RMA, the Tauranga City Council (Council) appointed a Hearing Panel consisting of independent commissioner Mr Greg Hill. The Hearing Panel's function was to hear and make recommendation to the Council on the submissions made to PPC40 and whether the Council should approve PPC40.

2.3 Report Format and Recommendations on Private Plan Change 40

This report sets out Mr Hill's recommendation in relation to PPC40 and the submissions made to it.

This report:

a. Summarises the key matters raised in submissions (primary and further submissions) and the legal submissions and evidence;

b. Evaluates those matters against the relevant statutory and policy framework; and

c. Provides a recommendation as to whether submissions should be accepted, accepted-in-part, or rejected.

The format of this Recommendation Report adopts the format, and much of the content, of the section 42A report. This is for efficiency reasons. There was little or no issues in contention between the Applicant's and the Council's experts (engineering, traffic and planning)[1]; and the Intermediate School (Submitter) which had concerns about the impact of PPC40, had largely resolved its concerns with the Applicant before the hearing. The only other submitter (Bay of Plenty Golf) to attend the hearing was in support of PPC40. On this basis much of the content of the section 42A report can be effectively 'adopted' for the purpose of this report.

In addition to the recommendations made on the submissions, the overall recommendation is that the Council approve PPC40 without amendment, as proposed by the Applicant.

[1] Noting that there was no expert evidence from the submitters.

3 Background

The private plan change application was made in February 2026. The Council resolved to accept PPC40 for processing in accordance with clause 25(2)(b) of part 2 of Schedule 1 of the RMA on 12 May 2026[2].

The full details of PPC40 are set out in the plan change request and supporting documentation prepared by MMCGCI and available on the TCC website[3].

3.1 Site Description

PPC40 relates to land located at 11 Fairway Avenue and is a portion of land (approximately 4,378m^2) located near the western corner of the Mount Maunganui golf course (MMGC), adjoining Mount Maunganui Intermediate School (MMIS) and the existing residential zone on Fairway Avenue as shown in Figure 1.



Figure 1 - Location of the site

The MMGC is zoned POSZ in the City Plan. There is a scheduled site which covers the entirety of the MMGC. The scheduled site specifically relates to enabling a multi-level building in an area of the existing MMGC club house and does not apply to the site.

There is a cultural viewshaft over the site, which are views of Mauao from marae to be protected from obstruction by buildings and structures. In relation to the site, any building or structure which intrudes 40metres RL requires a resource consent as a discretionary activity.

Major and minor overland flowpaths and flood prone areas are identified on the site which are flood hazards from intense rainfall. The City Plan has provisions to manage activities affected by flooding.

The site is currently free of buildings with an existing access track from Fairway Avenue runs through part of the site, which is proposed to be relocated.

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2 https://infocouncil.tauranga.govt.nz/Open/2026/05/CO_20260512_AGN_2900_AT.PDF
3 https://letstalk.tauranga.govt.nz/projects/private-plan-change-40-mount-maunganui-golf-club-incorporated

3.2 Proposed Private Plan Change

The request seeks to have approximately 4,378m^2 of land near the western corner of the golf club rezoned from POSZ to MDRZ. Approximately 2,780m^2 of land is proposed to be utilised for the purposes of medium density residential housing. The remaining land will be utilised for carparking, access and manoeuvring. This equates to a potential practical yield of up to 15 dwellings, and a maximum potential yield of 36 dwellings. MMGCI also considered options for eight standalone dwellings.[4]

The request seeks to adopt the MDRZ provisions in the City Plan without amendments to the provisions. The only amendments proposed to the City Plan are the planning maps to rezone the land to MDRZ and to remove the scheduled site overlay from the site (retaining the scheduled site overlay over the remainder of the MMGC). This is shown in **Appendix 2.**

[4] Noting this request is solely seeking to rezone the land, and not to undertake a specific residential development, for which resource consent will likely be required.

4 Hearing and Process Matters

4.1 Hearing

The hearing was held on the 4th November 2026, in the Council Chamber. Those who attended and presented at the hearing is set out in the table below:

The Council	Ms Speedy – Team Leader city Planning; and Mr Musk – Policy Planner and the author of the section 42A report.
The Applicant	Ms Barry – Piceno, Legal Counsel; Mr Williams – General Manager of the Golf Club; and Mr Collier – Planner.
The Submitters	Mount Maunganui Intermediate School – represented by Mr Dove, a Board member. Bay of Plenty Golf – represented by Mr Webb, Regional Manager. *[5]

4.2 Excusing Expert Witness

Hearing Direction (2) - Excusing expert witnesses from attending the hearing, excused two of the Applicant's experts -

- Mr Moodie – Civil Engineering; and
- Ms Ryan, transportation/traffic;

Also excused were the Council's 'equivalent experts' who were part of the section 42A reporting team.

Having read the application material, the section 42A report (including the technical reviews and advice from the Council's experts), the submissions, and the expert evidence of the Applicant, those expert witnesses were excused[6] on the basis that there were no, or inconsequential, issues in contention between the relevant experts and I had no questions for those witnesses.

[5] Mr Cooney, a supporting submitter was scheduled to attend the hearing, but due to timing did not attend.

[6] Pursuant to section 41C of the RMA.

5 Summary of the Applicant's Legal Submissions and Expert Evidence

The following is summary of the legal submissions and evidence presented at the hearing. It is to be read along the section 9 below where the submissions have been evaluated and recommendations made. The legal submissions and evidence have assisted in the evaluation of the submissions and the overall recommendation to approve PPC40.

5.1 Legal Submissions

Ms Barry-Piceno provided legal submissions. In summary she set out:

- The purpose of PPC40 was to rezone approximately 4,378 m² from POSZ to MDRZ without amendment to the MDRZ provisions, with the balance of the golf course land remaining POSZ; and not part of the rezoning request.
- PPC40 is a limited extension of residential zoning within a well-established urbanised neighbourhood and would enable additional residential housing on land identified as surplus to The Club's golfing requirements; while providing the Club the ability to fund major upgrade and maintenance works required to the golf course.
- The rezoning was supported by evidence of the suitability of the site for residential development; its relationship to the adjoining residential zone; access to infrastructure and community facilities; and the ability to manage the effects of development.
- Evidence in support of the PPC40 was provided by Mr Williams on the Club's operations, masterplan and engagement; Mr Collier on planning; Mr Moodie on engineering and flood management; and Ms Ryan on transport.

Ms Barry-Piceno also addressed:

- The statutory requirements - namely section 32 of the RMA, and setting out why in her submission the MDRZ was the most appropriate zoning for the site, particularly in light of the NPS-UD, and its housing policies;
- The effects or implications of the request in terms of:
    - Open space and community benefits;
    - Stormwater flood risk and servicing;
    - Traffic access and parking;
    - The school interface amenity and golf ball safety; and
    - The requested public walkway connection.

She also addressed the specific submissions seeking restrictive covenants (mainly related to limiting or preventing complaints about the school's activity). She submitted that these were unnecessary and unprecedented in this situation; and that no section 32 evaluation analysis been provided on the efficiency of this approach. She also set out that it was contrary to the Applicant's section 32 evaluation and Mr Collier's expert planning evidence (I address this in more detail later).

5.2 Evidence

Mr Williams, the General Manager of the Mount Maunganui Golf Club, set out in summary that:

- The golf club has operated in Mount Maunganui since 1935 and on its current site since the 1940s, that it owns its land freehold and has about 1,400 members plus thousands of visitors annually.
- That the change is needed as the course requires significant capital investment to replace aging infrastructure including irrigation systems, greens, tees, fairways, bunkers, and trees; and that doing nothing was not a realistic option because major maintenance and renewal costs would be incurred irrespective of the plan change.
- The Club had developed a Long-Term Masterplan. In 2021, golf course's architect and former professional golfer Mr Tataurangi was engaged to prepare a comprehensive masterplan, with the key objectives including:
    - Improving environmental sustainability;
    - Reducing water and chemical use;
    - Addressing golf holes adjacent to houses;
    - Creating a clearer course identity;
    - Planning for the entire property;
    - Maintaining accessibility for golfers of all abilities; and
    - Enhancing the club's reputation.
- With respect to the re-zoning proposal, the masterplan had identified two areas of land that were not required for future golf operations, with one of those areas proposed for rezoning through PPC40. It would result in the loss of only about 1% of the golf course area.
- In response to golf course safety concerns (golf ball strike), the redesign reverses the current 13th hole so it plays away from the proposed rezoned land. This will reduce the likelihood of golf balls entering the development area.
- The club had consulted its members and nearby Fairway Avenue residents over several years. It has also worked closely with Ngāi Tukairangi, who provided a letter supporting the plan change.

Ms Ryan provided expert transport related evidence. In summary, her key findings were:

- That the existing road network can accommodate the proposed development that would be provided by the re-zoning. Her opinion was based on a maximum theoretical yield of 36 dwellings, stating that a more realistic outcome was estimated at around 15 dwellings.
- A 36-dwelling development would generate about 180 vehicle movements per day. Traffic on Fairway Avenue would increase from roughly 1,300 to 1,480 vehicles per day, which remained well within the road's indicative capacity, with peak-hour traffic increasing by only about 18 vehicle movements, equating to roughly one additional vehicle every three minutes.
- The effects on Golf Road and the Fairway Avenue/Golf Road intersection would be minimal and would not materially affect their operation or capacity.

- A review of crash history found no concerning crash trend and no evidence of an existing safety problem that would be worsened by PPC40.
- Ms Ryan's evidence responded to submitters' concerns about:
    - Narrow road width on Fairway Avenue.
    - On-street parking and access difficulties.
    - Vehicle speeds and turning movements.
    - School-related traffic.
    - Golf club servicing and maintenance vehicles.
- In response it was her opinion that:
    - The projected traffic increase is too small to justify road widening or major traffic management measures;
    - Parking concerns do not arise directly from the rezoning and do not justify special parking controls through PPC40; and
    - Construction traffic, servicing arrangements, and detailed access design should be addressed later through subdivision and resource consent processes.
- With respect to the requested a pedestrian and cycle connection between Fairway Avenue and Mount Maunganui Intermediate School she opined that:
    - No transport assessment has been completed for the connection.
    - It could attract additional school-related traffic and activity into the Fairway Avenue cul-de-sac.
    - It should be considered separately through a broader traffic planning process involving the school, Council, and landowners.

Ms Ryan's overall conclusion was that the traffic evidence supports PPC40. Even under a conservative maximum-development scenario, it was her opinion that the surrounding transport network has adequate capacity and safety performance, and no transport mitigation measures are required.

Mr Moodie provided expert engineering evidence. It focused on three key engineering matters:

- Effects of earthworks on flooding and overland flow paths;
- Assessment of flood risk under the National Policy Statement for Natural Hazards (NPS-NH); and
- Availability and adequacy of infrastructure servicing.

Mr Moodie's evidence concluded that there are no flooding, servicing, infrastructure, or access constraints that would prevent the rezoning and future residential development of the 4,378 m² site. Flooding effects can be mitigated on-site, infrastructure networks have sufficient capacity, and any required upgrades are minor and manageable through standard engineering design.

Mr Collier provided expert planning evidence. He set out, in summary, that:

- Re-zoning would allow residential development on a small portion of the golf course, while retaining the wider golf course operation. Only about 1% of the course area is affected;
- That the site is considered suitable for housing due to:

- The site adjoins existing residential zoning on Fairway Avenue and sits near schools, public transport, open space and services;
- It is a logical extension of the surrounding MDRZ area; and
- Existing infrastructure such as water, wastewater, power, telecommunications and roads is available and has sufficient capacity;

- There are housing supply benefits, with the evidence emphasising Tauranga's significant housing shortage and the need for additional housing capacity. This proposal would help to meet housing demand and was supported by the objectives of the National Policy Statement on Urban Development (NPS-UD).

In terms of the Planning Assessment, Mr Collier concludes the proposal was consistent with:

- The Resource Management Act (RMA);
- The National Policy Statement on Urban Development (NPS-UD); and
- Relevant regional and district planning documents.

He considered that the MDRZ is the most appropriate zoning option after evaluating alternatives through the Section 32 assessment.

In response to submitter's concerns, he set out:

- Loss of views: The change from open space to residential development will alter outlooks, but mitigation through landscaping and site design is proposed;
- Natural hazards/stormwater: These are manageable through future engineering design and subdivision controls;
- Traffic: Traffic assessments indicate no significant adverse effects on the wider network;
- Public walkway access: That creating a pedestrian connection through the site is outside the scope of PPC40 and would require separate assessment; and
- Loss of open space: That the land is private golf club land, not public open space, and that only a very small portion of the golf course is affected.

He set out that consultation has occurred with neighbouring landowners and Fairway Avenue residents. Engagement has also occurred with tangata whenua, including Ngāi Te Rangi and ongoing discussions with relevant iwi and hapū.

Mr Collier's overall opinion is that PPC40 should be approved because it:

- Provides additional housing capacity in an area experiencing shortages;
- Uses existing infrastructure efficiently;
- Supports the long-term viability of the golf club; and
- Represents an efficient and effective use of land with benefits that outweigh any costs or adverse effects.

6 Summary of the Submitters' Evidence Presented at the Hearing

Two submitters presented evidence at the hearing.

Bay of Plenty Golf, represented by Mr Webb, Regional Manager, supported the re-zoning request for the reasons set out in their submission.

Mount Maunganui Intermediate School was represented by Mr Dove, a Board member. He set out that the schools concern related to the potential impact of the proposed re-zoning and the subsequent development of the land could have on the school, particularly in terms of 'reverse sensitivity' matters. The School and the Applicant had engaged and most of the matters of concern had been agreed between them. Mr Dove's statement of evidence set out[7]:

Matter	Club's advice (27 October 2026)	Board position
Stormwater	Detailed stormwater mitigation is dealt with in the subdivision design. It is likely that additional stormwater storage will be provided on the golf course land. The development will not make flooding on the school grounds any worse.	Satisfied, if the compensating flood storage on golf club land is secured by easement, as Mr Collier's evidence states (para 8.4).
Boundary	Trees removed; boundary fence to be replaced at no cost to the school and the inclusion of landscaping on the school side; driveway along the school boundary to separate dwellings from the school.	Satisfied. The current row of trees are mature and pose a potential health and safety risk. The Board asks that the new fence be solid, at least 1.8 m above finished ground on the development side, and have a smooth 'non-climbable' finish on the school side. Planting on the school side is to be agreed with MMGC. The boundary fence and planting should be paid for by MMGC.

[7] Hearing Statement on Behalf of The Board of Mount Maunganui Intermediate School (Submitter 19) – Mr Dove 4/5 November 2026.

Matter	Club's advice (27 October 2026)	Board position
Reverse sensitivity	No title covenant proposed as this is considered to have little effect on complaints actually made.	Accepted, although the Board sees little harm having a no-complaints covenant on the future titles. The Board asks that the recommendation record the s42A report's agreement that MMIS is an established activity whose effects future residents should expect.
Construction	Managed following discussion with the school; works timed for weekends or school holidays where possible, especially tree removal.	Satisfied. Tree removal particularly, should be tied for school holidays due to the health and safety risks.

Mr Dove sought confirmation of this agreement with the Applicant. These matters are addressed further in the evaluation section below.

7 Summary of the Section 42A Author's Opinion Having Heard the Evidence and Addressed the Submissions

Mr Musk was the author of section 42A report. As already set out much of his report has been 'adopted' for the purpose of my evaluation and recommendations. In response to having heard all of the evidence at the hearing Mr Musk provided the following (summary) at the hearing:

- In response to matters raised regarding enactment of the Planning Act 2026 and what implications this may have on PPC40, he set out that the Council is required to implement the transitional provisions in the Planning Act, including the preparation of a Land Use Plan by the end of 2029, which will include standardised provisions prescribed by central government.

- In the meantime, the transitional consenting provisions require a district land use consent to disregard effects set out in section 104(1A) of the Resource Management Act 1991. In relation to the MDRZ, areas of glazing, outdoor living areas and areas of landscaping provisions are now out of scope and cannot be considered. Although this does preclude a developer still providing for these. Views from private property is also out of scope in section 104(1A).

I agree with Mr Musk and note the Ms Barry-Piceno addressed this matter comprehensively in her legal submissions and in my questions to her. While a plan change is 'future focused', and these matters will be addressed in the new land use plan, I have not taken these matters into account as part of my recommendations but focused on the current provisions in the RMA.

Mr Musk set out the key Issues, which were the same as those addressed in the section 42A report. In summary it remained his position that:

- In terms of open space, while the plan change will result in the loss of approximately 4,378m² of land currently zoned POS, this represents less than one percent of the wider golf course landholding, which will remain available for recreational use. The land is privately owned and does not form part of Council's public open space network.

- With respect to infrastructure, he remained satisfied that the site can be serviced, that stormwater and flood related matters can be appropriately managed, and that there are no infrastructure constraints that make the proposed rezoning inappropriate.

- With respect to traffic, relying on the on the ITA provided as part of the section 32 report and expert advice and evidence he remained satisfied that the anticipated traffic increases can be accommodated within the existing network and that detailed access arrangements and design matters are more appropriately addressed through future subdivision and development processes.

- With respect to the concerns raised by Mr Dove on behalf of the MMIS, Mr Musk set that while the school generally supports the plan change, it sought additional controls relating to flooding and development adjacent to the school boundary. Mr Musk's opinion was that these matters are already appropriately addressed through the existing City Plan framework. Future development of the site remains subject to the City's flooding provisions, which require consideration of flood displacement effects, the maintenance of flood storage capacity, and the management of adverse effects on surrounding properties arising from floodwaters and overland flow paths. The outcomes sought by the school are therefore largely consistent with matters already addressed through the existing plan provisions. I am not persuaded that an additional site-specific rule is necessary to achieve those outcomes.

- With respect to the matters of reverse sensitivity raised by Mr Dove, Mr Musk agreed with the Applicant's position that the requested 6-metre setback from the school's boundary was unnecessary and should not be included in PPC40. Mr Musk was not persuaded that a specific adverse effect had been identified that would justify an additional site-specific control beyond the standards otherwise applying to residential development. The school is an established designated activity within an urban environment and is already adjoined by residential properties that are not subject to additional setbacks. For similar reasons, he did not support the inclusion or consideration of a non-complaints covenant as part of PPC40, as this falls outside the planning issues that need to be addressed through the proposed zoning framework. He also noted that discussions were ongoing between the golf course and the school regarding treatment of their shared boundary.

Overall, it was Mr Musk's opinion that PPC40 be approved as:

- Much of the relief sought by submitters relate to matters that would ordinarily be assessed at subdivision, land use consent, or detailed design stage, rather than matters that determine whether the site is suitable for rezoning.

- there are no network infrastructure constraints and appropriate existing provisions in the Tauranga City Plan to assess the detailed design of any future development.

8 Submissions and Evidence – Overview

8.1 Submissions Received

PPC40 was publicly notified in accordance with clause 26 of Schedule 1 of the RMA on 3 July 2026, with the submission period closing on 3 August 2026. Twenty-six submissions were received.

8.2 Further Submissions Received

A summary of decisions requested under clause 7(1) of Schedule 1 of the RMA was notified on 31 August, with the period for further submissions closing on 11 September 2026. Two further submissions were received.

8.3 Evaluation and Recommendation of the Submissions

Submission points have been grouped into topics. The submissions and further submissions are discussed under the relevant topic headings in **section 9** of this report.

9 Evaluation of Submissions

9.1 General

9.1.1 Introduction

This topic addresses general submission points received. The submissions have been grouped into the following sub-topics:

- Opposition.
- Support.
- Amendments/Further information requested.
- Plan Change Process/Consultation.
- Access and connectivity.

9.1.2 Submissions received and relief sought

Opposition

Multiple submissions points were received which seek to reject PPC40 for the following reasons:

- Retain the land as open space associated with MMGCI.
- Provide for enhancement of the golf course without the loss of green space to housing.

One further submission was received in support of these submission points in opposition.

These are addressed below.

Support

Multiple submission points were received which seek to accept PPC40 for the following reasons:

- Provides for additional housing.
- Implements the Course Concept Master Plan and contributes to the sustainable future of the club.
- Minimal adverse effects on neighbouring properties, traffic, and infrastructure.
- Benefits the community in years to come.

No further submissions were received on this topic.

As these submissions are in support, no further discussion is provided and they are accepted.

Amendments/Further information requested

Multiple submissions points were received seeking amendments and further information on the following:

- Amend to ensure the same areas are shown in Figures 2, 3 and 7 of the section 32 report.
- Provide an assessment of the maximum foreseeable effects of the full development potential enabled by the proposed zoning.

Three further submissions points support the need for further information in relation to natural hazards, mitigation of infrastructure and a golf ball trajectory assessment.

Plan Change Process/Consultation

Multiple submissions points were received on the plan change process and consultation, which seek the following:

- Provide for Council to note that MMGCI have not consulted in good faith with affected parties and have unjustifiably attempted to coerce residents to support this application.
- Provide for Council staff to be highly vigilant in their analysis and verification of all information in the application.
- The rezoning should be considered through Council's growth strategies rather than an isolated private plan change process.

No further submissions were received on this topic.

Access and connectivity

Multiple submission points were received on access and connectivity, which seek the following:

- Allow for a walkway and cycleway from the end of Fairway Avenue through to MMIS to improve safe access for students and the wider community.
- Amend PPC40 to better allow for future and current needs in relation to public access and a public access network.

Multiple further submission points were received which opposes the provision of a walkway and cycleway from Fairway Avenue through to MMIS and amending PPC40 to better allow for needs in relation to public access.

9.1.3 Evaluation

Opposition

The submissions received which seek to reject PPC40, provided a number of reasons such as loss of open space as well as seeking additional information to be provided.

Amendments/Further information requested

In relation to Figures 2, 3 and 7 of the section 32 report, I note that each figure serves a different purpose and is intended to provide different contextual information. Figure 2 identifies the specific area to be rezoned, Figure 3 illustrates that same area within the wider golf course masterplan, and Figure 7 identifies both the northern and southern surplus land areas within the golf course. Accordingly, I do not find the figures to be inconsistent, and nor are amendments required in response to those submissions.

Several submitters sought additional information regarding the potential development enabled by the MDRZ and the associated effects. The section 32 report utilised a maximum yield of 36 dwellings as a conservative development scenario. This yield informed the basis of the integrated transport assessment (ITA) and enabled the potential transport effects of the proposed rezoning to be assessed.

While the section 32 report did not include a detailed assessment of three waters capacity based on this yield, the Council has subsequently obtained a memorandum from Dr. Hellberg, Team Leader: City Waters Planning, which confirmed that sufficient supply is available to

accommodate development at this scale[8]. Traffic and stormwater effects are discussed further in the sections below. The request to provide a golf ball trajectory assessment is also discussed in the section below.

Having reviewed the information provided, together with the supporting technical assessments and planning analysis and evidence, I am satisfied that sufficient information is available to consider and make recommendations on PPC40. Accordingly, I do not support the relief sought to reject PPC40 or to retain the site in its current zoning on this basis.

Plan Change Process/Consultation

Some submitters raised concerns regarding the consultation and engagement undertaken by MMGCI during the preparation of PPC40 and the accuracy of information supplied in support of the application and the need for scrutiny of PPC40 through the plan change process.

The information provided in support of PPC40 sets out that consultation has occurred with neighbouring property owners, tangata whenua and Council staff during the development of PPC40. I note there is no statutory requirement for an applicant to obtain agreement or support from affected parties prior to lodging a private plan change request, and PPC40 was been publicly notified for submissions.

In relation to concerns regarding the accuracy of information provided by the applicant, I note that PPC40 has been supported by a range of technical assessments which have been independently reviewed by relevant Council staff throughout the plan change process. I am satisfied that PPC40 has been subject to an appropriate level of scrutiny through the plan change process.

Some submitters also suggested that the rezoning should be considered through broader Council growth planning processes rather than through an individual private plan change. While I acknowledge this view, the RMA provides a statutory mechanism for private plan change requests. The appropriateness of PPC40 therefore falls to be assessed on its own merits, having regard to the relevant statutory planning framework, the evidence presented in support of the request, and the submissions received.

Having regard to the matters raised by submitters, I do not find that concerns regarding consultation, engagement or process identify any issues that warrant amendments to PPC40. I am satisfied that the merits of PPC40 can be appropriately considered through the Schedule 1 process and that sufficient information has been provided to enable the assessment and determination of the proposed rezoning. In respect of this topic, I accept the findings in the section 42A report and the expert planning evidence of Mr Collier.

[8] This was provided as Appendix 3 to the section 42A report.

Pedestrian access and connectivity

The Outdoor Access Commission (23.1 and 23.2) requested that the Council provide for a pedestrian and cycle connection between Fairway Avenue and MMIS and that PPC40 be amended to better provide for current and future public access needs as shown in Figure 2.



Figure 2 - Proposed new walkway from Fairway Avenue to MMIS

PPC40 seeks to rezone privately owned land from POSZ to MDRZ and does not provide for a public walkway, cycleway, access corridor or wider public access network through the site. The land subject to PPC40 does not provide formal public access and no legal public access arrangements presently exist across the site.

While a pedestrian and cycle connection may provide wider community benefits, the ITA did not identify a need for an additional public pedestrian or cycle connection to mitigate the transport effects arising from development enabled by PPC40. Also, while a pedestrian and cycle connection may improve local connectivity, it may also encourage additional school-related activity at the end of Fairway Avenue, including increased drop-off and pick-up activity. The transport and operational implications of such a connection have not been assessed through PPC40.

Furthermore, PPC40 does not include a proposal for a public walkway/cycleway, and no evaluation has been undertaken regarding the feasibility, design, ownership, operational implications, or transport effects of a new public connection. The establishment of a publicly accessible route would require consideration of land ownership, legal access arrangements, ongoing maintenance responsibilities, and the operational requirements of MMIS and MMGCI.

Having regard to the information and evidence before me, I do not find that any amendments to PPC40 for the provision of a public pedestrian or cycle connection through the site are required to address the effects of the proposed rezoning.

Notwithstanding the above, I note that this does not preclude, MMGCI, MMIS and Council from undertaking further discussions and assessments regarding road ownership, pedestrian access, and local connectivity through any future subdivision or land use consent application, or separate agreement, should all parties consider this appropriate.

Having considered the submission points received under the General topic, I am satisfied that the matters raised have either been addressed through the supporting technical assessments and planning analysis or have been appropriately considered through the PPC40 process.

In making this finding and recommendation (set out below) I accept the findings in the section 42A report and the expert traffic evidence of Ms Ryan and the expert planning evidence of Mr Collier.

9.1.4 Recommendation

I recommend, based on the evaluation and reasons given above, that no amendments are made in response to the submission points on this topic.

Accordingly, no section 32AA evaluation has been required to be undertaken.

For my recommendations on whether a submission point is accepted, accepted in part, or rejected, see **Appendix 1**.

9.2 Natural Hazards and Stormwater

9.2.1 Introduction

This topic addresses the stormwater and natural hazard matters associated with PPC40, including stormwater management, flooding, flood storage requirements, and the management of potential effects on adjoining properties.

9.2.2 Submissions received and relief sought

Multiple submission points were received in relation to natural hazards and stormwater which seek the following:

- Reject the proposed zoning, unless MMGCI can provide improved stormwater management into the drains at the existing end of Fairway Avenue.
- Amend to include sufficient earthworks and flood storage controls so that any reconfiguration will not increase:
  - Stormwater runoff onto school land;
  - Flooding frequency or severity;
  - Ponding of water along boundaries; or
  - Any other adverse effects on the school's operations and infrastructure.
- Provide a detailed stormwater and flood management assessment demonstrating that development will achieve no adverse effects on neighbouring properties, including MMIS.
- Provide appropriate monitoring, design certification and maintenance requirements to ensure the long-term performance of the proposed stormwater infrastructure.

No further submissions were received on this topic.

9.2.3 Evaluation

Sufficient information

Submitters raised concerns regarding the potential effects of future development on stormwater management and flood risk, particularly in relation to the existing drainage network at the end of Fairway Avenue and potential effects on neighbouring properties, including MMIS.

Submitters also requested a detailed stormwater and flood management assessment demonstrating that development will achieve no adverse effects on neighbouring properties.

In considering these submission points, I note that the information provided in Attachment G to the s32 Report (Utilities and Infrastructure Assessment) that identifies that the site can be serviced and that stormwater management solutions are available to support future residential development. The assessment identifies a range of measures that may be utilised, including onsite soakage, attenuation storage and flood storage compensation.

The information provided in the section 32 report has been reviewed by Dr Hellberg. Based on the information provided in the section 32 report and Council's technical review, I have not identified any stormwater or flooding constraints that would make the proposed rezoning inappropriate.

Having regard to the information before me, I am satisfied that sufficient information has been provided to determine the suitability of the site for residential zoning.

Management of future stormwater and natural hazard effects

Submitters sought additional stormwater management measures, monitoring requirements, flood storage controls and design certification requirements to ensure that future development does not adversely affect neighbouring properties, including MMIS.

PPC40 seeks to rezone the site and does not authorise subdivision, earthworks, filling, construction or stormwater infrastructure works. Matters relating to the detailed design, construction, operation and maintenance of future development will be fully assessed once a specific development proposal is applied for at the resource consent stage of development.

Any future subdivision or land use consent application will be required to comply with the relevant provisions of the City Plan, including the subdivision provisions within Chapter 12 and the associated performance standards relating to stormwater management. These provisions address matters including the design, collection, conveyance, treatment and discharge of stormwater.

There are portions of the site are identified as being affected by flooding, including flood prone areas and overland flowpaths. The City Plan contains provisions that manage development within these flood hazard areas, including consideration of minimum floor levels, earthworks, flood storage and potential effects on neighbouring properties. The purpose of these provisions is to ensure natural hazard risk is appropriately managed and not increased through future development.

I find that the existing City Plan framework provides an appropriate mechanism for assessing and managing stormwater and natural hazard effects associated with any future development of the site. Matters such as design certification, monitoring and maintenance are more appropriately addressed through future resource consent and engineering approval processes where detailed design information is available.

In relation to the above, I do not find that additional site-specific stormwater, flood management, monitoring or maintenance provisions are necessary. These matters can be appropriately addressed through the existing planning framework and future development and consenting processes.

In making this finding and recommendation (set out below) I accept the findings in the section 42A report and the expert engineering evidence of Mr Moodie and the expert planning evidence of Mr Collier.

9.2.4 Recommendation

I recommend, based on the evaluation and reasons given above, that no amendments are made in response to the submission points on this topic.

Accordingly, no section 32AA evaluation has been required to be undertaken.

For my recommendation on whether a submission point is accepted, accepted in part, or rejected, see **Appendix 1**.

9.3 Traffic and Transport

9.3.1 Introduction

This topic addresses transportation effects, access, connectivity, transport modelling, and the capacity and safety of the surrounding transport network.

9.3.2 Submissions received and relief sought

Multiple submission points were received in relation to traffic and transportation which seek the following:

- Reject the proposed zoning unless improved traffic management can be provided on Fairway Avenue by MMGC.
- Provide road widening and road improvements if the rezoning is granted.
- Amend parking restrictions on Fairway Avenue by extending the no parking lines exiting Fairway Avenue to the right.

No further submissions were received on this topic.

9.3.3 Evaluation

Traffic management

Submission points raised concerns regarding existing traffic conditions on Fairway Avenue and Golf Road and the extent to which residential development enabled by PPC40 may increase traffic movements, parking demand, and safety issues within the surrounding transport network.

Attachment H to the s32 report (ITA) assessed the traffic effects of the proposed rezoning. The ITA was reviewed by Mr Siemensma, Council's Principal Strategic Transport Planner. Mr Siemensma agrees with the trip generation assessment and the conclusions regarding the effects of the development enabled by PPC40 on the wider transport network. However, he notes that matters relating to future access arrangements, road layout, and compliance with Council's IDC, including the Street Design Toolkit requires further consideration through any future subdivision and development process.

The ITA sets out that the current average daily traffic along Fairway Avenue is 1,300 veh/d inclusive of the new driving range. An increase of 180 vehicles due to the maximum potential development will increase the ADT by 13.8% of existing traffic volumes. The ITA has concluded that this is not expected to contribute to any noticeable effects along Fairway Avenue and remains consistent with the intended function of a local road within the City's road hierarchy.

The current traffic volume along Golf Road has been (conservatively) estimated as 7,800 veh/d. The maximum potential yield of the site is expected to increase this by less than 2%. Peak hour flows are expected to increase from 133 to 151 veh/h at the intersection or one additional movement per three minutes. The ITA has concluded that the expected increase in traffic along Golf Road and its intersection with Fairway Avenue is not expected to contribute to any noticeable effects or reduce the level of service and remains consistent with the intended function of a collector road within the City's road hierarchy.

While the ITA has identified there is sufficient capacity in the roading network to accommodate the additional traffic generated by the development enabled under PPC40, I note that the ITA identifies potential opportunities to improve pedestrian crossing facilities at the Fairway Avenue/Golf Road intersection in the future. However, the ITA does not conclude such

improvements are necessary to mitigate any transportation effects arising from PPC40, nor does it identify any existing road safety issues that would be materially worsened by the scale of development anticipated through the proposed rezoning.

There are provisions in the City Plan which will require any future subdivision to meet the requirements of Council's IDC, including the Street Design Toolkit. Matters related to detailed design and access would be assessed through future subdivision and land use consent processes. In addition, any development of more than 15 dwellings will be required to prepare an ITA.

Fairway Avenue Upgrades

Submitters have requested amendments to parking restrictions on Fairway Avenue. The ITA did not identify the need for such measures to mitigate the effects of the proposed rezoning at the end of Fairway Avenue exiting onto Golf Road. Amendments to parking restrictions to ensure safe vehicle movements and efficient operation of the local road network are operational transport management matters and can be considered by Council at any point to respond to parking effects on a road

Submitters also sought road widening and other road improvements. However, neither the ITA nor Mr Siemensma have identified a need for road widening or other network upgrades prior to rezoning the site to enable housing. The width of the road meets the requirements of a local road.

Mr Siemensma identified matters requiring further consideration at the future subdivision and development stage, including parking management, road ownership, pedestrian access to existing and/or potential nearby properties, vehicle tracking and refuse collection arrangements. These matters do not affect the suitability of the site for rezoning and are appropriate to be considered at the consenting stage.

The anticipated increase in vehicle movements is not expected to materially affect the wider operation of Fairway Avenue, Golf Road, or the Fairway Avenue/Golf Road intersection. Consequently, I do not find that road widening, traffic management measures, amended parking controls, or other transport upgrades are required to mitigate the effects of PPC40. Detailed transport design matters can be appropriately addressed through future subdivision, land use consent, and engineering approval processes.

I have set out a summary of Ms Ryan's expert evidence earlier, and have not repeated it here.

Having regard to the findings of the ITA, together with feedback from Council's Principal Strategic Transport Planner, the section 42A evaluation and Ms Ryan's evidence, I find that the existing transport network has sufficient capacity and functionality to accommodate the additional traffic generated by the development enabled under PPC40.

In making this finding and recommendation (set out below) I accept the findings in the section 42A report and the expert traffic evidence of Ms Ryan and the expert planning evidence of Mr Collier.

9.3.4 Recommendation

I recommend, based on the evaluation and reasons given above, that no amendments are made in response to the submission points on this topic.

Accordingly, no section 32AA evaluation has been required to be undertaken.

For my recommendation on whether a submission point is accepted, accepted in part, or rejected, see **Appendix 1**.

9.4 Open Space, Green Space and Landscaping

9.4.1 Introduction

This topic addresses the provision of open space, loss of green space, and landscaping requirements.

9.4.2 Submissions received and relief sought

Multiple submission points were received in relation to open space/green space which seek the following:

- Provide a comprehensive assessment of the loss of recreational land against current and future community needs.
- Provide acknowledgment of the value of the golf course green space.
- Reject the proposed zoning, as PPC40 diminishes the amount of green space in an urban area.
- Amend to include requirements within PPC40 relating to landscaping that:
    - Retains existing boundary vegetation wherever practicable;
    - Provides for appropriate replacement planting where removal is unavoidable;
    - Include species, planting densities and maturity standards appropriate to achieving an effective screening function;
    - Ensure replacement planting is established as early as possible; and
    - Includes ongoing maintenance and replacement obligations.

No further submissions were received on this topic.

9.4.3 Evaluation

PPC40 proposes to rezone a portion of the MMGC from POSZ to MDRZ. The area proposed for rezoning is less than one percent of the overall golf course site, with the balance remaining as open space, and is privately owned.

<u>Loss of open space/green space</u>

Submitters requested a comprehensive assessment of the loss of recreational land against current and future community needs be undertaken.

The information provided in the section 32 report demonstrates that the land is surplus to golf club's requirements and is not needed for its ongoing operation and recreational function. While PPC40 will result in the loss of a small area of open and green space, this loss is limited in scale and will not undermine the open space, landscape or recreational values of the wider golf course.

It is also relevant to note the land is not publicly owned open space for the purposes of public open space/access, and is not part of Council's public open space network. I also note that there are existing open space and recreation opportunities at MMIS, Mount Maunganui College, sport fields and other passive open space sites within a walkable catchment of the site.

I find it is relevant to distinguish between privately owned open space (golf course) and Council-owned public open space. Although the site is zoned POSZ, it is privately owned and

has been managed primarily for the operation of the golf course rather than for wider public recreation. Accordingly, the proposed rezoning would not diminish Council's public open space network, remove public reserve land, or reduce public access to existing parks and reserves. The balance of the golf course will remain providing recreational space in the form of a golf course.

Landscaping requirements

Submitters seek site-specific landscaping provisions requiring vegetation retention, replacement planting and ongoing maintenance obligations to provide a visual buffer, privacy screen and amenity values for students and staff of MMIS, and neighbouring residents.

The future development of the site has the potential to alter the existing interface between the golf course and the MMIS. However, I also note that the other boundaries of MMIS with residential development do not have visual buffers and privacy screenings. These matters are more appropriately addressed through future development and consenting processes where the design, layout and interface treatment of any development can be assessed.

The interface with MMIS will be managed through standards relating to height, outlook, and outdoor living space through the existing MDRZ provisions. A development of four or more dwellings in the MDRZ in the City Plan requires a resource consent which considers site and context, public space interface, movement networks, residential amenity and privacy. This would enable consideration of vegetation retention, replacement planting, boundary treatments and landscape outcomes once the extent and location of any future development is known.

The site and wider golf course site are not subject to any landscape, ecological or heritage overlays that identify the vegetation as requiring specific protection. Further, no landscape, ecological or amenity evidence has been presented which demonstrates the need for additional site-specific landscaping controls to manage adverse effects associated with the proposed rezoning.

Overall Finding

I am satisfied that the proposed rezoning, while resulting in some loss of open space, is very limited in scale relative to the wider golf course landholding, and that the land is not public open space (it being privately owned). I do not find, based on the submissions, that the loss of the site would result in significant adverse effects on open space or green space values, nor demonstrates a need for additional site-specific landscaping provisions.

In making this finding and recommendation (set out below) I accept the findings in the section 42A report and the expert planning evidence of Mr Collier.

9.4.4 Recommendation

I recommend, based on the evaluation and reasons given above, that no amendments are made in response to the submission points on this topic.

Accordingly, no section 32AA evaluation has been required to be undertaken.

For my recommendations on whether a submission point is accepted, accepted in part, or rejected, see **Appendix 1**.

9.5 Reverse Sensitivity and Construction Effects

9.5.1 Introduction

This topic addresses reverse sensitivity matters relating to the interface between future residential development enabled by PPC40 and established neighbourhood activities, including MMIS and MMGCI.

9.5.2 Submissions received and relief sought

Multiple submission points were received in relation to reverse sensitivity which seek the following:

- Reject the proposed zoning unless the risk of reverse sensitivity can be mitigated.
- Provide ongoing engagement with the future developer regarding the effects of construction.
- Provide recognition that MMIS is an established activity and that future residents should reasonably expect to experience the associated effects of being located adjacent to an intermediate school.
- Amend PPC40 to ensure any subsequent development proposals include appropriate measures to manage reverse sensitivity effects.

No further submissions have been received on this topic.

9.5.3 Evaluation

Intermediate school

MMIS is a long-established activity that forms part of the existing environment. The site is designated in the City Plan for the purposes of a school.

MMIS (19.6) requested recognition that the school is an established activity and that future residents should reasonably expect to experience associated effects, with which I agree. The existence and operation of MMIS form part of the receiving environment and future residents would be expected to anticipate and accept the effects associated with being located adjacent to the school.

The proposed rezoning would extend the MDRZ to directly adjoining land that is already zoned and developed for residential purposes. Existing residential properties in the surrounding area are already located on the boundary of MMIS with no mitigation requirements to manage reverse sensitivity. On this basis, I do not find that the rezoning itself will create reverse sensitivity effects beyond those already anticipated within an established urban environment. I therefore do not find that any amendments are required to PPC40 to mitigate the risk of reverse sensitivity.

Mr Dove (a board member of the school) presented evidence of behalf of the school. I have provided a summary of that evidence earlier in this report.

Construction related effects

Submitters requested ongoing engagement with any future developer regarding construction-related effects, including noise, dust, traffic and pedestrian safety.

In considering these submission points, I note that PPC40 proposes a rezoning of the site and is not a detailed development proposal. Matters relating to construction activities are

dependent on the nature, scale and timing of any future development and will be assessed once a specific development proposal is known and will be required to meet the relevant provisions in the City Plan and any regional plan in relation to construction effects including noise and dust, and where relevant a traffic management plan for works within the road reserve.

Construction related effects would arise from future land development activities rather than from the rezoning itself and can be managed through existing statutory processes, including conditions of consent requirements where applicable. I therefore do not find that additional provisions are necessary within PPC40 to address construction related effects.

Golf course interface

While not specifically identified in the relief sought, submitters have also raised concerns regarding the interface between existing and future residential development and the ongoing operation of the golf course; including requests for a golf ball trajectory assessment and consideration of potential safety effects.

The site forms part of the existing golf course landholding and that future residential development would be located adjacent to an ongoing recreational activity. The section 32 report sets out that the purpose of the rezoning is to provide for the redesign of the course which will result in the reconfiguration of the fairways. As a result, the future interface between MMGC and residential development is anticipated to differ from the existing course layout. PPC40 is intended to facilitate a broader course redesign, which the requestor advises will enable fairways to be reconfigured, and in part, reduce the potential for golf balls to encroach onto surrounding residential properties.

The master plan anticipates the redesign of the course layout, including changes to the alignment of nearby fairways, such that the future interface between residential development and golfing activities will differ from the existing arrangement. MMGCI is also in a position where fairways and tee-offs could be moved at any time that could increase or decrease the risk of ball strike.

Having regard to the information before me, including the MMGC masterplan, I am satisfied that the fairways can be reconfigured to reduce any impact of golf balls on the proposed future development. I therefore find that a golf ball trajectory assessment is not necessary to determine the appropriateness of the proposed rezoning. I am satisfied that the future residential development is an appropriate interface with the golf course and is not dissimilar to the residential interface on the other boundaries of the MMGC. On this basis, I find that no amendments or further assessments are required for PPC40.

Reverse sensitivity provisions

Submitters seek amendments to PPC40 to ensure any future development includes appropriate measures to manage reverse sensitivity effects.

The potential sources of reverse sensitivity identified by submitters relate primarily to the ongoing operation of MMIS and MMGCI. As discussed above, both activities are long-established activities of the receiving environment and the effects associated with their operation are readily apparent. There is existing residential development already along the boundary of MMIS and the golf course and is subject to the same receiving environment.

Mr Dove provided evidence on behalf of the school as already set out. With respect to reverse sensitivity issues, Mr Dove sought that a no-complaint convenient to the school's activity be imposed as a specific zone control, as well as any dwellings being set back at least 6 metres from the common boundary. The Applicant rejected both of these measures (as set out in the

legal submissions and Mr Collier's evidence as summarised above). Mr Musk also did not support any amendments to the MDRZ provisions in relation to reverse sensitivity matters.

I agree with the Applicant's legal submissions and planning evidence as well as Mr Musk's opinion. I accept it is unnecessary and would be unprecedented (as submitted by Ms Barry-Piceno) to impose a no-complaints covenant as sought by the school. Mr Dove, in response to questions from me, appeared to accept the plan change was not necessarily the most appropriate place to address this matter.

Mr Dove set out that the requested six metre building set back was also designed to potentially reduce reverse sensitivity issues. He acknowledged that given the shape of the land to be re-zoned and its orientation, that it was highly likely the access road to service the new residential development would on the site's southern boundary adjacent to the school, and the orientation of the dwellings would be to the north and overlooking the golf course. On this basis, it was likely there would be a significant distance between the school any dwellings, as well as the dwellings facing away from the school[9].

I do not support the need to for a site-specific zone modification to require a six-metre set back from the school's boundary.

Having regard to the information before me, I am satisfied that the site is suitable for residential zoning and that any potential interface effects between future residential development and surrounding established activities can be appropriately managed through the existing planning framework and consenting processes. I do not find that the submissions or the evidence presented by the Intermediate School demonstrates a need for additional site-specific reverse sensitivity provisions, nor do I find that such provisions are necessary to support PPC40.

In making this finding and recommendation (set out below) I accept the findings in the section 42A report and the expert planning evidence of Mr Collier, as well as Ms Barry-Pienco's legal submissions on this topic.

9.5.4 Recommendation

I recommend, based on the evaluation and reasons given above, that no amendments are made in response to the submission points on this topic.

Accordingly, no section 32AA evaluation has been required to be undertaken.

For my recommendations on whether a submission point is accepted, accepted in part, or rejected, see **Appendix 1**.

[9] I note for completeness that the school and the Applicant had already agreed some interface matters as previously set out.

10 Conclusion and Recommendations

MMGCI seeks to rezone approximately 4,378m^2 of land at 11 Fairway Avenue from POSZ to MDRZ. PPC40 seeks to enable the delivery of housing and urban development within the proposed residential zone that equates to a potential practical yield of up to 15 dwellings, and a maximum potential yield of 36 dwellings.

The actual and potential environmental effects of PPC40 have been comprehensively evaluated in the section 32 report and supporting technical assessments.

Twenty-six submissions and two further submissions were received to PPC40; in support and opposition to it. The key matters raised in submission points relate to:

- General matters, including opposition and support for PPC40, requests for further information, process and consultation matters, and access/connectivity considerations.
- Natural hazards and stormwater.
- Traffic and transport.
- Open space and green space; and
- Reverse Sensitivity.

It is my recommendation, pursuant to clause 10 of Schedule 1 to the RMA, that PPC40 be **approved** without any amendments to the MDRZ; and no amendments be made in relation to requests by submitters. The reasons for this are those set out above in this report.

The matters raised and relief sought by submitters have been considered in detail under the relevant topic headings of this report. The summary of decisions sought, and my recommendations on the submissions are included in **Appendix 1**.



Greg Hill Chairperson

09 November 2026

Appendix 1: Summary of Decisions Requested and Recommendation on the Submissions

TAURANGA CITY COUNCIL

OPERATIVE CITY PLAN

Proposed Private Plan Change 40

Mount Maunganui Golf Club Incorporated Rezoning

Summary of Decisions Requested and Recommendation on the Submissions

November 2026

Summary of Decisions Requested and Recommendation on the Submissions

Name	Sub ID & Point No.	Position	Summary	Hearing Commissioner's Recommendation
General				
Joss Hooker	1.1	Oppose	PROVIDE an assessment of the maximum foreseeable effects of the full development potential enabled by the proposed zoning.	Accept in part
Joss Hooker	FS 27.1 (1.1)	Support	ACCEPT submission point 1.1 AND PROVIDE an assessment to determine if mitigation for infrastructure, natural hazards and amenity for surrounding areas has been carried out on the full development potential.	Accept in part
Joss Hooker	1.2	Oppose	AMEND to ensure the same areas are shown in Figures 2, 3 and 7 of the section 32 report.	Accept in part
Zoe Brown	2.1	Oppose	PROVIDE an assessment of the maximum foreseeable effects of the full development potential enabled by the proposed zoning.	Accept in part
Joss Hooker	1.3	Oppose	PROVIDE an assessment on what the zoning enables.	Accept in part
Joss Hooker	FS 27.2 (1.3)	Support	ACCEPT submission point 1.3 AND PROVIDE an assessment to determine if mitigation has been provided for what the zone enables for natural hazards and amenity for surrounding areas.	Accept in part
Joss Hooker	1.4	Oppose	PROVIDE further information AND if the information does not satisfy the comment/question then to REJECT the proposal.	Accept in part
Joss Hooker	FS 27.3 (1.4)	Support	ACCEPT submission point 1.4 AND PROVIDE a golf ball trajectory assessment for the current or future environment and include a plan for how this hazard can be managed for unforeseen environment changes.	Reject
Zoe Brown	2.2	Oppose	AMEND to ensure the same areas are shown in Figures 2, 3 and 7 of the section 32 report.	Accept in part
Zoe Brown	2.3	Oppose	PROVIDE an assessment on what the zoning enables.	Accept in part
Zoe Brown	2.4	Oppose	PROVIDE further information	Accept in part

Name	Sub ID & Point No.	Position	Summary	Hearing Commissioner's Recommendation
			AND if the information does not satisfy the comment/question then to REJECT the proposal.	
Celine Holmes	3.2	Oppose	REJECT Plan Change 40 AND RETAIN the land as open space associated with the Mount Maunganui Golf Club.	Reject
Jenni Carden	4.1	Oppose	REJECT the proposed private plan zoning change.	Reject
Jennifer Taplin	5.2	Oppose	REJECT the rezoning application AND PROVIDE for enhancement of the golf course without the loss of green space to housing.	Reject
Keryn Hawkes	6.4	Oppose	PROVIDE for Council to note that Mount Maunganui Golf Club have not consulted in good faith with affected parties and have unjustifiably attempted to coerce residents to support this application.	Accept in part
Keryn Hawkes	6.5	Oppose	PROVIDE for Council staff to be highly vigilant in their analysis and verification of all information in the application.	Accept in part
Lynne Hansen	7.1	Oppose	REJECT the proposed development for a medium density residential development.	Reject
Douglas Leigh	8.1	Oppose	REJECT the Plan Change application.	Reject
William Winchester	9.1	Support	RETAIN Plan Change 40.	Reject
Bryn Williams	10.1	Support	No specific decision requested, but submission supports Plan Change 40 as it provides for additional housing, implements the Course Concept Master Plan and contributes to the sustainable future of the club.	Accept
Peter Crombie	11.1	Support	No specific decision requested, but submission supports Plan Change 40 to help secure the golf club's long-term viability and implementation of the club's master plan, support additional housing and have minimal adverse effects on neighbouring properties, traffic, and infrastructure.	Accept
Marie Bunyan	12.1	Not Stated	No specific decision requested, but submission supports the rezoning application to future-proof the club without imposing significant costs on members, provide additional housing where is sufficient capacity in the roading network.	Accept
Sue Scahill	13.1	Support	RETAIN the Plan Change.	Accept
Victoria Kjestrup	14.1	Not Stated	RETAIN the Plan Change.	Accept
Terry Mooney	15.1	Support	RETAIN the Plan Change.	Accept

Name	Sub ID & Point No.	Position	Summary	Hearing Commissioner's Recommendation
Anna Rutten	16.1	Oppose	PROVIDE an assessment of the maximum foreseeable effects of the full development potential enabled by the proposed zoning.	Accept in part
Grace Wade	17.1	Oppose	PROVIDE an assessment of the maximum foreseeable effects of the full development potential enabled by the proposed zoning.	Accept in part
Anna Rutten	16.2	Oppose	AMEND to ensure the same areas are shown in Figures 2, 3 and 7 of the section 32 report.	Accept in part
Anna Rutten	16.3	Oppose	PROVIDE an assessment on what the zoning enables.	Accept in part
Anna Rutten	16.4	Oppose	PROVIDE further information AND if the information does not satisfy the comment/question then to REJECT the proposal.	Accept in part
Grace Wade	17.2	Oppose	AMEND to ensure the same areas are shown in Figures 2, 3 and 7 of the section 32 report.	Accept in part
Grace Wade	17.3	Oppose	PROVIDE an assessment on what the zoning enables.	Accept in part
Grace Wade	17.4	Oppose	PROVIDE further information AND if the information does not satisfy the comment/question then to REJECT the proposal.	Accept in part
Gillian & Jude Lees & Cameron	18.1	Support	No specific decision requested. However, the submission supports the plan to benefit the community in years to come.	Accept
Mount Maunganui Intermediate	19.1	Amend	No specific decision requested. However, the submitter notes that given their responsibility to provide a safe, healthy and functional learning environment, they have several concerns they seek to be addressed through the planning process.	Reject
Barry Brown	20.1	Support	RETAIN Plan Change 40 AND any consequential amendment necessary to give effect to the submission.	Accept
Matt Tustin	21.1	Support	RETAIN the rezoning of the land.	Accept
Campbell Izzard	22.1	Support	RETAIN Private Plan Change 40.	Accept
Outdoor Access Commission, Herenga a Nuku	23.1	Amend	AMEND to better allow for future and current needs in relation to public access and a public access network.	Reject
Sue Scahill	FS 28.1 (23.1)	Oppose	REJECT submission point 23.1.	Accept

Name	Sub ID & Point No.	Position	Summary	Hearing Commissioner's Recommendation
Outdoor Access Commission, Herenga a Nuku	23.2*	Amend	Submitter specifically requests that Council allows for a walkway and cycleway from the end of Fairway Avenue, through to Mount Maunganui Intermediate School to improve safe access for students and the wider community.	Reject
Sue Scahill	FS 28.2 (23.2)	Oppose	REJECT submission point 23.2.	Accept
Andrew Markman	24.1	Oppose	No specific decision requested, however, the submission considers the rezoning should be considered through council's growth strategies, rather than an isolated private plan change process.	Reject
Andrew Markman	24.2	Oppose	REJECT Plan Change 40.	Reject
Peter Cooney	25.1	Support	RETAIN Plan Change 40 AND any consequential amendment necessary to give effect to the submission.	Accept
Bay of Plenty Golf	26.1	Support	RETAIN Plan Change 40 AND any consequential amendment necessary to give effect to the submission.	Accept
Natural Hazards				
Keryn Hawkes	6.3	Oppose	REJECT the proposed zoning unless Mount Maunganui Golf Club can provide improved stormwater management into the drains at the existing end of Fairway Avenue.	Reject
Mount Maunganui Intermediate	19.2	Amend	AMEND to include sufficient earthworks and flood storage controls so that any reconfiguration will not increase: Stormwater runoff onto school land; Flooding frequency or severity; Ponding of water along boundaries; or any other adverse effects on the school's operations and infrastructure.	Reject
Mount Maunganui Intermediate	19.3	Amend	PROVIDE a detailed stormwater and flood management assessment demonstrating that development will achieve no adverse effects on neighbouring properties, including Mount Maunganui Intermediate School.	Reject
Mount Maunganui Intermediate	19.4	Amend	PROVIDE appropriate monitoring, design certification and maintenance requirements to ensure the long-term performance of the proposed stormwater infrastructure.	Reject
Traffic and Transport				
Keryn Hawkes	6.2	Oppose	REJECT the proposed zoning unless improved traffic management can be provided on Fairway Avenue by Mount Maunganui Golf Club.	Reject

* Following receipt of submissions, submission point 23.3 was identified as duplicating the relief sought in submission point 23.2. For the purposes of assessment and reporting, the duplicated submission point (23.3) has been consolidated with submission point 23.2. Further submissions received in relation to the duplicated submission point have been summarised against submission point 23.2.

Name	Sub ID & Point No.	Position	Summary	Hearing Commissioner's Recommendation
Lynne Hansen	7.2	Oppose	PROVIDE road widening and road improvements if permission is granted for this Medium Density Housing Development.	Reject
Terry Mooney	15.2	Support	AMEND parking restrictions on Fairway Avenue by extending the no parking lines exiting Fairway Avenue to the right.	Reject
Open Space and Green Space				
Celine Holmes	3.1	Oppose	PROVIDE a comprehensive assessment of the loss of recreational land against current and future community needs.	Accept in part
Jennifer Taplin	5.1	Oppose	PROVIDE acknowledgement of the value of the golf course green space.	Accept in part
Keryn Hawkes	6.1	Oppose	REJECT the proposed zoning.	Reject
Joss Hooker	FS 27.4 (6.1)	Support	ACCEPT submission point 6.4 AND REJECT the proposed rezoning.	Reject
Mount Maunganui Intermediate	19.1	Amend	AMEND to include requirements within the plan change relating to landscaping that: Retains existing boundary vegetation wherever practicable; Provides for appropriate replacement planting where removal is unavoidable; Includes species, planting densities and maturity standards appropriate to achieving an effective screening function; Ensure replacement planting is established as early as possible; and includes ongoing maintenance and replacement obligations.	Reject
Reverse Sensitivity				
Keryn Hawkes	6.6	Oppose	REJECT the proposed zoning unless the risk of reverse sensitivity can be mitigated.	Reject
Mount Maunganui Intermediate	19.5	Amend	PROVIDE ongoing engagement with the future developer regarding the effects of construction such as noise, dust, traffic and pedestrian safety.	Reject
Mount Maunganui Intermediate	19.6	Amend	PROVIDE recognition that the Mount Maunganui Intermediate School is an established activity, and that future residents should reasonably expect to experience the associated effects of being located adjacent to an intermediate school.	Accept in part
Mount Maunganui Intermediate	19.7	Amend	AMEND to ensure the plan change and any subsequent development approvals include appropriate measures to manage reverse sensitivity effects.	Reject

11.14 Te Maunga Partnership Programme

File Number: **A21195493**

Author: **Cayley McLean, Principal Strategic Waste Planner**

Authoriser: **Christine Jones, General Manager: Strategy, Partnerships & Growth**

PURPOSE OF THE REPORT

1. To seek Council's endorsement of a proposed partnership programme with Ngā Pōtiki which:
    - Supports kaitiaki oversight of Te Maunga, and
    - Progresses work to rectify and/or mitigate the impacts of Council-related activities in the wider Te Maunga area.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Te Maunga Partnership Programme".

(b) Endorses the programme approach as set out in **Attachment 1** as a starting point, to be refined with Ngā Pōtiki, noting that this does not indicate any intention on land transfer, relocation of activities or capital projects.

(c) Supports Council and Tāheke – Bay Waters working together to fund the $1,200,000 programme through the 2027-2037 Long Term Plan and Water Services Strategy, with the funding shares to be discussed and reported back to Council on 15 December 2026, in recognition of the impact of waters activities on the Te Maunga area and the concerns raised by Ngā Pōtiki.

EXECUTIVE SUMMARY

2. Te Maunga is an important and complex site. Council's wastewater plant, closed landfill, waste facilities and Baypark sit alongside the cultural relationship, interests and aspirations of Ngā Pōtiki. Ngā Pōtiki have raised concerns for many years about the cumulative impact of this infrastructure on Te Tāhuna o Rangataua (the bay) and on them. On 7 September 2026, the City Future Committee asked staff to report back with options to rectify or mitigate the impact of Council activities in the wider Te Maunga area. This report is that response.

3. Council and Ngā Pōtiki need a coordinated way to bring together existing commitments, current issues and longer-term opportunities for restoration, land use, infrastructure planning and partnership. A 3-year programme (2027/28 to 2029/30) is proposed, to be carried out jointly by Ngā Pōtiki, Council and Tāheke – Bay Waters. Ngā Pōtiki have helped shape Attachment 1 and agree with it in principle, however further work will be required to refine it.

4. The proposed programme has five workstreams running in parallel:

Workstream	What it covers	Funding in this report
1. Partnership, governance and Ngā Pōtiki engagement	A Te Maunga Addendum to the 2017 Relationship Agreement and a funding agreement, a joint governance group, and engagement funding so Ngā Pōtiki can take part as a partner in all workstreams, including access to specialist advice.	$450,000 ($150,000 a year)
2. Information stocktake	Brings together information on consents, activities and	None. Council staff, within existing budgets.

Workstream	What it covers	Funding in this report
	commitments across Te Maunga.	
3. Restoration of Te Tāhuna o Rangataua	Four stages: review existing data (the baseline); develop and test a restoration plan and a Ngā Pōtiki-led kaitiaki monitoring plan; carry out the restoration plan; and carry out the monitoring plan.	$610,000. Carrying out the restoration plan (Stage 3) not yet costed.
4. Shared vision and spatial plan	A shared long-term vision and spatial plan for Te Maunga, developed together.	$140,000 for workstreams 4 & 5 combined
5. Priority projects	Early work on projects such as Ōhōtūtaihi Pā: land-status checks, interim site care, an options report, and facilitation and hui costs. It does not include any land transfer or development costs.	
Total Costs over 3 years		**$1,200,000** ($400,000 per yr average)

The aim is practical results on the ground while the longer-term relationship, shared vision and land matters are worked through together.

5. As the programme partly responds to the cumulative effects of waters related activities in the Te Maunga area, Council will discuss with Tāheke – Bay Waters how the costs are shared, with the funding split to be determined and reported back to Council on 15 December 2026.

6. Endorsing the programme does not decide land returns, relocation of activities or new capital projects. These matters will be addressed as separate decisions, set out under “How the Decisions Fit Together”.

BACKGROUND

7. **The 2025 decision.** In September 2025, Council acknowledged Ngā Pōtiki’s cultural and environmental concerns about Council activities at Te Maunga, and the significance of Te Maunga and Te Tāhuna o Rangataua to their culture, traditions and ancestral landscape. Council agreed to work towards a Memorandum of Understanding and to use co-design, where appropriate and practical. It kept responsibility for the technical design and operation of core infrastructure, and recognised that many existing activities cannot realistically be moved because of earlier investment, operational dependencies and regulatory or contractual limits.

8. **The 2026 decision.** On 7 September 2026, the City Future Committee endorsed Te Maunga as the preferred eastern corridor location for the waste drop-off facility, to go to a detailed business case. Elected members will make the final decision once that business case is presented. The Committee noted this differs from the Ngā Pōtiki view that Te Maunga fails the cumulative-burden “fatal flaw” test, acknowledged the cumulative burden identified in the Ngā Pōtiki Cultural Assessment, and confirmed Council’s commitment to work in partnership with Ngā Pōtiki. It asked staff to report back with options to rectify or mitigate the impact of Council activities in the wider Te Maunga area, which may include actions elsewhere in the wider Ngā Pōtiki rohe.

9. **Core activities are staying.** The wastewater treatment plant will stay for the life of the significant investment already made. The waste drop-off facility is proposed to be upgraded on its current site, subject to the final decision above, and Baypark’s recreation facilities will remain. Tāheke – Bay Waters, the new water services organisation, will own the wastewater

assets from 1 July 2027. Because these activities are staying, the programme focuses on other practical responses to Ngā Pōtiki's concerns: restoration of the bay, cultural monitoring, land matters and how the parties work together.

10. **Why act now.** Ngā Pōtiki have raised the impacts of hosting city-wide infrastructure at Te Maunga for many years. A joint programme shows Council has listened, supports a healthier harbour with restoration planned from 2027/28, and supports Ngā Pōtiki as kaitiaki, including monitoring cultural health alongside environmental health. It brings connected issues together instead of dealing with them project by project, which also reduces the load on Ngā Pōtiki, and reduces the risk of delay, dispute and extra cost on current work such as the waste drop-off facility, closed landfill consents and the transfer of wastewater assets and associated land to Tāheke – Bay Waters. Te Maunga is not the only potential influence on Te Tāhuna o Rangataua, as other discharges into the harbour also contribute to its condition, and the baseline review will look at the state of the bay as a whole.

11. **Cultural mitigation and cumulative effects.** At a hui on 22 May 2026, Council executive staff and Ngā Pōtiki agreed in principle that cultural mitigation measures already identified in Ngā Pōtiki's cultural assessments would be built into project planning and, where funding is needed, Long-Term Plan budgeting from the start. Ngā Pōtiki's Cultural Assessment (17 August 2026), undertaken for the Waste Drop-Offs Detailed Business Case, says the only pathway capable of materially changing its conclusion that Te Maunga fails the cumulative-burden test (for the transfer station to stay at Te Maunga) is a deliberate, funded and accountable programme of restoration and cumulative-effects management across Te Maunga and Te Tāhuna o Rangataua, developed with Ngā Pōtiki and including meaningful cultural and environmental monitoring. This programme is intended to respond to that direction, but Ngā Pōtiki have not said that it meets that test.

12. **Status of Attachment 1.** Council staff prepared Attachment 1 in time to make a provisional request for the Long-Term Plan 2027–37, balancing what Council may have appetite for with what Ngā Pōtiki have asked for. Known Ngā Pōtiki aspirations are reflected where possible, though Ngā Pōtiki may propose something different on some points. In particular, they support engagement funding of $150,000 a year only ($450,000 over the three-year period). Detailed scopes and delivery arrangements will be developed with them, and direction and decisions rest with elected members.

13. **Existing work continues and live issues are not parked.** Work already under way continues through its own budgets and decision processes and is not funded by this programme. This includes closed landfill consents and upgrade works, the waste drop-off business case, the Goodwood, Materials Recovery Facility (MRF) and Pete's Takeaways leases, the wastewater Kaitiaki Monitoring Plan and the Wastewater Programme Business Case. It also includes the air discharge consent appeal: an Environment Court appeal by Ngā Pōtiki against the Bay of Plenty Regional Council's decision on Enviro NZ's application for a short-term renewal of its consent to discharge odour and dust to air from the Te Maunga Waste Transfer Station. Enviro NZ, not Council, holds the consent. The appeal is on hold while Council and Ngā Pōtiki work through the future of waste activities at Te Maunga. Each matter Ngā Pōtiki have raised is sorted into existing work, matters needing early, targeted work, or longer-term matters.

14. **Working with Tāheke – Bay Waters and others.** Close collaboration is needed with everyone based at Te Maunga, in particular Tāheke – Bay Waters, which takes over the wastewater assets, with associated land proposed to transfer, on 1 July 2027, and Bay Venues, which manages Baypark. Before 1 July 2027, Council will work with Waters and Tāheke – Bay Waters to confirm how relevant commitments to Ngā Pōtiki (such as participation, information sharing and monitoring) continue after the transfer, and which responsibilities stay with Council. Tāheke – Bay Waters joins programme governance from 1 July 2027.

15. **Draft outcomes.** The programme aims for clear ways of working and more trust and transparency between Ngā Pōtiki and Council. It aims for a better understanding of the state of the bay, restoration with measurable improvements, and a reduction over time in

cumulative environmental effects and cultural burden. It aims for priorities informed by Ngā Pōtiki aspirations, including the Pāpaka Model where relevant. In the Pāpaka (crab) Model, the body is a shared set of principles and values and the legs are the individual projects worked through in line with them. And it aims for a shared view of the future of Te Maunga, with a pathway for considering land aspirations including Ōhōtūtaihi Pā. These outcomes are draft and will be refined with Ngā Pōtiki.

16. **Important limitations.** These points apply throughout this report and are not repeated in each section. Ngā Pōtiki have helped shape the programme and agree with it in principle, however further work will be required to make refinements. Endorsing the programme does not approve any land return, relocation of activities or capital project. Each would need its own decision (see "How the Decisions Fit Together"). The funding is a planning provision only, not approval to spend, and Tāheke – Bay Waters' contribution is subject to its own decision.

PROPOSED PROGRAMME (ATTACHMENT 1)

17. The proposed draft three-year programme (2027/28 to 2029/30) is set out in attachment 1. It is intended to be carried out jointly by Ngā Pōtiki, Council and Tāheke – Bay Waters (from 1 July 2027), with tenants and operators of Council-owned sites taking part where relevant. It sets out what will be delivered, how the work is organised and how it will be held to account. The funding for this programme is shown in this report.

18. The work is in five workstreams that run in parallel, summarised in the table at paragraph 4. Detailed scopes would be agreed with Ngā Pōtiki once funding is confirmed.

19. Governance would be established through a Te Maunga Addendum, funding agreement and joint governance arrangements, with further detail in Attachment 1. Next steps are set out at the end of this report.

20. Restoration of Rangataua Bay is proposed to be delivered in four stages:

    (a) Stage 1; reviews existing data and monitoring to see whether the data provides a clear picture of the state of the bay (the baseline). If not, the parties agree what else is needed and who does the work (for example a PhD student, an agreed person or a consultant).

    (b) Stage 2; develops and tests a restoration plan and a Ngā Pōtiki-led kaitiaki monitoring plan. Both plans are live documents, reviewed as the work progresses and updated where appropriate.

    (c) Stage 3; carries out the restoration plan; and

    (d) Stage 4; carries out the monitoring plan. What is restored, and where, is agreed with Ngā Pōtiki. The wastewater Kaitiaki Monitoring Plan stays separate, with Tāheke – Bay Waters and the three iwi (Ngā Pōtiki, Ngāi Te Rangi and Ngāti Ranginui).

HOW THE DECISIONS FIT TOGETHER

21. Many decisions and activities at Te Maunga are connected, and what is decided on one can influence others. This section sets out what has been decided, what is still to come and what will inform each decision. "Council" means Tauranga City Council as an organisation. For matters still to come, who decides (elected members, the executive team or staff) is to be confirmed unless a resolution or this report already sets it. Each decision stays with the relevant decision-maker.

Decisions made

22. **2025 and 2026 decisions.** Council's decision of 16 September 2025 gives the mandate for this programme. The City Future Committee's decision of 7 September 2026 asked staff to report back on options, which this report provides (both are described in the Background). The final location of the waste drop-off facility is still to come (see below).

Decisions still to come – this programme

23. **Endorsement and funding – Council, 1 December 2026 (this report).** Decides whether to endorse the programme and include a funding provision in the draft Long-Term Plan 2027–37. Tāheke – Bay Waters makes its own decision on its contribution before the Long-Term Plan is adopted, with the proposed funding shares reported back to Council on 15 December 2026.

24. **Te Maunga Addendum and funding agreement – Council and Ngā Pōtiki, by June 2027.** This is the Memorandum of Understanding Council agreed to work towards in September 2025, proposed as an addendum to the 2017 Relationship Agreement. It sets how the parties work together and when engagement funding starts (1 July 2027), informed by the review of the 2017 Relationship Agreement and Ngā Pōtiki's engagement work plan.

25. **Restoration and monitoring – agreed jointly with Ngā Pōtiki, from 2027/28.** The restoration sites, kaitiaki monitoring plan and annual work plans are decided together once the Stage 1 baseline review and the cumulative effects identified in Ngā Pōtiki's cultural assessments show what is needed. Any move of Council funding between lines needs Council approval.

26. **Ōhōtūtaihi Pā and other land requests – Council, options from 2027/28.** Ngā Pōtiki are seeking return of Ōhōtūtaihi Pā, a pā site of cultural significance close to Baypark, and have asked whether other Te Maunga land is surplus. The programme confirms the location and extent of the pā, checks land status and prepares options for decision. Any decision rests with Council, informed by the land-status checks, the shared vision and spatial plan, and Council's and Tāheke – Bay Waters' future land needs. Where land is proposed to transfer to Tāheke – Bay Waters under the Transfer Agreement, Tāheke – Bay Waters would also be involved as the proposed landowner.

Decisions still to come – other activities at Te Maunga

27. **Waste drop-off facility location – Council, once the detailed business case is presented (timing to be confirmed).** Decides where waste drop-off facilities will be, informed by the detailed business case. Ngā Pōtiki's request about the transfer station is linked to this decision, as is the air discharge consent appeal described in the Background, which is on hold.

28. **Materials Recovery Facility (MRF) – Council.** Council has not decided the future of the MRF. The drop-off facility decision will be a big factor, because it would likely be more efficient to have the MRF next to the transfer station, and if the transfer station were to move, the MRF could potentially move too. Council also needs to decide whether it wants to keep providing its land for this type of facility, in line with its strategic direction, and would set criteria for when a facility should stay on Council-owned land, including clear community benefits and the service the operator provides. Regional work (given multiple councils rely on this MRF) will inform the best location and the ownership and operating models. For now, Council's options are limited by the existing lease, which runs to 2030 and is due to transfer to another contractor, with arrangements running to 2037.

29. **Pete's Takeaways – Council.** Council will decide whether Pete's Takeaways stays at Te Maunga or moves, using the same criteria as for the MRF, and will take into account the concerns raised by Ngā Pōtiki (see Consultation / Engagement) as well as the community and business service the operator provides, including whether any alternative arrangements are needed or appropriate. Council will then tell Pete's Takeaways the outcome and allow enough time to plan a move if needed. This is a separate decision from the MRF.

30. **Goodwood – Council.** As with the MRF, the future of Goodwood depends on whether Council wants to keep providing its land for this activity, using the same criteria, and is also informed by Regional Council consents. Council will consider the concerns raised by Ngā Pōtiki alongside these criteria, as well as the community and business service the operator provides, including whether any alternative arrangements are needed or appropriate. For now, Council's options are limited by the lease, which runs to 2037.

31. **Closed landfill – Council, through its consent and upgrade processes.** In progress. The decisions are about which best practicable options (BPO) are put in place. A BPO is the most

effective, reasonably practical way to reduce the effects of the landfill's discharges on the environment, taking account of cost and what is technically possible. The options respond to the BOP Regional Council abatement notice. Consent applications lodged in October 2024 are on hold, and consent for the immediate upgrade works was lodged in April 2026. The abatement notice requires the works to be completed by 31 December 2026, and an extension is being considered by the BOP Regional Council.

32. **Transfer Agreement – Council and Tāheke – Bay Waters (draft by December 2026, final by July 2027).** Decides how wastewater assets, associated land, functions and commitments transfer, and how commitments to Ngā Pōtiki continue after 1 July 2027 and includes the future of the Wastewater Management Review Committee. Consent RC62878 sets the committee's oversight role and requires iwi and hapū representation.

33. **Wastewater growth, oxidation ponds, biosolids and marine outfall – Tāheke – Bay Waters, through the Wastewater Programme Business Case (shortlist in 2027; timing to be confirmed).** This informs the future requirements of the Te Maunga plant and the outfall system, including the ponds and wetlands (the marine outfall consent expires 2040).

34. **Stormwater effects and Baypark – to be confirmed.** Not yet defined. Ngā Pōtiki are clarifying what they are asking for and the outcome they want, and these will be scoped with them first.

35. **Later – relocation of activities, capital projects and funding beyond 2029/30.** Council, through Annual Plans and Long-Term Plans, each with its own business case. Informed by the baseline, restoration priorities and spatial plan from this programme, and by the decisions above.

STATUTORY CONTEXT

36. The Local Government Act 2002 requires Council to support Māori participation in decision-making. For significant decisions about land or water, Council must also consider Māori relationships with ancestral land, water and taonga. This programme would help meet these requirements, but the Act does not require this particular programme or funding model. (Local Government Act 2002, ss 4, 14, 77 and 81.)

37. Funding goes through Council's normal planning and financial processes. Section 101 now requires particular regard to the purpose of local government (section 10) and core services (section 11A). Including funding in the draft Long-Term Plan is a proposal for consultation, not final approval. (Local Government Act 2002, ss 93 and 101; Local Government (System Improvements) Amendment Act 2026, ss 6, 7 and 19.)

38. This programme does not replace consents or compliance obligations. Resource Management Act decisions must recognise Māori relationships with ancestral land and water, have particular regard to kaitiakitanga, and take account of Treaty of Waitangi principles. Existing consent conditions still apply. Future works or changes to activities need their own approvals, including the transitional requirements under the new planning system. (Resource Management Act 1991, ss 6–8; government guidance on transitional consenting, updated September 2026.)

STRATEGIC ALIGNMENT

39. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	☐
We are a city that supports business and education	☐
We are a vibrant city that embraces events	☐

40. The recommendation supports two of the selected community outcomes:

    (a) **We are an inclusive city:** it strengthens the partnership with Ngā Pōtiki and gives them dedicated capacity to take part in decisions affecting Te Maunga.

    (b) **We value, protect and enhance the environment:** it proposes restoration of Te Tāhuna o Rangataua, environmental and cultural monitoring, and work to address the cumulative impacts of Council-related activities.

OPTIONS ANALYSIS

41. Each decision below links to a recommendation and has a recommended option and an alternative. Whether Tāheke – Bay Waters contributes is its own decision, so it is not an option for Council to decide. Council is asked only to support Council and Tāheke – Bay Waters working together on the funding shares (recommendation (c); see Financial Considerations).

Decision 1: Programme approach (recommendation (b))

Option	What it involves and gives	Trade-offs
Option 1: **Endorse the approach in Attachment 1, subject to refinement with Ngā Pōtiki (recommended)**	A coordinated response to Council's 2025 and 2026 commitments, bringing restoration, monitoring, land investigations and partnership together. It enables initial work and Long-Term Plan planning.	Ngā Pōtiki agree with the approach in principle, but further work will be required to make refinements. Endorsement is therefore a starting point, with scope, priorities and delivery arrangements developed together and material changes reported back.
Option 2: **Continue to deal with issues case by case, with no support for engagement with Ngā Pōtiki (not recommended)**	This is the current approach. Each issue (such as consents, leases, the closed landfill and the drop-off facility) is dealt with separately through existing budgets and processes, with no dedicated support for engagement with Ngā Pōtiki. This is not a staff recommendation and is not supported by Ngā Pōtiki.	The current approach is not working well. It is not an efficient use of anyone's time, with many crossovers between issues and no coordinated approach to restoring the bay. It leaves the 2025 and 2026 commitments without a coordinated or funded response, with risks to trust and Council's credibility. Restoration planning and engagement funding (due to start 1 July 2027) would not progress.

Decision 2: Long-Term Plan funding (recommendation (c))

Option	What it involves and gives	Trade-offs
Option 1: **Endorse the full $1.2M programme, with funding shares between Council and Tāheke – Bay Waters to be determined and reported back to Council on 15 December 2026 (recommended)**	The programme costs $1.2M over three years, about $400,000 a year on average. This is made up of $450,000 for Ngā Pōtiki engagement funding, $610,000 for restoration of Te Tāhuna o Rangataua and $140,000 for joint projects. Inclusion in the draft LTP and Water Services Strategy is not final funding approval. Spending would still depend on agreed scope and checks against existing budgets.	The share to be funded by Tāheke – Bay Waters is not yet agreed. Staff will report the proposed funding shares back to Council on 15 December 2026. The provision does not fund carrying out the restoration plan, which is not yet costed.
Option 2: **Endorse a programme with a larger or smaller scope, and a**	Council could include a smaller or staged amount, which has a lower initial cost.	A smaller or staged amount means a narrower scope or slower delivery, with priorities agreed with Ngā Pōtiki. Making no provision would leave

corresponding larger or small budget.	engagement funding and restoration without a confirmed funding pathway from July 2027, because existing budgets have not been shown to cover them. If this option is chosen, Council should say what it will still deliver, from which budgets and by when.

FINANCIAL CONSIDERATIONS

42. The proposed programme costs $1.2M over 2027/28 to 2029/30, about $400,000 a year on average. Discussions are underway with Tāheke – Bay Waters on appropriate funding shares and this will be reported back to Council on 15 December 2026 (see Important limitations in Background section). Scope, annual amounts and delivery arrangements will be refined with Ngā Pōtiki before money is committed, and no funding beyond June 2030 is committed.

What the funding covers.

43. Ngā Pōtiki engagement funding ($450,000 total, or $150,000 a year) enables Ngā Pōtiki take part as a partner in all the workstreams, including access to specialist advice. It is not funding for a single full-time role and is expected to involve a team.

44. Restoration of Te Tāhuna o Rangataua ($610,000) covers the baseline review (Stage 1), developing and testing the restoration and monitoring plans (Stage 2) and carrying out the Ngā Pōtiki-led monitoring plan (Stage 4). Carrying out the restoration plan (Stage 3) is not yet costed.

45. Joint projects ($140,000) cover the shared vision and spatial plan, Ōhōtūtaihi Pā land-status checks, interim site care and an options report, and facilitation and hui costs for other priority projects. They exclude any land transfer or development costs.

46. A separate rohe-wide spatial plan that Ngā Pōtiki may seek funding for through Council's Takawaenga Unit is not included.

47. The information stocktake needs no programme funding and is delivered by Council staff within existing budgets.

How the funding works.

48. The $1.2M is a total provision, not a fixed amount for each line, because what the parties learn about the bay will shape what happens next. Funding can move between lines only when agreed through governance with Ngā Pōtiki, with Council approval for Council funding. Any extra funding needs a separate decision by elected members.

49. Council's current view, informed by advice from Waters, is that a lot of environmental monitoring information for Te Maunga already exists. This is a planning assumption that has not been agreed with Ngā Pōtiki. Ngā Pōtiki's Cultural Assessment (August 2026) says there is no baseline showing how degraded the receiving environment is, and no monitoring that can track whether it is improving or getting worse. The Stage 1 review will test both views. Before money is drawn down, staff will confirm with Ngā Pōtiki and Tāheke – Bay Waters what existing commitments, including the wastewater Kaitiaki Monitoring Plan, already cover, so no work is funded twice.

50. The wastewater Kaitiaki Monitoring Plan and the existing Environmental Mitigation and Enhancement Fund (EMEF) stay separate until the parties work out whether and how they could be brought together, if at all. Part of the work will be for the parties to identify together the best way to fund this work from here, taking existing KMP and EMEF funding into account so there is no double-up. This includes considering whether the EMEF remains the best mechanism, or whether wider funding from all activities that affect the bay could be

available, with this programme as part of that. Funding will only be spent if required, and only once scope is clear and governance is confirmed.

Contribution from Tāheke – Bay Waters.

51. Tāheke – Bay Waters is the third party to the programme and will own the wastewater assets at Te Maunga from 1 July 2027, with the associated land proposed to transfer to it under the Transfer Agreement. The wastewater plant, oxidation ponds and related discharges are part of the cumulative effects on the bay that the programme responds to. Tāheke – Bay Waters also benefits from the work, through a clearer picture of the state of the bay, stronger relationships with Ngā Pōtiki and more certainty for the long-term operation of the plant. Together with the cultural concerns raised by Ngā Pōtiki, these matters will inform discussions on the funding shares, which will be reported back to Council on 15 December 2026.

Other funding, timing and what is not covered.

52. Restoration may also be funded in other ways, such as grants. Projects identified through the programme could also apply to the Environmental Mitigation and Enhancement Fund (EMEF), which funds up to 50% of a project's cost. Wastewater activities already contribute to ecological restoration and enhancement in Te Tāhuna o Rangataua, including through the EMEF, which was established under condition 19 of Consent RC62878, and the wastewater Kaitiaki Monitoring Plan. These existing contributions continue and will be recognised and taken into account when the funding shares are determined. Funding is for the financial year 2027/28 forward.

53. Funding is for the financial year 2027/28 forward. Work prior to 1 July 2027 will utilise existing staff and existing budgets. The provision does not cover years after 2029/30 (the cost of a full restoration project is not yet known), the wastewater Kaitiaki Monitoring Plan (which stays with Tāheke – Bay Waters), existing projects (which continue through their own budgets), or future capital projects, land transfers or relocation of activities (which need separate business cases and funding decisions).

RISKS AND LEGAL IMPLICATIONS

54. **Partnership and expectations.** Ngā Pōtiki and Tāheke – Bay Waters have had limited time to contribute to the preliminary programme. Endorsement could be read as Council having already settled its priorities and how the work will be delivered (see Important limitations for what endorsement does not decide). This is managed by making the preliminary status clear, refining scope and priorities together, and keeping funded investigations separate from decisions reserved for later. The Addendum should record how differences are handled and how Ngā Pōtiki input shapes decisions.

55. **Not proceeding.** Continuing to deal with issues case by case without a programme (Option 2 under Decision 1) could undermine confidence in Council's follow-through on its earlier resolutions, delay restoration and land investigations, and leave engagement fragmented and inefficient. Disputes, delays and extra costs are possible but have not been quantified. The earlier resolutions do not commit Council to this particular funding amount or model, and this report does not suggest that declining would itself be a legal breach. If another approach is chosen, the decision should say how the earlier commitments will be met, with responsibilities, resources and timeframes shared with Ngā Pōtiki.

56. **Financial and delivery risk.** Costs and scope are indicative. The cost of a full restoration project is not yet known, so the $1.2M may not be enough if the baseline review finds bigger gaps than expected. Delivery relies on existing Council staff capacity, Ngā Pōtiki confirming its engagement team, and coordination across five workstreams. This is managed by treating the funding as a total provision that can move between lines (with Ngā Pōtiki's agreement and Council approval), releasing it against milestones, and staging delivery through annual work plans. Reduced engagement funding means a smaller workload, not the same delivery.

No external co-funding is assumed, and any funding beyond June 2030 needs a separate decision.

57. **Tāheke – Bay Waters contribution.** The share to be funded by Tāheke – Bay Waters is not yet agreed and depends on its own decisions. Staff will report the proposed funding shares back to Council on 15 December 2026. This is managed by recording any agreed contribution in the Addendum or transfer arrangements. A contributing party also has a say over how funding is used, which adds complexity to changing funding between lines.

TE AO MĀORI APPROACH

58. The programme aligns with Council's Te Ao Māori approach by supporting partnership with Ngā Pōtiki, enabling kaitiaki involvement in restoration and monitoring, recognising the cultural significance of Te Maunga, and providing a pathway to progress Ngā Pōtiki aspirations through collaborative planning and decision-making. Alignment depends on how the programme is developed and delivered, so priorities, cultural outcomes and measures of success will be refined together, and Ngā Pōtiki retain authority over the sharing and use of their mātauranga Māori.

CLIMATE IMPACT

59. Restoration of Te Tāhuna o Rangataua is the main environmental benefit, developed with Ngā Pōtiki as kaitiaki. Sites, methods and measures of success are still to be confirmed.

60. The recommended programme has no direct or material effect on adapting to climate change or reducing emissions.

CONSULTATION / ENGAGEMENT

61. Staff have worked with Ngā Pōtiki through a series of hui to develop the programme. These hui identified the issues, projects and matters Ngā Pōtiki want addressed and the possible responses, and agreed that funding in the Long-Term Plan is needed so that Council and Ngā Pōtiki can act on them in a meaningful way.

62. At a high level, the concerns raised by Ngā Pōtiki cover a range of issues, including the cumulative effects of infrastructure on Te Tāhuna o Rangataua, wastewater discharges, odour and dust from waste activities and the closed landfill, and the return of land such as Ōhōtūtaihi Pā.

63. Ngā Pōtiki have helped shape Attachment 1 and agree with it in principle, however further work will be required to make refinements. In particular, they support engagement funding of $150,000 a year only. Scope, priorities and delivery arrangements will continue to be developed with them. If the funding is included, the draft Long-Term Plan 2027–37 will go through its own public consultation.

SIGNIFICANCE

64. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

65. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) The current and future social, economic, environmental, or cultural well-being of the district or region

    (b) Any persons who are likely to be particularly affected by, or interested in, the decision.

    (c) The capacity of the local authority to perform its role, and the financial and other costs of doing so.

66. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the decision is of medium significance. Te Maunga is a site of high cultural importance and sensitivity to Ngā Pōtiki, it has significant ecological value, and it is home to essential city infrastructure. Ngā Pōtiki and others therefore have a strong interest in what happens there. The significance is kept at medium because this decision only endorses a provisional programme and includes a funding provision in the draft Long-Term Plan (see Important limitations in Background).

ENGAGEMENT

67. Taking into consideration the above assessment, that the decision is of medium significance, officers are of the opinion that no further engagement is required prior to Council making a decision. However, the Committee may determine that further engagement or consideration of additional information is appropriate.

NEXT STEPS

68. If Council endorses the programme, staff will take the following steps. Attachment 1 sets out the proposed programme in more detail.

    (a) **Secure the funding.** Work with Tāheke – Bay Waters on the funding shares, reporting back to Council on 15 December 2026.

    (b) **Agree the Addendum and funding agreement.** Work with Ngā Pōtiki to agree the Te Maunga Addendum to the 2017 Relationship Agreement and the funding agreement by June 2027. These set how the parties work together, how the programme is governed and how funding is released. Engagement funding starts on 1 July 2027.

    (c) **Scope the work with all parties.** Once funding is confirmed, agree detailed scopes, priorities and annual work plans with Ngā Pōtiki, Tāheke – Bay Waters and the other parties involved, including tenants and operators where relevant.

    (d) **Start the stocktake and land-status work.** Begin the information stocktake of consents, activities and commitments across Te Maunga, and the Ōhōtūtaihi Pā land-status work, using existing staff and budgets.

    (e) **Establish the baseline.** From 2027/28, review existing data and monitoring to confirm the state of the bay. This will inform the restoration and kaitiaki monitoring plans.

    (f) **Confirm the transfer to Tāheke – Bay Waters and set up governance.** Before 1 July 2027, confirm how commitments to Ngā Pōtiki continue after the wastewater transfer, including through the Shared Services Agreement. Set up a joint governance group, which Tāheke – Bay Waters joins from 1 July 2027. Further governance detail is in Attachment 1.

ATTACHMENTS

1. Te Maunga and Te Tahuna o Rangataua Programme Framework - 1 December 2026 - A21472700 ⇩

Te Maunga and Te Tāhuna o Rangataua – Programme Framework

Attachment 1 – 1 December 2026, Council Meeting

1. Overview

This framework is a draft proposal, based on the information available at this point in time, for a programme of work at Te Maunga. It is a joint effort. Ngā Pōtiki, Tauranga City Council (Council) and Tāheke – Bay Waters are the three parties to the programme. The other parties with activities at Te Maunga, including tenants and operators of Council-owned sites, take part where relevant (together, the parties). The framework proposes what will be delivered, how the work is organised, how it will be held to account, and the funding requested.

The work is organised into five workstreams that are all carried out in parallel:

1. Partnership, governance and Ngā Pōtiki engagement;
2. Information stocktake (consents, activities and commitments across all of Te Maunga)
3. Restoration of the bay:
    - Stage 1 Review the data and monitoring that already exist, to see whether they give a clear picture of the state of the bay (the baseline). If the parties agree they do, the work moves straight on. If they do not, the parties agree what else is needed and a plan to get the full baseline.
    - Stage 2 develops and tests a restoration plan and a monitoring plan to address the issues the baseline identifies.
    - Stage 3 implements the restoration plan.
    - Stage 4 implements the monitoring plan
4. Te Maunga shared vision and spatial plan
5. Priority projects from the Issues and Projects Register (such as the Ōhōtūtaihi Pā work). Workstream 5 is not limited to the first three years.

The parties agree which projects to take first, in order of priority, and the rest are progressed over time. Plans are treated as live documents, reviewed as the work progresses and updated where appropriate.

The proposal will be refined as the parties work through the detail, and is the starting point for what the parties agree to do together. How Ngā Pōtiki and Council work together is set out in the 2017 Relationship Agreement and in a Te Maunga Addendum to that agreement, which is still being drafted. The Addendum focuses on Te Maunga and associated infrastructure, and is intended to move away from transactional engagement toward working through issues, joint planning and partnership opportunities together. Tāheke – Bay Waters and the other parties are expected to take part in and help carry out the agreed work, with their roles agreed through the Addendum or other arrangements, and subject to their own processes.

In this framework, “the bay” means Te Tāhuna o Rangataua, and “Council” means Tauranga City Council. Where it matters, the framework says “Council staff” or “elected members”. “Tāheke – Bay Waters” means the new water services organisation that owns the wastewater assets from 1 July 2027 and takes over those functions from Council’s Waters team. Until then, Council’s Waters team carries out that work.

2. How the Work Is Organised

The five workstreams are carried out in parallel, at different speeds. Detailed scopes will be agreed with Ngā Pōtiki and the other parties once funding is confirmed.

Workstream	What it does	Lead and resourcing
1. Partnership, Governance and Ngā Pōtiki Engagement	• Council and Ngā Pōtiki agree the Te Maunga Addendum to the 2017 Relationship Agreement, which sets out how they work together on Te Maunga and associated infrastructure. Tāheke – Bay Waters is a party to the programme and takes part from 1 July 2027, with its role agreed through the Addendum or other arrangements. Other parties, such as tenants and operators, are involved where relevant. Simple governance arrangements and an annual review are also agreed. • Council and Ngā Pōtiki start the review of the 2017 Relationship Agreement and agree whether and how the Pāpaka Model[1] should inform the principles used for Te Maunga discussions and decisions. • Ngā Pōtiki engagement is one workstream across the whole programme. Engagement funding, provided through a funding agreement, enables Ngā Pōtiki to take part as a partner in all the workstreams, including access to specialist advice. It is not funding for a single full-time role. Ngā Pōtiki develops and leads its engagement work plan, which has clear milestones and agreed outcomes and is jointly agreed and approved by Council before any funding is provided. Engagement funding takes into account the resourcing Ngā Pōtiki already has to take part in the Wastewater Management Review Committee, the Wastewater Programme Business Case, and the design and implementation of the wastewater Kaitiaki Monitoring Plan, so that this participation is not funded twice, including by Tāheke – Bay Waters.	Joint; existing Council staff; Ngā Pōtiki engagement funding
2. Information Stocktake	• Scope and quality agreed with Ngā Pōtiki before work starts. • Brings existing information on activities, consents, leases projects and commitments across all of Te Maunga into one place, shared with Ngā Pōtiki. Includes the recommendations in Ngā Pōtiki’s cultural impact assessments and how far they have been put in place, and a check on whether consent conditions and agreements are being met. Most wastewater information comes from the 5-yearly MUTR Report. Ngā Pōtiki have been closely involved in that report and have access to its information through the Wastewater Management Review Committee, so the stocktake builds on this rather than repeating it.	Council staff within existing budgets, with the parties working together to gather relevant information; scope agreed jointly with Ngā Pōtiki

[1] The Pāpaka (crab) Model: the body is a shared set of principles and values, and the legs are the individual projects and issues worked through in line with them. How it applies at Te Maunga is to be agreed with Ngā Pōtiki.

Workstream	What it does	Lead and resourcing
	• Checks current and potential commitments, such as the wastewater Kaitiaki Monitoring Plan, and how they fit together. Also provides information on which assets, functions and commitments transfer to Tāheke – Bay Waters. • This is separate from the review of existing data and monitoring for the bay, which is Stage 1 of Workstream 3.	
3. Restoration of Te Tāhuna o Rangataua **(Delivered over 4 stages)**	• Brings together the baseline, restoration and monitoring work for the bay. The parties first review the data and monitoring that already exist, to see whether they give a clear picture of the state of the bay. If they do not, the parties agree what else is needed and a plan to get the full baseline. They then develop and test a restoration plan and a monitoring plan, then implement both. Both plans are live documents, reviewed as the work progresses and updated where appropriate. The stages are set out in section 3. • Cultural and scientific information and monitoring are looked at together. Ngā Pōtiki leads the cultural side and works with Council on how scientific information is brought in. What is restored, and where, is agreed jointly with Ngā Pōtiki and delivered with Ngā Pōtiki as kaitiaki. • Ngā Pōtiki leads a broader kaitiaki monitoring plan for Te Tāhuna o Rangataua and the wider Te Maunga area, covering other Council activities (closed landfill, waste facilities, Baypark). It builds on the existing draft plan, and is jointly agreed and approved by Council before any funding is provided. • The wastewater Kaitiaki Monitoring Plan is kept separate. It continues with Tāheke – Bay Waters and the three iwi (Ngā Pōtiki, Ngāi Te Rangi and Ngāti Ranginui) and is funded by Tāheke – Bay Waters. The two plans will be coordinated with Ngā Pōtiki to avoid duplication, unless the parties identify through the work that they can be merged or one approach used. The wastewater work Ngā Pōtiki have already done over the last 12 months is taken into account, so that work already done on wastewater is not funded again.	Ngā Pōtiki, Council and Tāheke – Bay Waters, with other parties where relevant; programme funding (see section 5). Allowance for gaps agreed jointly. Implementation of the restoration plan is resourced once the plan is developed
4. Shared Vision, Spatial Plan and Future Use Framework	• Ngā Pōtiki, Council and Tāheke – Bay Waters develop a shared long-term vision, spatial plan and future use framework together, with other parties involved where relevant. This includes mapping that shows where views align and differ. Together these are a key reference point for future decisions on Te Maunga. • Where views differ, these are recorded and provided to elected members for direction. Formal decisions on Council land remain with elected members, informed by the framework. • The spatial plan covers Te Maunga. Ngā Pōtiki is also expected to seek funding through Council's Takawaenga Unit for a spatial plan for its whole rohe. That work is kept separate, and the Te Maunga plan will align with and feed into it rather than duplicate it.	Joint; funded through joint projects, including facilitation and mapping
5. Priority Projects from the Issues and Projects Register	• The parties carry out the priority projects listed in the Issues and Projects Register.	Project owners (Council, Tāheke – Bay Waters,

Workstream	What it does	Lead and resourcing
	• The projects are not all tackled at once. The parties agree with Ngā Pōtiki a small number of projects to take first, in order of priority, and the others follow over time. This workstream is not limited to the three years of funding in this framework and continues beyond 2029/30 as needed. • Examples include the transfer station air discharge consent appeal, the Goodwood, Materials Recovery Facility and Pete's Takeaways leases, closed landfill consents, stormwater effects, and land investigations. • Land investigations look into Ngā Pōtiki's land-related requests so elected members can make informed decisions. Ōhōtūtaihi Pā is the priority. They also include checking the status and current use of other Te Maunga land Ngā Pōtiki has raised as potentially surplus and advising which land transfers to Tāheke – Bay Waters, consistent with Council's surplus land policy. • Each project is progressed through its own process and budget, with Ngā Pōtiki involved and progress reported to the joint governance group (see "Live Issues Are Not Parked" below).	tenants and operators) with Ngā Pōtiki. Ōhōtūtaihi Pā work is part of the joint projects funding. Land investigation roles confirmed through the Addendum.

Existing Work That Continues

The following work is already under way and represents significant existing investment. It continues through its own budgets and decision processes and is not funded by this programme. It is included so that all parties can see the full picture in one place:

- Closed landfill consents and upgrade works (Council)
- Waste drop-off facility detailed business case, and the transfer station air discharge consent appeal (Council Solid Waste, Enviro NZ and Ngā Pōtiki)
- Decisions on Goodwood, Materials Recovery Facility and Pete's Takeaways leases (Council)
- Kaitiaki Monitoring Plan for the Tauranga wastewater system, developed with the three iwi: Ngā Pōtiki, Ngāi Te Rangi and Ngāti Ranginui (Tāheke – Bay Waters; development under way, implementation funding to be agreed). A separate, broader Ngā Pōtiki-led plan for the wider Te Maunga area will sit alongside it (Workstream 3). The two plans are likely to assess similar things. This is managed through coordination between the parties, and funding is apportioned appropriately so that no work is funded twice, including by Tāheke – Bay Waters.
- Wastewater Programme Business Case, biosolids assessment and the Wastewater Management Review Committee transition (Tāheke – Bay Waters)

Including this work does not, on its own, commit Tāheke – Bay Waters or any other party to new work or funding. Each party's contribution is confirmed through the Te Maunga Addendum or other arrangements, and through its own decision processes. Ngā Pōtiki's requests for changes to existing activities, such as the relocation of Goodwood and removal of the oxidation ponds, are recorded in the Issues and Projects Register and will be considered through the relevant decision process. The future requirements of the Te Maunga wastewater treatment plant, including the oxidation ponds, are for Tāheke – Bay Waters to understand and determine through its own decision processes, informed by the Wastewater Programme Business Case. This programme does not decide them.

Live Issues Are Not Parked

The stocktakes, shared vision and spatial plan do not replace discussion and resolution of live issues. The Issues and Projects Register will sort each matter into one of three groups:

- **Existing work underway:** continues through its own process, with Ngā Pōtiki involved and progress reported to the joint governance group.
- **Matters needing early, targeted work:** the relevant parties, including Ngā Pōtiki, agree specific actions, assurances or agreements, with an owner and a date, without waiting for the wider programme. Examples include the transfer station air discharge consent appeal, the Goodwood, Materials Recovery Facility and Pete's Takeaways leases, closed landfill consents, stormwater effects, Ōhōtūtaihi Pā and the transfer of wastewater assets to Tāheke – Bay Waters.
- **Longer-term matters:** progressed through the shared vision and spatial plan, monitoring and restoration work.

Agreeing a pathway is not the same as agreeing an outcome. Decisions stay with the relevant decision-maker, but the register will show each party's position, what has been agreed, who decides and when. How each matter is sorted is agreed with Ngā Pōtiki. Being in an existing pathway does not take a matter out of programme oversight.

3. Restoration of Te Tāhuna o Rangataua: The Stages of Work (Workstream 3)

Stage	What you will see	When
Stage 1: Understanding the state of Te Tāhuna o Rangataua (baseline)	• A review of all the data and monitoring that is already happening, or has already happened, at Te Maunga, to see whether it builds a clear picture of the state of the bay. This is separate from the information stocktake (Workstream 2), which covers consents and activities across all of Te Maunga. • The parties decide together whether the existing data is enough. If all parties agree it is, no further baseline work is needed and the work moves straight to identifying restoration projects to test (Stage 2). • If the parties do not agree they have a clear picture of the state of the bay, they work out together what else needs to be done and agree a plan for how to get the full baseline data. Who does the work and how it is delivered are decided together. The approach is open and will be investigated. • Cultural and scientific information brought together into one holistic picture. Ngā Pōtiki leads the cultural side and works together with Council on how the scientific information is brought in.	• Council lead and scope for the review confirmed first (early 2027) • Review of existing data and monitoring carried out through 2027, then a joint decision on whether it is enough • If it is not enough, the plan for getting the full baseline is agreed, then carried out
Stage 2: Develop and test the restoration plan and monitoring plan	• The parties create a plan to address the issues identified in the baseline. Once the state of the bay is understood, whether from the existing data or from further baseline work, they identify restoration projects and test some of them. The projects are not yet decided because they	• Starts in 2027/28, once the parties agree they have a

Stage	What you will see	When
	depend on what the baseline shows. The first three years also build the information needed to scope a full restoration project. • What is restored, and where, is agreed jointly with Ngā Pōtiki, using the baseline results and the cumulative effects identified in Ngā Pōtiki's cultural assessments. Where those assessments have already identified measures to reduce cultural effects, these are taken into account when restoration projects are chosen and planned. • A Ngā Pōtiki-led kaitiaki monitoring plan for Te Tāhuna o Rangataua and the wider Te Maunga area is developed at the same time, taking a holistic approach. Ngā Pōtiki leads the cultural side and works together with Council on how scientific monitoring is brought in. The plan is jointly agreed with Ngā Pōtiki and approved by Council before any funding is provided. It sits alongside the wastewater Kaitiaki Monitoring Plan, which stays separate with Tāheke – Bay Waters, unless the parties identify through the work that the two plans can be merged or one approach used. • Both plans are treated as live documents. They are reviewed as the work progresses and updated where appropriate. • Developing the restoration plan also shows what resources are needed to implement it, which can be different from the resources needed to develop and test it.	clear picture of the state of the bay • Restoration priorities confirmed after the baseline work • Plans confirmed by 2028/29–2029/30, then reviewed and updated as we go
Stage 3: Implement the restoration plan	• The restoration projects in the plan are carried out, delivered with Ngā Pōtiki as kaitiaki and, where possible, alongside Bay of Plenty Regional Council and community programmes. • Implementation needs different resources from Stage 2 and may need more. What is needed and how it is funded is considered once the plan has been developed. • Restoration may be funded in several ways, such as Council funding, external grant funding, contributions from Tāheke – Bay Waters and other sources. Each source is confirmed through its own decision process.	• Starts once the restoration plan is confirmed • Scale and timing depend on the plan and on funding
Stage 4: Implement the monitoring plan	• The Ngā Pōtiki-led kaitiaki monitoring plan is put into action. Monitoring continues after the baseline, to show whether restoration is working, and builds Ngā Pōtiki's skills and capacity. • The review of existing data and monitoring may identify gaps in monitoring. Some of these can be filled early, rather than waiting for the full restoration plan to be developed. • The monitoring plan is a live document, reviewed as the work progresses and updated where appropriate.	• Early gap filling from 2027/28, as the review identifies gaps • Early monitoring under way by 2028/29–2029/30 • Ongoing after that

4. Value and Accountability

Elected members, Ngā Pōtiki and ratepayers need to be able to see what the funding is delivering. This is a programme with three parties: Council, Ngā Pōtiki and Tāheke – Bay Waters. The programme will be held to account in four ways.

1. **Clear milestones and agreed outcomes.** Funding is released against clear milestones and agreed outcomes, set out in a funding agreement between Council and Ngā Pōtiki for engagement funding, and in jointly agreed work plans for baseline, restoration and monitoring work. Examples include the information stocktake being completed and shared, the review of existing bay data and monitoring being completed and assessed together, restoration works delivered with Ngā Pōtiki as kaitiaki, timely Ngā Pōtiki input on projects and consents, progress on the Ōhōtūtaihi Pā options report, and progress on the kaitiaki monitoring plan. The agreement also sets out Council's commitments, such as sharing information early and showing how Ngā Pōtiki input has shaped decisions. Specific milestones and measures will be agreed with Ngā Pōtiki.
2. **Joint review after year one.** The parties will review together how the partnership is working, including engagement funding and governance arrangements, after the first year. This is to check what is working and agree to any changes for years two and three.
3. **Regular reporting.** Six-monthly progress updates to the joint governance group, and an annual progress report to elected members and Ngā Pōtiki, prepared jointly by the parties. The annual report will show what was delivered, what was spent and what is planned next.

5. Funding

The funding requested is $1.2M for the first three years of the programme. It covers the work across all five workstreams, not just the restoration of the bay. For the bay, these years are used to gather the information and develop the plans needed for a full restoration project. The scale and cost of that project are not yet known, and further funding is likely to be sought through the next Long-Term Plan. Planning, coordination and governance are kept small and mostly delivered by existing staff.

Funding will be sought through Tauranga City Council's Long-Term Plan (LTP) and Tāheke Bay Waters Water Services Strategy process and is described in the Council paper Te Maunga Partnership Programme.

How the Funding Works

The funding is a total provision, not a fixed amount for each workstream, because what the parties learn about the bay will shape what happens next. Money can be moved between workstreams as needed. If one workstream costs more than another, funding can be moved to where it is needed. For example, if the baseline work finds bigger gaps than expected, some funding from plan development can be moved to baseline work, or further funding may need to be sought. Funding for implementing the restoration plan is not set now, because it depends on the plan that is developed. The flexibility has limits: each workstream has clear milestones and agreed outcomes, and funding is released when they are met. Any move between workstreams is agreed jointly with Ngā Pōtiki and approved by Council, and any party that contributes funding, including Tāheke – Bay Waters, has a say in how its contribution is used. Any additional funding needs a separate decision by elected members.

Confirming Scope Before Funding Is Used

Some of this work may overlap with existing or planned commitments, such as the wastewater Kaitiaki Monitoring Plan. Before programme funding is drawn down, Council staff will work with Ngā Pōtiki and Tāheke – Bay Waters to confirm:

- what current and potential commitments already cover, including the wastewater Kaitiaki Monitoring Plan, so the broader Ngā Pōtiki-led plan for the wider Te Maunga area complements it rather than duplicating it
- what Ngā Pōtiki engagement funding covers directly
- what is left to fund through the baseline and monitoring work, including the holistic cultural and scientific monitoring approach
- what other funding streams may be available to apply to the work (eg Wastewater Enhancement Fund).

Once the scope is confirmed, the split of funding between workstreams may change within the total provision, with Council approval. Funding will not be drawn down for work that is already covered elsewhere. For Ngā Pōtiki-led work (engagement funding and cultural monitoring), Ngā Pōtiki will advise what it plans to do, and Council will approve the plan before any funding is provided. The work is jointly agreed but developed and led by Ngā Pōtiki.

Ngā Pōtiki Engagement Funding

Engagement funding enables Ngā Pōtiki to put in place capacity to take part in this programme as a partner, rather than responding project by project. It is not funding for a single full-time role. It is funding to enable Ngā Pōtiki to participate, including access to specialist advice, and is expected to involve a team of people. The funding would support Ngā Pōtiki to:

- provide a main point of contact for Council and Tāheke – Bay Waters on Te Maunga matters
- coordinate timely Ngā Pōtiki input on projects, consents and the Issues and Projects Register
- support restoration planning and delivery with Ngā Pōtiki as kaitiaki
- support the Ōhōtūtaihi Pā work, the shared vision and spatial plan, and cultural monitoring
- support governance and reporting under the funding agreement.

Council will provide a named contact for Ngā Pōtiki and access to relevant information and systems to support the work. The funding is intended to cover the cost of Ngā Pōtiki's engagement, including staff time, specialist advice, overheads, travel and equipment. Ngā Pōtiki will develop and lead its engagement work plan and decide how it is staffed. The plan has clear milestones and agreed outcomes, and is jointly agreed and approved by Council before funding is provided.

Possible Additional Funding

Restoration may also be funded in other ways, such as through Council, external grant funding, Tāheke – Bay Waters and other sources. Each source would be confirmed through its own decision process. The funding in this framework does not assume any funding from these other sources. Projects identified through the programme could also apply to the Environmental Mitigation and Enhancement Fund (EMEF), which was established under condition 19 of Consent RC62878 and funds up to 50% of a project's cost. The EMEF is not assumed to fund the restoration work in full. The wastewater Kaitiaki Monitoring Plan and the EMEF stay separate until the parties work out whether and how they could be brought together, if at all. Part of the work is for the parties to identify the best way to fund

restoration from here, taking existing Kaitiaki Monitoring Plan and EMEF funding into account so there is no double-up. This includes considering whether the EMEF remains the best mechanism, or whether wider funding from all activities that affect the bay could be available.

What the Funding Does Not Cover

- **Current year (2026/27):** work this year, including drafting the Addendum, the information stocktake and early Ōhōtūtaihi Pā work, is done by existing Council staff. Engagement funding starts on 1 July 2027.
- **Years after 2029/30:** the cost of a full restoration project is not yet known. Further funding is likely to be sought through the next Long-Term Plan or Takehe – Bay Waters Limited funding processes, once the baseline work shows what is needed.
- **A new Council role:** Council coordination is provided by existing staff. If new Council resource were needed, costs would increase.
- **Wastewater Kaitiaki Monitoring Plan:** the wastewater part stays with Tāheke – Bay Waters, including its implementation.
- **Existing projects:** continue through their own budgets (see section 2).
- **Future capital projects, land transfers or relocation of activities:** these would need separate business cases and funding decisions through future Annual Plans or Long-Term Plans, or the relevant party's own processes (for example Tāheke – Bay Waters).

6. Roles and Governance

Party	Role
Council	• Landowner and decision-maker for its activities and land. • Funds the programme and provides coordination through existing staff. • Shares information, responds to Ngā Pōtiki input, and upholds the 2017 Relationship Agreement. • Elected members make decisions on funding and land.
Ngā Pōtiki	• Partner in the programme. • Leads Te Maunga cultural input and the broader kaitiaki monitoring plan for the wider Te Maunga area, coordinated with the wastewater plan and Ngāi Te Rangi and Ngāti Ranginui. • Decides how Ngā Potiki engagement funding is used within the jointly agreed work plan and milestones, and helps deliver restoration as kaitiaki.
Tāheke – Bay Waters	• Owns wastewater assets from 1 July 2027 and joins governance from that date. • Wastewater decisions continue through its own processes, including the Wastewater Programme Business Case. • Before 1 July 2027, Council will work with Tāheke – Bay Waters to confirm how relevant commitments to Ngā Pōtiki (such as participation, information sharing and monitoring) continue after the transfer, and record which responsibilities stay with Council and which pass to Tāheke – Bay Waters. The consents Tāheke – Bay Waters holds already set requirements for information sharing, participation and monitoring. These are carried into the Addendum or other arrangements, which do not place requirements on Tāheke – Bay Waters over and above them. • Is expected to take part once it takes over, including in the baseline work and the joint spatial plan, and to carry out its part of the agreed work, including the coordination of the wastewater and broader kaitiaki monitoring plans. • May contribute to restoration, including funding. Any contribution is agreed through the Te Maunga Addendum or other arrangements, and its own decision processes, and is not assumed in the funding requested. Any restoration projects that Tāheke – Bay Waters agrees to part-fund would come from the Environmental Mitigation and Enhancement Fund (EMEF), unless agreed otherwise. • Co-funder through contributing to the waters related impacts of this programme of works.
Bay Venues	• Involved where relevant to Baypark.
Tenants and operators of Council-owned sites	• Take part where their activities affect Te Maunga or Te Tāhuna o Rangataua, including in the baseline work. • Expectations are made clear to each tenant and operator through their lease or other agreements, so everyone knows what is expected of them. Roles are agreed with each party as appropriate.

A joint governance group, with representatives of Ngā Pōtiki, Council and Tāheke – Bay Waters (from July 2027), supported by other parties such as Bay Venues, tenants and technical advisors where relevant, will oversee the programme, agree priorities, make funding recommendations, monitor progress and deal with escalated issues. Governance will be kept light, using existing meetings where possible, and reviewed after the first year.

7. Timeline

When	What
Late 2026	• Framework endorsed and funding provision included in the draft Long-Term Plan 2027–37. • Council and Ngā Pōtiki continue drafting the Te Maunga Addendum and agree how the review of the 2017 Relationship Agreement and the Pāpaka Model will be approached.
Nov 2026 – Mar 2027	• Confirm who in Council will lead the information stocktake, then agree its scope with Ngā Pōtiki (Workstream 2), including a check of current and potential commitments (such as the wastewater Kaitiaki Monitoring Plan) to confirm scope and avoid duplication. The stocktake itself is carried out after this, through 2027. • Confirm Council lead for review of existing data and monitoring for the bay, and agree its scope with Ngā Pōtiki (Workstream 3, Stage 1). • Agree actions, owners and dates for live issues needing early work. • Start Ōhōtūtaihi Pā land-status work.
By June 2027	• Milestones and agreed outcomes confirmed for each workstream, including how specialist advice is covered within engagement funding. • Te Maunga Addendum and funding agreement agreed. • Continuity of commitments to Ngā Pōtiki confirmed with Tāheke – Bay Waters. • Ngā Pōtiki confirms its engagement team.
2027/28	• Engagement funding starts on 1 July 2027. • Tāheke – Bay Waters joins governance and takes part in the programme (from 1 July 2027). • Information stocktake completed and shared with Ngā Pōtiki. Review of existing bay data and monitoring completed, and the parties agree whether it gives a clear picture of the state of the bay. If not, a plan for the full baseline is agreed. Development and testing of the restoration plan and monitoring plan starts (Stage 2), straight away if the existing data is enough. • Early filling of monitoring gaps identified by the review of existing data begins (Stage 4). • Ōhōtūtaihi Pā options to elected members. • Shared vision and spatial plan workshops start.
Mid 2028 (calendar year)	• Joint review of how the partnership is working, including engagement funding and governance. • First annual progress report to elected members and Ngā Pōtiki.
2028/29 – 2029/30	• Restoration plan confirmed, then reviewed and updated as it is implemented (Stage 3, as resourced). • Shared vision and spatial plan completed. • Priority projects from the Issues and Projects Register progressed in the agreed order of priority (Workstream 5). This work continues over time beyond 2029/30. • Broader kaitiaki monitoring plan for the wider Te Maunga area confirmed, with early monitoring under way (Stage 4). • Baseline results and restoration plan used to scope a full restoration project and identify the further funding to seek through the next LTP

11.15 Appointment of Co-chair to Matapihi Southern Pipeline Advisory Group

File Number: **A21214845**

Author: **Sarah Holmes, Team Leader: Governance & CCO Support Services**

Authoriser: **Christine Jones, General Manager: Strategy, Partnerships & Growth**

PURPOSE OF THE REPORT

1. To appoint a Council Co-chair to the Matapihi Southern Pipeline Advisory Group, as required by the terms of reference for the group.

RECOMMENDATIONS

That the Council:

(a) Receives the report "Appointment of Co-chair to Matapihi Southern Pipeline Advisory Group".

(b) Appoints *[insert name]* as co-chair of Matapihi Southern Pipeline Advisory Group.

DISCUSSION

2. The purpose of the Advisory Group is to provide strategic oversight and direction over the management of the Southern Pipeline, and meets at least two times per year. Terms of reference and memorandum of understanding (MOU) are included as Attachment 1.

3. The Advisory Group includes eight members being:

   (a) Four representatives appointed by the mana whenua hapū. These are two representatives from Ngāti Tapu and two representatives from Ngāi Tūkairangi; and

   (b) Four representatives appointed by Council – Deputy Mayor Jen Scoular, Cr Rick Curach, Cr Marten Rozeboom, and Cr Kevin Schuler.

4. The terms of reference for the advisory group state that there should be co-chairs - the Chair representing the Council will be appointed by the Council and the Chair representing the hapū will be appointed by the hapū. Staff have recently identified that the Council Chair appointment was not done when the Council initially made appointments to Committees and Advisory Groups at the beginning of this Council term. This report is therefore now presented so this appointment can be made.

5. Responsibilities of the co-chair include:

   (a) Attending pre-agenda briefings and split any other duties outside of meetings, e.g. spokesperson for the Advisory Group.

   (b) Jointly overseeing and coordinating all activities of the Advisory Group within their specific terms of reference and delegated authority, providing guidance and direction to all members and liaising with Council staff in setting the content and priorities of meeting agendas.

   (c) Being accountable for ensuring that any recommendations from the Advisory Group are considered by the Council.

6. The Matapihi Southern Pipeline Advisory Group has the power to recommend to Council and/or any standing committee as it deems appropriate.

NEXT STEPS

7. Notification to the advisory group of the co-chair appointment.
8. Next meeting of the Matapihi Southern Pipeline Advisory Group is on 11 March 2027 (to be held at marae)

ATTACHMENTS

1. Matapihi Southern Pipeline Advisory Group Terms of Reference and MOU - A21296266

Matapihi Southern Pipeline Advisory Group

Membership

Four representatives appointed by the hapū, namely two representatives from Ngāti Tapu and two representatives from Ngāi Tūkairangi	Anthony Fisher (Ngāi Tūkairangi) Josh Gear (Ngāti Tapu) Puhirake Ihaka (Ngāti Tapu) Ngareta Timutimu (Ngāi Tūkairangi)
Four representatives appointed by Tauranga City Council ('Council') (these members will be appointed for a term subject to Council triennial elections and must include one appointed or elected representative)	Deputy Mayor Jen Scoular Cr Rick Curach Cr Marten Rozeboom Cr Kevin Schuler
Co-chairs	Two members appointed as co-chairs • Anthony Fisher • TBD
Quorum	Four members comprised of at least: • Two hapū members - one representative from Ngāti Tapu and one representative from Ngāi Tūkairangi; • Two Council members
Decision-making	Decision-making shall be made by a resolution at a meeting of the Advisory Group. If consensus cannot be reached then the discussions will continue.
Meeting frequency	Shall meet as necessary in order to carry out its functions, but it will be no less than two times per year.
Reporting	The Advisory Group will: • Meet with the hapū Ngāti Tapu and Ngāi Tūkairangi and Council's governing body (appointed or elected members) at least once per year. Will report on key discussion points, outcomes and actions following each meeting. • Any recommendations from the Advisory Group will be considered either by the Council and/or any standing committee as it deems appropriate. The Advisory Group has the discretion whether: • The minutes and agenda be made publicly available on Council's website. • Unconfirmed minutes be circulated to the hapū and Council members. • Provide reports for the benefit of the wider Tauranga community by way of newsletter or other media communication in consultation and with the approval of

	Council's Community Relations Team and respective hapū Ngāti Tapu and Ngāi Tūkairangi.
Meeting venue	To alternate between marae and Council venues, or as appropriate to a meeting venue as agreed.

1. Background

A Memorandum of Understanding (**"MOU"**) was signed between mana whenua hapū representatives from Ngāti Tapu and Ngāi Tūkairangi and the Council on 31 August 2022 to establish the Matapihi Southern Pipeline Advisory Group ("**Advisory Group"**). The MOU is attached to this Terms of Reference.

2. Ko ngā mātāpono (Guiding principles)

2.1 Ko ngā mātāpono hei Arataki i ngā whakahaere a te Advisory Group**:** *The Advisory Group is guided by the following principles:*

(a) Rangatiratanga

Ko Ngāti Tapu me Ngāi Tūkairangi ngā mana whenua o Matapihi. *The hapū Ngāti Tapu and Ngāi Tūkairangi have authority over Matapihi.*

(b) Kaitiakitanga

Te tino haepapa kia tiakina te oranga mana motuhake o Matapihi mō ngā uri whakatupu. *The obligation to care for and protect the health and wellbeing of Matapihi for future generations.*

(c) Wairuatanga / Mauri

Kei a Matapihi tonu tōna mauri, tōna wairua, hei oranga mōna. *Acknowledging and understanding that for tangata whenua, the existence of mauri and spiritual dimension to Matapihi requires attention and nourishment.*

(d) Whānaungatanga

Ka ū tonu ngā hononga i waenganui i ngā hapū me te kaunihera o Tauranga Moana i runga i te aronui me te mārama ki ngā tumanako, me ngā uara o tētahi ki tētahi, me te mōhio anō he tino taonga a Matapihi. *Maintaining relationships between hapū and Council built on mutual respect and acceptance of each other's interests and values, including an acknowledgement that Matapihi is regarded as a significant place.*

(e) Tāutuutu

Te whai i te ara o te tāutuutu e taea ai e te katoa te tuku koha mai. Tū atu, tū mai. *Pursuing a unity of reciprocity where both parties are able and encouraged to contribute and speak.*

3. Purpose

3.1 The purpose of the Advisory Group is to provide strategic oversight and direction over the management of the Southern Pipeline. To achieve this, the Advisory Group will:

(a) Recognise and acknowledge the history, character, landscape and unique contribution of Matapihi and what it has done for the wider Tauranga.

(b) Build and maintain an ongoing relationship with the hapū Ngāti Tapu and Ngāi Tūkairangi and community at Matapihi as expressed by mana whenua in relation to the Matapihi peninsula.

(c) Cooperate in partnership in conjunction with the guiding principles (above).

(d) Actively work together using shared knowledge and expertise.

(e) Engage early on issues of known interest to either of the parties.

(f) Enable and support the use of te reo and tikanga Māori.

(g) Acknowledge that the parties' relationship is evolving.

(h) Have regard for the interests of the Tauranga community.

4. Functions

4.1 The Advisory Group is informal in nature and is NOT established as a committee, subcommittee or other subordinate decision-making bodies of Council under clause 30(1) of Schedule 7 of the Local Government Act 2002 and does not have any delegated decision-making powers.

4.2 The Advisory Group may make recommendations relating to the following:

(a) Advise and provide input into the maintenance, development, upgrade and overall day to day operation of the Southern Pipeline.

(b) Provide future planning solutions:

i. Consider and provide future planning solutions.

ii. Consider the schedule of upcoming works for the Southern Pipeline prior to works beginning.

iii. to Council through the Long-Term Plan and Annual Plan processes for the amount of funding to the Advisory Group to carry out its purpose and functions.

iv. to Council and/or any standing committee as it deems appropriate.

4.3 Maintain a relationship with the Wastewater Management Review Committee, including the Ngāi Te Rangi representative who is a member of that committee.

4.4 A report from Council to be provided to the Advisory Group informing:

(a) Council's future / long-term plans or view of Tauranga City in respect to wastewater and how it may impact the southern pipeline and Matapihi. This may include (although not an exhaustive list):

- Predicted areas of growth;
- Future housing development and infrastructure connection;
- City plan changes or new legislative requirements;
- Future plans for the pipeline.

(b) The report can be submitted as a staff update.

4.5 The Advisory group will be responsible for:

(a) Determining how the project funds and community purpose funds will be prioritised and allocated (refer to schedule 1 of the Memorandum of Understanding for details of the funding arrangements);

(b) Providing and presenting an annual monitoring report to council at the end of each financial year to identify how and why the fund has been allocated; and

(c) Identify potential priorities for funding in the following financial year in the annual monitoring report.

5. Membership

5.1 The Advisory Group shall be comprised of eight members being:

(a) Four representatives appointed by the mana whenua hapū. These are two representatives from Ngāti Tapu and two representatives from Ngāi Tūkairangi; and

(b) Four representatives appointed by Council.

6. Co-chairs

6.1 The Chair representing the Council will be appointed by the Council and the Chair representing the hapū will be appointed by the hapū.

6.2 Only one person can chair a meeting at any one time.

6.3 Given alternate venues between the Marae and Council venues, or as appropriate to a meeting venue as agreed, the corresponding host will chair the meeting.

6.4 Both Co-Chairs will:

(a) Attend pre-agenda briefings and split any other duties outside of meetings, e.g. spokesperson for the Advisory Group.

(b) Jointly oversee and coordinate all activities of the Advisory Group within their specific terms of reference and delegated authority, providing guidance and direction to all members and liaising with Council staff in setting the content and priorities of meeting agendas.

(c) Be accountable for ensuring that any recommendations from the Advisory Group are considered by the Council.

7 Powers

7.1 Power to Recommend

(a) To Council and/or any standing committee as it deems appropriate.

Memorandum of Understanding



between

Ngāti Tapu and Ngāi Tūkairangi

and

Tauranga City Council

to establish the Matapihi Southern Pipeline Advisory Group

1

1. Background

Southern Pipeline

1.1 In 2005, Tauranga City Council (**'Council'**) proposed to construct a sewer pipeline, the **Southern Pipeline**, to transfer wastewater flows from the parts of Tauranga to Te Maunga Wastewater Treatment Plant. The pipeline was to cater for the increased urban growth in Tauranga City and relieve pressure on the existing wastewater network.

In 2010, the Council obtained consents for two potential routes that would allow the pipeline to cross the Tauranga Harbour and exit at Matapihi peninsula before reaching Te Maunga. One route was a submarine pipeline constructed in a trench approximately two metres beneath the harbour bed that runs parallel to the existing railway bridge. The other route was to attach the pipeline to the railway bridge. However, both these options proved challenging as trenchless techniques were deemed too difficult to undertake, and that any attachment to the bridge required significant bridge strengthening by Kiwi Rail. Consultation was carried out by the Council with the hapū Ngāti Tapu and Ngāi Tūkairangi and residents of Matapihi, and a Cultural Impact Assessment had been undertaken.

In 2015, the Council sought new consents as the proposed new harbour crossing involved a different route as that already consented for. With trenchless technology becoming more efficient and accessible, the Council embarked on the option of a deep pipeline or multiple pipelines constructed via a trenchless method not less than 10 metres below the harbour bed. This application did not receive support from the Matapihi community, and hapū members, residents and landowners later met with the Council not only to discuss how the pipeline would cross over Māori land, but also Council's intention to install the pipeline over a paper road on an orchard. An injunction was sought from the Māori Land Court to stop the laying of the pipeline at Matapihi.

In 2019, the pipeline project was completed. The overall costs reached approximately $107 million.

Reticulation

1.2 The Southern Pipeline supports wastewater flow from Maleme St Pump Station, Memorial Park Pump Station and suburbs like Welcome Bay and the Lakes at Tauriko. Yet, despite this, the community of Matapihi itself had no option for reticulated sewage and could not connect to the pipeline. Today, some Matapihi properties are connected via a pump station to the Southern Pipeline that fall inside the two rural marae community zones (Waikari and Hungahungatoroa) and include the two Marae, Te Kura o Matapihi, Te Kohanga Reo o Matapihi and the residential properties between the two zones. There have been some exceptions to these rules including several affected homes where the pipeline exits the harbour bed and some properties adjacent to the rural marae community zone.

Wastewater leak into the harbour and odour from vent

1.3 The Council has an obligation to safeguard the health of the community and environment, and this includes making sure the city's wastewater is regularly maintained. Assurances were made by the Council to the community and hapū of Matapihi that there would be no issues with the Southern Pipeline. In particular the community and hapū of Matapihi were concerned about any possible contamination into Tauranga Harbour and the impacts of the vent on neighbouring residences especially at Te Kura o Matapihi.

However, there have been issues with leakages of raw sewage and odour affecting residences and the taiao (environment). These events have been objected to by the community and hapū of Matapihi. In the same year the project had been completed, the pipeline leaked raw effluent onto Matapihi Road near Te Kura o Matapihi on several occasions. Then again in 2021, as a result of the air valve not being secured properly, saw raw wastewater spill directly into the harbour.

The vent installed opposite Te Kura o Matapihi is a significant concern to the community and hapū of Matapihi. The Southern pipeline requires air valves at various points to release gas, and the location by the kura was considered the highest point and therefore required for an air valve. Consequently, the valve regularly expels a foul odour and at times, the odour is so strong that the students of the kura cannot eat their lunch. Te Kura o Matapihi was founded in 1913 and since this time has continued to provide education to many generations of the Matapihi community.

Formation of Matapihi Southern Pipeline Advisory Group

1.4 With the Southern Pipeline causing problems over the years, coupled with the latest spill into the harbour and ongoing odour issues, in April 2021 the community sought a meeting with Council to discuss these issues. This took place at Waikari Marae.

At this meeting it was decided the community should get involved, forming a steering group that is made up of four Council members and tangata whenua representatives. In subsequent discussions with the hapū it was supported that two representatives should each come from the hapū Ngāti Tapu and Ngāi Tūkairangi. Those nominated were Hauata Palmer and Joshua Gear for Ngāti Tapu, and Ngareta Timutimu and Anthony Fisher for Ngāi Tūkairangi.

On 23 November 2021, the hapū representatives met with the Commissioners and Council staff at Waikari Marae to discuss the next steps around the formation of the group. A terms of reference was to be drafted and circulated and, the Commissioners were to discuss Council membership to the group.

2. Ko ngā mātāpono (Guiding principles)

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a) Rangatiratanga
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b) Kaitiakitanga
Te tino haepapa kia tiakina te oranga mana motuhake o Matapihi mō ngā uri whakatupu. *The obligation to care for and protect the health and wellbeing of Matapihi for future generations.*

c) Wairuatanga / Mauri
Kei a Matapihi tonu tōna mauri, tōna wairua, hei oranga mōna. *Acknowledging and understanding that for tangata whenua, the existence of mauri and spiritual dimension to Matapihi requires attention and nourishment.*

d) Whānaungatanga
Ka ū tonu ngā hononga i waenganui i ngā hapū me te kaunihera o Tauranga Moana i runga i te aronui me te mārama ki ngā tumanako, me ngā uara o tētahi ki tētahi, me te mōhio anō he tino taonga a Matapihi. *Maintaining relationships between hapū and Council built on mutual respect and acceptance of each other's interests and values, including an acknowledgement that Matapihi is regarded as a significant place.*

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Te whai i te ara o te tāutuutu e taea ai e te katoa te tuku koha mai. Tū atu, tū mai. *Pursuing a unity of reciprocity where both parties are able and encouraged to contribute and speak.*

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b) Build and maintain an ongoing relationship with the hapū Ngāti Tapu and Ngāi Tūkairangi and community at Matapihi as expressed by mana whenua in relation to the Matapihi peninsula.
c) Cooperate in partnership in conjunction with the guiding principles (above).
d) Actively work together using shared knowledge and expertise.
e) Engage early on issues of known interest to either of the parties.
f) Enable and support the use of te reo and tikanga Māori.
g) Acknowledge that the parties' relationship is evolving.
h) Have regard for the interests of the Tauranga community.

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a) Advise and provide input into the maintenance, development, upgrade and overall day to day operation of the Southern Pipeline.
b) Provide future planning solutions:
   i. Consider and provide future planning solutions.
   ii. Consider the schedule of upcoming works for the Southern Pipeline prior to works beginning.
   iii. to Council through the Long-Term Plan and Annual Plan processes for the amount of funding to the Advisory Group to carry out its purpose and functions.
   iv. to Council and/or any standing committee as it deems appropriate.

4.3 Maintain a relationship with the Wastewater Management Review Committee, including the Ngāi Te Rangi representative who is a member of that committee.

4.4 A report from Council to be provided to the Advisory Group informing:

a) Council's future / long-term plans or view of Tauranga City in respect to wastewater and how it may impact the southern pipeline and Matapihi. This may include (although not an exhaustive list):
   - Predicted areas of growth;
   - Future housing development and infrastructure connection;
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   - Future plans for the pipeline.

b) The report can be submitted as a staff update.

4.5 The Advisory group will be responsible for:

a) Determining how the project funds and community purpose funds will be prioritised and allocated,

b) Providing and presenting an annual monitoring report to council at the end of each financial year to identify how and why the fund has been allocated, and

c) Identify potential priorities for funding in the following financial year in the annual monitoring report.

5. Membership

5.1 The Advisory Group shall be comprised of eight members being:

a) Four representatives appointed by the mana whenua hapū. These are two representatives from Ngāti Tapu and two representatives from Ngāi Tūkairangi; and

b) Four representatives appointed by Council including at least a Commissioner (or an elected member) and appointed staff members.

6. Co-Chairs

6.1 The Chairperson representing the Council will be appointed by the Council and the Chairperson representing the hapū will be appointed by the hapū.

6.2 Only one person can chair a meeting at any one time.

6.3 Given alternate venues between the Marae and Council venues, or as appropriate to a meeting venue as agreed, the corresponding host will chair the meeting.

6.4 Both Co-Chairs will:

a) Attend pre-agenda briefings and split any other duties outside of meetings, e.g. spokesperson for the Advisory Group.

b) Jointly oversee and coordinate all activities of the Advisory Group within their specific terms of reference and delegated authority, providing guidance and direction to all members and liaising with Council staff in setting the content and priorities of meeting agendas.

c) Be accountable for ensuring that any recommendations from the Advisory Group are considered by the Council.

7. Schedule of upcoming works

7.1 Council (Infrastructure, City Waters, Drainage Services) is to provide a schedule of upcoming works for the Southern Pipeline to the Advisory Group prior to works beginning. This schedule can be provided at a meeting or by email to the members.

8. Meeting Procedures

8.1 The Advisory Group shall:

a) Meet as necessary in order to carry out its functions, but shall meet no less than four (4) times per year.

b) A quorum of four members comprised of at least:

i. two hapū members - one representative from Ngāti Tapu and one representative from Ngāi Tūkairangi;

ii. two Council members - a Commissioner (or an elected member) and an appointed staff member.

c) Any decision making shall be made by a resolution at a meeting of the Advisory Group. If consensus cannot be reached then the discussion will continue.

d) No business shall be transacted at any meeting of the Advisory Group unless at least a quorum of members is present at the meeting during the whole time at which business is transacted.

9. Reporting Requirements

9.1 The Advisory Group will:

a) Meet with the hapū Ngāti Tapu and Ngāi Tūkairangi and Council's governing body (appointed or elected members) at least once per year. Will report key discussion points, outcomes and actions following each formal meeting.

b) Any recommendations from the Advisory Group will be considered either by Council and/or standing committee as it deems appropriate.

9.2 The Advisory Group has the discretion whether:

a) The minutes and agenda be made publicly available on Council's website.

b) Unconfirmed minutes be circulated to the hapū and Council members.

c) Provide reports for the benefit of the wider Tauranga community by way of newsletter or other media communication in consultation and with the approval of Council's Community Relations Team and respective hapū Ngāti Tapu and Ngāi Tūkairangi.

10 Resourcing and Funding

10.1 Council shall provide an annual amount of funding to the Advisory Group to carry out its purpose and functions, in accordance with the funding arrangements in Schedule 1. The funding amount will be determined by Council through the annual budget process. The provision of funding acknowledges the impact of the Southern Pipeline on the hapū and community of Matapihi.

10.2 In addition to the funding outlined in Schedule 1, Council shall provide the following support to the Advisory Group.

a) Administration will be provided by the Council's Democracy Services team (i.e. preparation of agendas, minutes, organising venues, remuneration etc).

b) Meeting fees to the hapū representatives in accordance with the Tauranga City Council Tangata Whenua Remuneration Policy.

c) Technical assistance and access to information held by Council if requested. Requests for assistance or information shall be made to the Council's General Manager: Infrastructure and may include the following:

i. Provision of technical reports, data and GIS reports, and

6

i. Access to appropriate technical staff for assistance in answering technical questions.

10 Term of Agreement

11.1 Building, fostering and maintaining an ongoing relationship between hapū and Council is of great importance. While the Advisory Group does not need to be re-established at the next Council election, the current Advisory Group agree that membership may change overtime. As a result, a review or reconfirmation of membership should be carried out following each council election.

11 Key Contacts

12.1 The following people will be the key contacts for the parties for the purposes of this MOU and all correspondence shall be directed to them in the first instance:

a) Advisory Group: Co-Chairs

b) Tauranga City Council: Chief Executive

THIS Memorandum of Understanding dated the day of

SIGNED for and on behalf of Ngāti Tapu by the hapū representatives:

Puhirake Ihaka

Joshua Gear

SIGNED for and on behalf of Ngāi Tūkairangi by the hapū representatives:

Ngareta Timutimu

Anthony Fisher

SIGNED for and on behalf of TAURANGA CITY COUNCIL by:

Commission Chair Anne Tolley

Chief Executive Marty Grenfell

SHADRACH ROLLESTON

7

Appendix

12 Additional signatories

Name	Signature
CHARLO ELLIS	
D.G. CHAPLOW	
R. Chaplow	R. Chaplow
Ngakumanga KEITH	
Wayne Keith	W. Keith
Grey Milne	
Rawiri Dickson	
Tūreiti Keith	
Kerasina Murray	
Arahera Dinsdale	A. Dinsdale.

Schedule 1 - Funding Arrangements

1 Tauranga City Council Funding

Tauranga City Council (**'Council'**) provides an annual amount of funding to the Advisory Group to carry out its purpose and functions, in accordance with this MOU and Terms of Reference.

The amount of funding is determined by the Council through the Long-Term Plan (**"LTP"**) and annual plan processes. The funding comprises:

- project funds,
- community purpose funds.

The Council is responsible for advising the Advisory Group of the funding amount available in both portions of the fund and rationale for this. This information will be provided each year at the time that the amount of fund is determined by the Council through the LTP and annual plan processes.

2 The Funding Objectives

In providing the funding, the Council requires that the operational and project components to be used in the following manner:

- the operation funds shall be used for the administration of the Advisory Group.
- the project funds shall be used to implement projects that are either identified in or are consistent with Matapihi regarding the Southern Pipeline.

3 Responsibilities of the Advisory Group in respect to the Fund

The Advisory Group is responsible each year for:

- determining how the fund will be prioritised and allocated.
- providing and presenting an annual monitoring report to Council at the end of each financial year to identify how the fund has been allocated. The Advisory Group will also use this opportunity to identify potential priorities for funding in the following financial year.

8

11.16 Animal Services - Annual Section 10A Report

File Number: **A21462983**

Author: **Oscar Glossop, Team Leader: Animal Services**

Authoriser: **Sarah Omundsen, General Manager: Regulatory and Community Services**

PURPOSE OF THE REPORT

1. The purpose of this report is to formally adopt the Tauranga City Council Dog Control Annual Report for the 2025-2026 reporting year in accordance with section 10A of the Dog Control Act 1996.

RECOMMENDATIONS

That the Council:

(a) Adopts the report "Animal Services - Annual Section 10A Report".

EXECUTIVE SUMMARY

2. The 2025-2026 Tauranga City Council Dog Control Annual Report (Attachment 1) outlines the administration of Tauranga City Council's dog control policy and practices for the period 1 July 2025 to 30 June 2026. It has been prepared to meet the reporting requirements of section 10A of the Dog Control Act 1996 (the Act), which requires the Council to report each financial year on its dog control policy and practices.

3. Overall dog control activity, particularly complaints/requests for service, infringements and impoundments, was slightly lower than in 2024/25. The known dog population remained broadly unchanged at 15,909, while complaints and requests for service decreased by 7.4% to 5,136, infringement notices decreased by 31.2%, and impoundments decreased by 3.8%. At the same time, a number of serious dog attacks resulted in increased prosecution activity and associated demands on Animal Services.

4. Council is asked to formally adopt the report, after which it will be publicly notified and made available in accordance with the Act

BACKGROUND AND KEY FINDINGS

5. Dog control functions under the Act include registering dogs and maintaining the dog register, responding to complaints and requests for service, enforcing the Act and the Council's dog control bylaw, classifying dangerous and menacing dogs, managing probationary and disqualified owners, impounding dogs, and educating the community about responsible dog ownership and safe behaviour around dogs. These functions are delivered by Council's Animal Services team.

6. The annual report provided at Attachment 1 shows that overall dog control activity, particularly complaints/requests for service, infringements and impoundments, was slightly lower than in 2024/25, although Animal Services continued to manage significant compliance and public safety matters. The most commonly recorded issues were unregistered dogs, roaming or wandering dogs, and barking or howling. A number of serious dog attack incidents also resulted in increased prosecution activity during the year.

STATUTORY CONTEXT

7. The following reporting requirements are set out under the Dog Control Act:

- A territorial authority must, in respect of each financial year, report on the administration of:

(a) its dog control policy adopted under section 10; and

(b) its dog control practices.

- The report must include, in respect of each financial year, information relating to:

(a) the number of registered dogs in the territorial authority district:

(b) the number of probationary owners and disqualified owners in the territorial authority district:

(c) the number of dogs in the territorial authority district classified as dangerous under section 31 and the relevant provision under which the classification is made:

(d) the number of dogs in the territorial authority district classified as menacing under section 33A or section 33C and the relevant provision under which the classification is made:

(e) the number of infringement notices issued by the territorial authority:

(f) the number of dog related complaints received by the territorial authority in the previous year and the nature of those complaints:

(g) the number of prosecutions taken by the territorial authority under this Act.

- The territorial authority must:

(a) give public notice of the report; and

(b) make the report publicly available, as described in section 5(3) of the Local Government Act 2002.

STRATEGIC ALIGNMENT

8. This contributes to the promotion or achievement of the following strategic community outcome(s):

	Contributes
We are an inclusive city	✓
We value, protect and enhance the environment	✓
We are a well-planned city that is easy to move around	✓
We are a city that supports business and education	☐
We are a vibrant city that embraces events	☐

9. Dog control is a core regulatory service that Council is required to deliver under the Dog Control Act 1996 and the Local Government Act 2002. Adopting the Dog Control Annual Report 2025-2026 supports Council's accountability and transparency by publicly reporting on how dog control policy and practices have been administered. This contributes to the three community outcomes selected above in the following ways:

(a) We are an inclusive city (Tauranga Mataraunui)

This outcome describes a city where people of all ages, beliefs, abilities and backgrounds feel safe, connected and healthy. Dogs are a much-loved part of Tauranga life, with approximately one dog for every ten residents, but poorly managed dogs can affect people's sense of safety and their ability to use public spaces with confidence.

Dog control contributes by registering dogs and keeping the dog register current, responding to complaints and requests for service, classifying and managing dangerous and menacing dogs, supervising probationary and disqualified owners, and providing education on responsible dog ownership and safe behaviour around dogs.

Together these functions help people, including children, older people, and those who are more vulnerable, to feel safe in their neighbourhoods and when moving around the city. Services such as impounding and reuniting lost dogs with their owners also support community wellbeing and connectedness.

(b) We value, protect and enhance the environment (Tauranga Taurikura)

This outcome reflects a city that values its natural environment and outdoor lifestyle and actively works to protect and enhance it. Dog control supports this outcome by managing the impact of dogs on native wildlife, coastal and dune habitats, and sensitive ecological areas through leash and dog-prohibited area requirements, enforcement of the Dog Management Bylaw, compliance patrols, and education of dog owners. Requirements such as picking up dog faeces and keeping dogs under effective control also help protect the health and amenity of Tauranga's parks, reserves, beaches and waterways.

(c) We are a well-planned city that is easy to move around (Tauranga Tātai Whenua)

As Tauranga grows and intensifies, more people and dogs share parks, shared paths, footpaths and beaches. Dog control supports this by providing clear and enforceable rules on where dogs may be exercised off-leash, where they must be on a leash, and where they are prohibited, so that public spaces can be safely shared by dog owners, other recreational users and the wider community. Animal Services' regulatory and educational activities help keep pedestrians, cyclists and other path users safe when moving around the city.

FINANCIAL CONSIDERATIONS

10. There are no additional financial implications arising from the recommendations in this report.

11. Adopting the Dog Control Annual Report 2025-2026 is a statutory reporting requirement under section 10A of the Dog Control Act 1996, and the costs of preparing and publicly notifying the report are met from existing Animal Services operational budgets. Dog control services are delivered within the funding provided through the Long-term Plan, which is primarily supported by dog registration fees, other fees and charges, infringements, and general rates.

RISKS AND LEGAL IMPLICATIONS

12. Council is legally required under section 10A of the Dog Control Act 1996 to report each financial year on its dog control policy and practices, give public notice of the report, and make it publicly available. Adopting the report meets this obligation and mitigates the risk of non-compliance. There are no other significant risks or legal implications arising from the recommendations.

TE AO MĀORI APPROACH

13. This report is regarding a statutory reporting requirement under section 10A of the Dog Control Act 1996. Adopting the annual report is an administrative and regulatory procedure that records how Council has administered its dog control policy and practices over the 2025-2026 year, and it does not involve a decision that directly impacts on Te Ao Māori. Any changes to Council's dog control policy or bylaw are considered separately and include engagement in line with Council's Te Ao Māori approach.

CONSULTATION / ENGAGEMENT

14. No consultation or engagement has been undertaken in preparing this report. Adopting the Dog Control Annual Report 2025-2026 is a statutory reporting requirement under section 10A

of the Dog Control Act 1996, and there is no requirement to consult on it. The report will be publicly notified and made publicly available as required by the Act.

SIGNIFICANCE

15. The Local Government Act 2002 requires an assessment of the significance of matters, issues, proposals and decisions in this report against Council's Significance and Engagement Policy. Council acknowledges that in some instances a matter, issue, proposal or decision may have a high degree of importance to individuals, groups, or agencies affected by the report.

16. In making this assessment, consideration has been given to the likely impact, and likely consequences for:

    (a) the current and future social, economic, environmental, or cultural needs of the district or region

    (b) any persons who are likely to be particularly affected by, or interested in, the matter.

    (c) the capacity of the local authority to perform its role, and the financial and other costs of doing so.

17. In accordance with the considerations above, criteria and thresholds in the policy, it is considered that the matter is of low significance.

ENGAGEMENT

18. Taking into consideration the above assessment, that the matter is of low significance, officers are of the opinion that no further engagement is required prior to Council making a decision.

Click here to view the TCC Significance and Engagement Policy

NEXT STEPS

19. Once the report is formally adopted Tauranga City Council will give public notice of the report and make the report publicly available, such as on the Tauranga City Council website.

ATTACHMENTS

1. 2025-2026 Tauranga City Council Dog Control Annual Report - A21465175

TCC Policy and Practices in Relation to the Control of Dogs for the Year 1 July 2025 to 30 June 2026 (Section 10A of the Dog Control Act 1996)

Oscar Glossop
Team Leader: Animal Services
Tauranga City Council

1. Introduction and background

This report outlines Tauranga City Council's dog control policy and practices for the period 1 July 2025 to 30 June 2026. It has been prepared to meet the reporting requirements of section 10A of the Dog Control Act 1996 (the Act), which requires the Council to report each financial year on its dog control policy and practices. The appendices provide the mandatory and optional data fields that support the report's contextual narrative.

The Council's dog control functions under the Act include registering dogs and maintaining the dog register, responding to complaints and requests for service, enforcing the Act and the Council's dog control bylaw, classifying dangerous and menacing dogs, managing probationary and disqualified owners, impounding dogs, and educating the community about responsible dog ownership and safe behaviour around dogs. These functions are delivered by Animal Services.

2. Summary

Overall, dog control activity in 2025/26 was slightly lower than in 2024/25 across complaints, enforcement and impounding. The known dog population was broadly unchanged at 15,909 (15,912 in 2024/25). Complaints and requests for service fell approximately 7.4%, from 5,547 to 5,136, and infringement notices fell approximately 31.2%, from 891 to 613. Dogs impounded decreased from 605 to 582 (approximately 3.8%), and dogs euthanised decreased from 135 to 117.

Of particular interest, unregistered dogs (1,381), roaming or wandering dogs (974) and barking or howling (890) were the most commonly recorded issues. Failure to register a dog (297 notices) and failure to comply with a bylaw (204 notices) accounted for most of the infringement notices. During the year the Council newly classified 3 dogs as dangerous and 50 as menacing and disqualified 24 owners.

Despite slight decreases in reported incidents, Animal Services responded to increased public, media and central government expectation by holding owners of aggressive dogs to account. This resulted in an increase in prosecutions (see Enforcement) and Regulatory Hearings Panel hearings, with four regulatory hearings panel meetings held and a total of six matters heard.

Heightened media coverage and increased public access to AI tools led to Animal Services experiencing a marked increase in LGOIMA, advocate, and service complaint activity over this period.

The 25/26 year saw rising operating cost becoming more difficult to reconcile with dog owners facing increased cost of living pressure.

3. Dog control policy and practices

Animal Services delivers the Council's dog control activity, covering registration, response to complaints and requests for service, enforcement, impounding and education.

The principles of Tauranga City Council dog management policy are:

- Dogs should be able to be exercised in all public places except where required to protect public safety and wildlife.
- Dog safe communities.
- Responsible dog ownership.
- All dogs must be registered.

A review of the Tauranga City Council Dog Management Bylaw 2018 was publicly consulted on during this reporting period.

4. Fees

Fees continue to be balanced between affordability, deterrence and increased sentiment for cost recovery through services users.

Service	**2025/26 Fee**
Registration (registered by 31st July 2025)	$129.00
Dangerous Dog Registration (registered by 31st July 2025)	$193.50

Registration – including late penalty (on or after 1st August 2025)	$193.50
Dangerous Dog Registration - including late penalty (on or after 1st August 2025)	$290.25
Microchip Fee – Voluntary	$33.00
Microchip Fee – Impounded Dog	$33.00
Kennel Licences – New application or renewal (incl. address changes)	$100.00
Kennel Licences – Variation (adding or removing a dog)	$50.00
Impounding – First impounding – Non-Registered	$107.00
Impounding – First impounding – Registered	$72.00
Impounding – Second impounding	$153.00
Impounding – Third impounding	$221.00
Impounding – Fourth & subsequent impounding	$307.00
Impounding – Sustenance fee (per day or part of)	$14.00
Impounding – Dogs released after hours	$70.00
Other Dog Fees – Surrender fee	$115.00
Other Dog Fees – Seizure fee	$115.00

5. Registration

At year end, 14,528 dogs were registered, to 13,663 registered owners, within a known dog population of 15,909 that includes registered and estimated unregistered dogs. Registration compliance remained a regular source of work: 75 unregistered dogs were impounded, and 297 infringement notices were issued for failure to register a dog. The known dog numbers remain almost constant from the 2024/25 year while registered dog numbers dropped by approximately 100.

6. Enforcement

Enforcement activity in 2025/26 was largely reactive. The Council received 5,136 dog-related complaints and requests for service, down approximately 7.4% from 5,547 in 2024/25. The largest incident type was unregistered dogs (1,381), these were almost entirely officer discovered. Of incidents reported to Animal Services, the most prolific types were roaming or wandering dogs (974) and barking or howling (890). Reports also included 114 dog attacks on animals, 24 incidents of dogs worrying stock or poultry, 95 rushing incidents and 33 other incidents of aggressive behaviour. Attacks on people comprised 87 minor and 3 serious incidents. The Council issued 613 infringement notices during 2025/26, compared with 891 in 2024/25, a reduction of approximately 31.2%. This reduction in infringement numbers can largely be attributed to a combination of staffing pressures, leading to reduced unregistered follow-up activity, and urban intensification driving down proportionate dog ownership from a post-Covid peak.

Infringements issued were most commonly for failure to register a dog (s42, 297), failure to comply with a bylaw (s20(5), 204), failure to comply with the effects of menacing dog classification (s33EC(1), 22) and failure to keep a dog under control on private property (s53(1), 17). Bylaw infringements were primarily for failure to control

offences in public places. Other bylaw offences that were commonly investigated were failure to leash dog, failure to carry a leash, failure to pick up dogs faeces and dogs in banned areas. It was common that reports of bylaw breaches were anecdotal, with no specific evidence to enable enforcement.
Infringements were commonly appealed over the period with heightened demand for disclosure of all supporting information, yet very few requesting hearing. It is particularly notable that over 80% of infringement fees were not paid and only recovered after filing with the court. Infringement statuses for the period were, Paid (96), Filed (431), Waived (54), Withdrawn (10) with an additional 3 remaining on payment plans at reporting years end.
Animal Services encourages waiver applications and applies consistent criteria for waiving registration infringements which successfully increases registration compliance throughout the registration year.

7. Prosecution

Several highly publicised attack incidents occurred over the reporting period. Media articles highlight an attack by dogs on their own owners, attacks on people, dogs, cats, and stock, and an attack on a horse being ridden on the beach. Eight prosecutions were commenced from attacks occurring over this period, these included a total of 17 charges between 7 Defendants. This was an approximately 400% increase in prosecutions initiated compared with the two prior reporting years. One of these matters was resolved by a Council Diversion Scheme within the reporting year while the other matters remained before the court at the end of the reporting year.
These prosecutions required intensive resource. This entailed not only the obvious investigation and prosecution resource and expertise, but also intensified correspondence, information requests, media requests, reviews, appeals, hearings and long-term demand on pound resources.
Further to these prosecutions, one prosecution was ongoing over the entire reporting year from a previous reporting year, one defended infringement from the previous reporting year resulted as proven at a hearing this year and a defended infringement from this year remained to be heard.

8. Impounding

A total of 582 dogs were impounded during 2025/26, compared with 605 in 2024/25, a decrease of 23 dogs or approximately 3.8%. Of the dogs impounded, 424 were claimed or returned to their owners, 26 were transferred to rescue organisations and 117 were euthanised, and the average length of stay was 5.99 days. The most common reasons for impounding were requests from the public to collect a secured roaming dog (212), officer secured roaming or wandering dogs (199) and unregistered dogs seized (75).
Euthanasia was 18 dogs lower than the 135 recorded in 2024/25 (approximately 13.3% lower) and represented approximately 20.1% of dogs impounded. Dogs considered for euthanasia are typically unclaimed and assessed as unsuitable for rehoming because of factors such as poor socialisation, significant behavioural concerns or a history of aggression that makes a safe return to the community inappropriate.
Partnerships with approved adoption and rescue organisations help suitable dogs find new homes across New Zealand; in 2025/26 this included 26 dogs transferred to rescue organisations as Animal Services focused on this partnership model for re-homing.

9. Education, communications and community engagement

During the reporting period, the Council's education activity focused on safe interactions with dogs, responsible dog ownership and reducing the risk of dog-related incidents. Education sessions promoted practical ways to prevent incidents, and training was provided to staff and community professionals who may encounter dogs in their daily work. Animal Services found an innovative way to deliver dog safety messaging to school age children over this period through Travel Safe workshops.
The Council also supported dog owners to meet their legal obligations through advice, microchipping services and discussions about dog behaviour and control responsibilities.

10. Partnerships

Animal Services benefit from a broad range of internal and external stakeholder relationships to achieve outcomes for the community.
Longstanding community, agency, business and charity partnerships had some notable new additions over the period, including Community Vet Project and Under The Stars, who's efforts have seen an increase in the compliance and welfare of unhoused owner's dogs.
Police support and a strong local understanding has contributed to positive enforcement outcomes and staff safety. This in an integral partnership in the dynamic risk environment of dog control.
All partnerships, specifically mentioned or not, play their part and are greatly appreciated.

11. Dog control staffing

Animal Services dedicated staffing included Animal Services Officers (5 x FTE), Pound Managers (equivalent 1.5 x FTE), Administrator/Technical Support (2 x FTE) and the Team Leader (1 x FTE). This team was supported by leaders and internal council functions.
After hours warranted contractors (First Security) provided reactionary response and pound care functions after hours, including weekends and public holidays.

12. Dog control information

The mandatory data required by s10A(2) of the Act is reported in the tables below, along with the majority of suggested optional data fields. When reviewing this data, a dash may indicate that this data is not recorded or not aggregated, this is generally due to system limitations.

Mandatory reporting fields under section 10A(2)	
Number of registered dogs in the territorial authority district	14528
Number of probationary owners in the territorial authority district	1
Number of disqualified owners in the territorial authority district	71
Dogs classified as dangerous under s31 — total	22
s31(1)(a): owner convicted of an offence under s57A(2)	0
s31(1)(b): sworn evidence of aggressive behaviour and grounds to believe the dog constitutes a threat	14
s31(1)(c): owner admission in writing that the dog constitutes a threat	8
Dogs classified as menacing under ss33A or 33C — total	194
s33A(1)(b)(i): threat based on observed or reported behaviour	125
s33A(1)(b)(ii): threat based on characteristics typically associated with breed or type	1
s33C(1): reasonable grounds to believe the dog belongs to a Schedule 4 breed or type	68
Infringement notices issued, excluding notices subsequently withdrawn or cancelled	527
Dog-related complaints or requests for service received during the year (see Appendix B)	5,136
Prosecutions started and not completed during the financial year	7
Prosecutions still in progress from prior financial years	1
Prosecutions completed during this financial year	1
Appeals filed during this financial year	0

Dog-related complaints or requests for service	
Field — number of	**Answer**
Dog attacks on people — minor	87
Dog attacks on people — serious	3
Dog attacks on animals	114
Dogs worrying stock or poultry	24
Dog rushing	95
Aggressive dog behaviour other than rushing or attacking	33
Roaming or wandering dogs	974
Barking or howling	890
Fouling	3
Unregistered dog	1381
Dog reported lost	-
Welfare	-
Miscellaneous	-

Infringement notices by provision	
s18 — Wilful obstruction of dog control officer or ranger	1
s19(2) — Failure or refusal to supply personal information, or wilfully providing false particulars	0
s19A(2) — Failure to supply information, or wilfully providing false particulars about a dog	0
s20(5) — Failure to comply with a bylaw authorised by the section	204
s23A(2) — Failure to undertake a dog owner education programme or dog obedience course, or both	0
s24 — Failure to comply with obligations of a probationary owner	0
s28(5) — Failure to comply with effects of disqualification	9
s32(2) — Failure to comply with effects of dangerous dog classification	1
s32(4) — Fraudulent sale or transfer of a dangerous dog without advising its classification	0
s33EC(1) — Failure to comply with effects of menacing dog classification	22

s33F(3) — Failure to advise a person in possession of a dangerous or menacing dog of muzzle and leashing requirements	0
s36A(6) — Failure to implant a microchip transponder	1
s41 — False statement relating to dog registration	0
s41A — Falsely notifying the death of a dog	0
s42 — Failure to register a dog	297
s46(4) — Fraudulent procurement or attempted procurement of a replacement registration label or disc	0
s48(3) — Failure to advise a change of dog ownership	0
s49(4) — Failure to advise a change of address	0
s51(1) — Removal, swapping or counterfeiting of a registration label or disc	0
s52A(3) — Failure to keep a dog controlled or confined	2
s53(1) — Failure to keep a dog under control	17
s54(2) — Failure to provide proper care, food, water, shelter and adequate exercise	0
s54A(2) — Failure to carry a leash in public	0
s55(7) — Failure to comply with a barking dog abatement notice	6
s62(4) — Allowing a dog known to be dangerous to be at large unmuzzled or unleashed	0
s62(5) — Failure to advise of muzzle and leashing requirements	0
s72(2) — Releasing a dog from custody	0

Dog impounding totals	
Dogs impounded	582
Impounded dogs claimed or returned to owner	424
Impounded dogs adopted	0
Impounded dogs transferred to rescue organisations	26
Impounded dogs euthanised	117
Impounded dogs that died in shelter	0
Impounded dogs stolen or escaped from shelter	0
Impounded dogs neutered	0
Average length of stay for impounded dogs	5.99 days

Dog impounding reasons	
Dog attacks on people — minor	21
Dog attacks on people — serious	13
Dog attacks on animals	19
Dogs worrying stock or poultry	0
Dog rushing	7
Aggressive dog behaviour other than rushing or attacking	0
Roaming or wandering dogs	199
Dog not controlled or confined on the owner's property	0
Barking or howling	0
Unregistered dog	75
Dog not wearing a current registration label	0
Welfare	4
Request from the public to collect	212
Dropped off at shelter by the public	0
Voluntary surrender by owner	0
Failure to comply with disqualified owner classification	8
Failure to comply with dangerous dog classification	0
Failure to comply with menacing dog classification	0
Miscellaneous	11

Other information on the dog population	
Estimated known dogs, including registered and estimated unregistered dogs	15,909
Dogs newly registered this financial year	-

Registered dogs transferred from another territorial authority this financial year	-
Missing dogs	-
Registered dog owners	13,663
Probationary owners newly classified this financial year	0
Probationary owners transferred from another territorial authority this financial year	0
Disqualified owners newly classified this financial year	24
Disqualified owners transferred from another territorial authority this financial year	-
Registered dogs microchipped	-
Registered dogs neutered	-
Dangerous dogs neutered	-
Menacing dogs neutered	-
Dangerous dogs newly classified this financial year	3
Dangerous dogs transferred from another territorial authority this financial year	-
Menacing dogs newly classified this financial year	50
Menacing dogs transferred from another territorial authority this financial year	-
Welfare-related referrals to SPCA, MPI or Police this financial year	-

12 DISCUSSION OF LATE ITEMS

13 PUBLIC EXCLUDED SESSION

Resolution to exclude the public

RECOMMENDATIONS

That the public be excluded from the following parts of the proceedings of this meeting.

The general subject matter of each matter to be considered while the public is excluded, the reason for passing this resolution in relation to each matter, and the specific grounds under section 48 of the Local Government Official Information and Meetings Act 1987 for the passing of this resolution are as follows:

General subject of each matter to be considered	Reason for passing this resolution in relation to each matter	Ground(s) under section 48 for the passing of this resolution
13.1 - Revaluation 2026 - QV	s7(2)(c)(i) - The withholding of the information is necessary to protect 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 prejudice the supply of similar information, or information from the same source, and it is in the public interest that such information should continue to be supplied	s48(1)(a) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
13.2 - Potential in-housing of contract	s7(2)(i) - The withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	s48(1)(a) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
13.3 - Economic Development Partnership Agreements	s7(2)(i) - The withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations)	s48(1)(a) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
13.4 - Bay of Plenty Housing Equity Fund - Founding Shareholder Resolutions	s7(2)(a) - The withholding of the information is necessary to protect the privacy of natural persons, including that of deceased natural persons	s48(1)(a) - the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for withholding would exist under section 6 or section 7
Confidential Attachment 1 - 11.9 - Allocation of Elder Housing sale proceeds	s7(2)(b)(ii) - The withholding of the information is necessary to protect information where the making available of the information would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information	s48(1)(a) the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information for which good reason for

		withholding would exist under section 6 or section 7

14 CLOSING KARAKIA