

Policy and Planning Committee



11 June 2024 10:30 AM

Age	nda Topic	Page
1.	Cover	1
2.	Apologies	
3.	Confirmation of Policy and Planning Minutes - 30 April 2024	3
4.	Future Development Strategy for Ngāmotu New Plymouth	7
5.	Office of the Auditor General - Audit on Managing Freshwater Quality	65
6.	Interim Review of Regional Pest Management Plan for Taranaki	108
7.	Freshwater Implementation Update June 2024	179
8.	Freshwater Target Attribute State Overview – Nutrients in Rivers	186
9.	Source Water Risk Management Areas for Municipal Drinking Water Supplies	224
10.	Submission on the Local Government (Water Services Preliminary Arrangements) Bill	271
11.	Karakia to close meeting	278
12.	Agenda Authorisation	279



Date: 11 June 2024

Subject: Policy and Planning Committee Minutes – 30 April 2024

Author: M Jones, Governance Administrator

Approved by: A D McLay, Director - Resource Management

Document: 3278218

Recommendations

That Taranaki Regional Council:

- a) takes as read and confirms the minutes of the Policy and Planning Committee meeting of the Taranaki Regional Council held in the Taranaki Regional Council chambers, 47 Cloten Road, Stratford on Tuesday 30 April 2024
- notes the recommendations therein were adopted by the Taranaki Regional Council on Tuesday 14 May 2024.

Appendices/Attachments

Document 3269781: Policy and Planning Committee Minutes – 30 April 2024



Date: 30 April 2024

Venue: Taranaki Regional Council Boardroom, 47 Cloten Road, Stratford

Document: 3269781

Present: C S Williamson Chairperson

S W Hughes

B J Bigham zoom

D M Cram
D H McIntyre
A L Jamieson

C L Littlewood (ex officio) N W Walker (ex officio)

P Moeahu Iwi Representative

E Bailey Iwi Representative (zoom)

M Ritai Iwi Representative (zoom joined at 11.03am)

L Gibbs Federated Framers

B Haque New Plymouth District Council
G Boyde Stratford District Council
C Filbee South Taranaki District Council

Attending: S J Ruru Chief Executive

A D McLay Director – Resource Management
M J Nield Director – Corporate Services
A J Matthews Director – Environment Quality

L Hawkins Planning Manager
F Kiddle Strategy lead zoom
L Hawkins Policy Manager

F Jansma Scientist – Water Quality

T McElroy Manager - Science and Technology

A Collins Scientist – Water Quality
B Levine Scientist – Land and Soil
B Mahoney Team Lead – Land and Water

G Marcroft Senior Policy Analyst – Regional Planning Lead

C Woollin Communications Advisor
M Jones Governance Administrator

N Chadwick Executive Assistant

The meeting opened at 10.56am.

1. Confirmation of Minutes Policy and Planning 19 March 2024

Resolved

That the Taranaki Regional Council:

- a) took as read and confirmed the minutes of the Policy and Planning Committee of the Taranaki Regional Council held at 10.30 on 19 March 2024 at Taranaki Regional Council 47 Cloten Road Stratford
- b) noted the recommendations therein were adopted by the Taranaki Regional Council on Tuesday 2 April 2024.

Walker/Littlewood

2. Opportunities for Freshwater Reform

- 2.1 F Kiddle gave an update on the initial analysis on opportunities to improve the freshwater management regime.
- 2.2 L Hawkins provided clarification on the values that define an outstanding water body.

Resolved

That the Taranaki Regional Council:

- a) received the memorandum titled Opportunities for Freshwater Reform
- b) noted that opportunities to influence the initial form of the Government's freshwater reforms will likely require quick response over the coming months
- noted the initial analysis presented in Attachment One Comments on Reform of the Resource Management Act 1991 Freshwater Regime
- noted that none of the policy suggestions presented would necessitate a change in the notification target of mid-2025 for the Council's Land and Freshwater Plan
- e) <u>noted</u> Council officers will continue to refine the analysis, including specific drafting options, and engage closely with Te Uru Kahika in the reform process.

Hughes/Gibbs

3. Fast Track Bill: Te Uru Kahika Submission

3.1 F Kiddle gave an update of the Te Uru Kahika submission and the fast track process.

Resolved

That the Taranaki Regional Council:

- a) received the memorandum titled Fast Track Bill: Te Uru Kahika Submission
- b) <u>noted</u> the submission contained in Attachment One.

Hughes/Walker

4. Freshwater Implementation Update

4.1 L Hawkins provided an update on the Freshwater Implementation project.

Resolved

That the Taranaki Regional Council:

a) <u>received</u> the March 2024 update on the Freshwater Implementation Programme.

McIntyre/Walker

5. Freshwater Target Attribute State Overview

5.1 T McElroy provided a presentation on the investigations and analysis undertaken to identify draft Target Attribute States (TAS) to inform the freshwater plan development process, and importantly the upcoming public consultation process.

(B Haque left meeting 12.16pm)

(P Moeahu left meeting 12.17pm)

Resolved

That the Taranaki Regional Council:

- a) <u>received</u> this memorandum Target Attribute State Overview
- b) <u>noted</u> the attached presentation and the detail which will be presented during the Committee meeting.

Williamson/Cram

There being no further business the Committee Chairperson, C S Williamson, declared the meeting of the Policy and Planning Committee closed at 12.51pm.

Policy and Planning		
Committee Chairperson:		
	C S Williamson	



Date: 11 June 2024

Subject: Future Development Strategy for Ngāmotu New Plymouth

Author: N Bradley-Archer, Policy Analyst

Approved by: A D McLay, Director - Resource Management

Document: 3277213

Purpose

 The purpose of this memorandum is to update the Policy and Planning Committee on the process and decision by the Future Development Strategy Subcommittee (FDS Subcommittee) regarding adoption of the Future Development Strategy for Ngāmotu New Plymouth (the FDS) and associated Implementation Plan.

Executive summary

- 2. The purpose of the FDS is to promote the achievement of a well-functioning urban environment in the existing and future urban area and provide at least sufficient development capacity over the next 30 years to meet expected demand.
- 3. The National Policy Statement on Urban Development (NPS-UD) 2020 requires Taranaki Regional Council (TRC) and the New Plymouth District Council (NPDC) (the Councils) to jointly prepare, and make available, the FDS
- 4. Both the Councils' Ordinary Meetings agreed to publicly notify a FDS Statement of Proposal (draft FDS) and formed the Subcommittee to hear submissions on the draft FDS, using the Special Consultative Procedure under section 83 of the Local Government Act (LGA) 2002. The Subcommittee were delegated authority from both Councils to jointly make the decision to adopt the FDS. The adopted FDS would therefore not need to be formally adopted by each Council individually.
- 5. The draft FDS and Implementation Plan were notified on 6 March 2024 and the submission period ended on 8 April 2024.
- 6. The Subcommittee heard from submitters across three hearings dates, which took place from 22 April to 24 April 2024.
- 7. Key issues raised during submissions were addressed within the officer's report were:
 - establishment of the Ngāmotu Growth Advisory Panel
 - retirement residential living
 - infill housing and intensification feasibility
 - supply of sufficient development capacity
 - modelling assumptions used within the Housing and Business Capacity Assessment 2024.

The Subcommittee deliberated on the written and verbal submissions on Friday 10 May 2024. They
subsequently made a decision to adopt the FDS and provided their feedback for the associated FDS
Implementation Plan.

Recommendations

That Taranaki Regional Council:

- a) receives this memorandum Future Development Strategy for Ngāmotu New Plymouth.
- notes the decision made by Future Development Subcommittee to adopt the Future Development Strategy for Ngāmotu New Plymouth on behalf of Taranaki Regional Council and New Plymouth District Council
- c) <u>notes</u> the following attachments:
 - (I) Document 1: Future Development Strategy for Ngāmotu New Plymouth; and
 - (II) Document 2: Future Development Strategy Implementation Plan.

Background

- This memorandum is a continuation from the previous Future Development Strategy reports that were presented to both the Policy and Planning Committee on 21 November 2023 (#3221487) and the Ordinary Council on 27 February 2024 (#3248008 & # 3246941).
- In August 2020, the government released the NPS-UD. The NPS-UD 2020 requires the development of a FDS for districts such as New Plymouth, which are classified as Tier 2 Urban Environments. Consequently, the Councils are jointly required to implement a FDS.
- 11. The purpose of a FDS is to promote long-term strategic planning by outlining how the Councils intend to:
 - achieve well-functioning urban environments in their existing and future urban areas
 - provide at least sufficient development capacity over the next 30 years to meet expected demand
 - assist with the integration of planning decisions under the Resource Management Act (RMA) with infrastructure planning and funding decisions.
- 12. Current and previous long-term growth initiatives serve as key inputs to the draft FDS. Notable examples include the Proposed District Plan Decisions Version (PDP) 2023 and the Housing and Business Capacity Assessment (HBA) 2024.
- 13. Additionally, other key inputs to the draft FDS include joint consultation and engagement led by NPDC with various key stakeholders. These stakeholders include the Ngā Kaitiaki Roopū, development and technical professionals, infrastructure providers, and government organisations. The feedback and high-level direction received from this engagement were integrated into development of the draft FDS, as required by the NPS-UD.
- 14. The NPS-UD requires the first FDS to be published in time to inform, or at the same time, as the 2024 Long-Term Plan. Councils must review the FDS every 3 years to determine if it requires updating, a full review must be done every 6 years. However, the FDS Implementation Plan must be updated annually separately from the FDS and does not require use of the special consultative process.
- 15. Ongoing consideration of the FDS is the requirement for councils to have regard to the FDS when preparing RMA planning documents. Additionally, councils are also strongly encouraged to consider the FDS when considering long-term plans (LTPs), along with other plans and strategies developed under the LGA, this is to ensure alignment of infrastructure and projects that facilitate delivery of a FDS.

Discussion

- 16. The Councils must implement a FDS by utilising the Special consultative procedure under section 83 of the LGA 2002. Under this process the Councils must prepare, adopt and notify a draft FDS/Statement of Proposal, seek public submissions, and provide the opportunity for submitters to present their submissions to the Councils or its representatives.
- 17. On 27 February 2024, both the Councils' endorsed the adoption of the draft FDS for public consultation. In addition, on the same day, they approved the establishment of the FDS Subcommittee and the draft Terms of Reference for the subcommittee. This subcommittee was led by accredited independent commissioner Mr Stephen Daysh. The remaining six members included two representatives each from the Councils and two representatives from Ngā lwi o Taranaki. One of the tangata whenua positions on the subcommittee was left vacant due to difficulty in availability of desired candidates. Further it was advised by tangata whenua that Mr Daysh's extensive local knowledge through his involvement in recent NPDC Proposed District Plan hearings provided some further comfort that tangata whenua values would be well understood.
- 18. On 6 March 2024 the Councils notified the draft FDS and the FDS Implementation Plan. Submissions were taken until 8 April 2024, with a few late submissions being accepted by the FDS Subcommittee. The Councils received a total of 36 submissions on the draft FDS and FDS Implementation Plan.
- 19. Councils' staff prepared a joint officers report for the Subcommittee. This report included an analysis of the submissions and offered recommendations to the Subcommittee on options for resolving points of contention.
- 20. The Councils held three days of hearings between 22 April 24 April 2024, where the FDS Subcommittee heard from both the Council's Officers and submitters who wished to speak in support of their submission. A total of 24 submitters were heard by the FDS Subcommittee. Following the hearing of verbal submissions, Councils officers were provided instruction by the FDS Subcommittee to incorporate amendments to the FDS and FDS Implementation Plan as a result of the written and verbal submissions.
- 21. The updated officer's report, included the following information and recommendations:
 - responses to questions raised by submitters and subcommittee members during the hearing
 - an updated summary of recommendations and minor amendments to be made to the FDS
 - an outline proposal for the Ngāmotu Growth Advisory Panel to be formed that will play a key role in improving the quality of planning for growth and development across the District
 - memo from Property Economics about the Retirement Market, intended to provide the subcommittee with a high-level economic overview of the current demand in New Plymouth's retirement residential market
 - case studies of infill housing under the Proposed New Plymouth District Plan
 - an updated housing capacity modelling to inform the FDS, which was received after the close of submissions and the hearing. This includes a memo from Property Economics on intensification (including infill) and advice on greenfield development (including undeveloped residential) land;
 - the draft FDS (with tracked changes) for the Subcommittee's consideration
 - the draft FDS Implementation Plan (with tracked changes) which includes an action list based on recommendations for the Subcommittee's consideration.
- 22. The FDS Subcommittee reconvened on 10 May 2024 to formalise adoption of the revised FDS and Implementation Plan. Councils' officers reported back to the Subcommittee on key matters within their officer's report. In addition, the officers were supported by two economists from Property Economics, a consultancy that assisted in developing the 2024 HBA for the New Plymouth District.
- 23. While a range of changes identified in the updated officer's report were seen as useful for improving the FDS, the most significant amendment came in response to a submitter on the peer review of the

- most recent HBA. The peer review demonstrated that some of the HBA's assumptions required some revision. The recommendations within the updated officer's report resolved this issue to the satisfaction of both the Subcommittee and the submitters, who were present on 10 May. The recommendations for change include: an updated section in the FDS to demonstrate how the Councils will manage development capacity in the future, revised modelling in the HBA, and feasibility investigations of new or existing growth areas being brought forward in the FDS Implementation Plan.
- 24. Another notable outcome of this process is that NPDC has scheduled an omnibus plan change over the next three years to address some of the issues raised by submitters regarding the proposed District
- 25. The FDS Subcommittee resolved to adopt both the FDS and FDS Implementation Plan after having considered all matters raised in both of the officer's reports, written, verbal and late submissions. This resolution was subject to track changes and actions outlined by the Subcommittee on the FDS.
- 26. All revisions required by the FDS Subcommittee have now been incorporated, and as such the FDS and Implementation Plan have now been adopted on behalf of the Councils, as per the resolution from 10 May 2024 (see Appendix 1 & 2 for the final versions of the FDS and FDS Implementation Plan). Submitters were sent a final versions of the FDS and FDS Implementation Plan on 24 May 2024.

Financial considerations—LTP/Annual Plan

- 27. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.
- 28. Note that implementation plan is aligned with TRC LTP, and future review of FDS alongside the LTP reviews will address any future discrepancies.

Policy considerations

29. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

30. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.

Community considerations

31. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

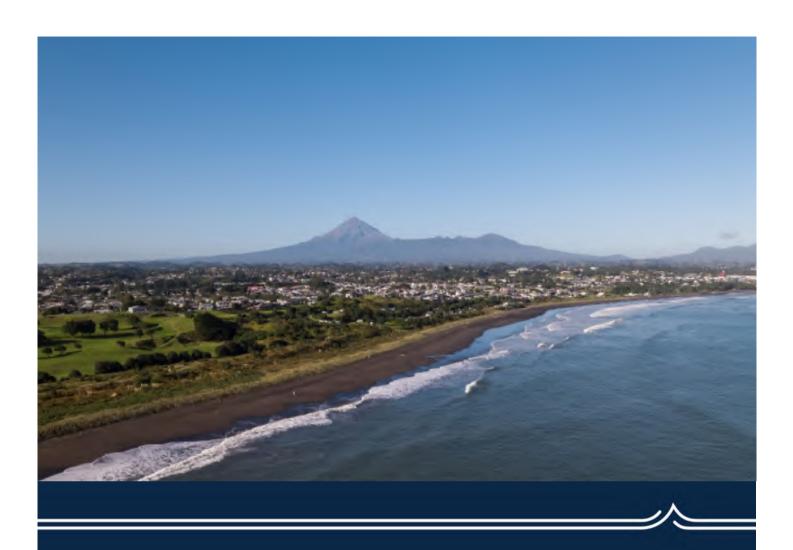
Legal considerations

32. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3277848: Future Development Strategy for Ngāmotu New Plymouth - 24 May 2024.

Document 3277850: Future Development Strategy Implementation Plan - 24 May 2024.



Future Development Strategy for Ngāmotu New Plymouth 2024-2054





Contents

1	Intr	oduction	3
	1.1	What is the Future Development Strategy for Ngāmotu New Plymouth?	
	1.2	Policy framework - Where does the FDS fit?	4
	1.3	Outcomes for the FDS	
2	Gro	wth Planning in New Plymouth	
	2.1	Previous Growth Planning	
	2.2	Future Growth Planning	
3	Dev	relopment Context	
	3.1	Providing for our Growing and Changing Population	
	3.2	Managing Urban Growth	15
	3.3	Planning for and Provision of Infrastructure	16
	3.4	Protecting the Natural Environment	
	3.5	Climate Change	
4	Inpu	uts to our Spatial Response	
	4.1	Hapū and Iwi: Values and Aspirations for Growth	
	4.2	Constraints on Development	24
	4.3	Spatial Scenarios	
	4.4	Preferred Spatial Scenario	
<u>5</u>	Our	Growth Strategy	
	5.1	What capacity will this provide?	
6	Imp	olementation	
	6.1	Monitoring and Review	44

1 Introduction

1.1 What is the Future Development Strategy for Ngāmotu New Plymouth?

This Future Development Strategy for Ngāmotu New Plymouth (the FDS) has been prepared by Taranaki Regional Council and New Plymouth District Council (the Councils). Its purpose is to set out the strategic framework for providing for urban growth to meet the needs of New Plymouth district. It gives direction to the community about where new homes and businesses will be located. It describes the priority issues we need to start to address now, and the collective aspirations we have for the future of our urban areas.

This FDS is supported by a Technical Document that provides additional detail on the data and research that has been utilised to inform the FDS.

The Government introduced the National Policy Statement on Urban Development 2020 (NPS-UD) in August 2020 (updated 2022)¹. The NPS-UD outlines the requirements for what a FDS must show and be informed by. It states that the purpose of the FDS is to promote long-term strategic planning by setting out how the Councils intend to:

- Achieve well-functioning urban environments in their existing and future urban areas;
- Provide at least sufficient development capacity over the next 30 years to meet expected demand;
- Assist with the integration of planning decisions under the Resource Management Act (RMA) with infrastructure planning and funding decisions.

To achieve a well-functioning urban environment, the NPS-UD requires that a FDS:

- Provides for a variety of homes that meet local needs and enable Māori to express their cultural traditions and norms;
- Provides a variety of land suitable for local business needs;
- Enables good accessibility for all people between housing, jobs, community services and open spaces, including by public or active transport;
- Supports the competitive operation of land and development markets;
- Supports reductions in greenhouse gas emissions; and
- Necessitates being resilient to the current and future effects of climate change.

For more information on the content requirements of a FDS refer to Section 2 of the Technical Document.

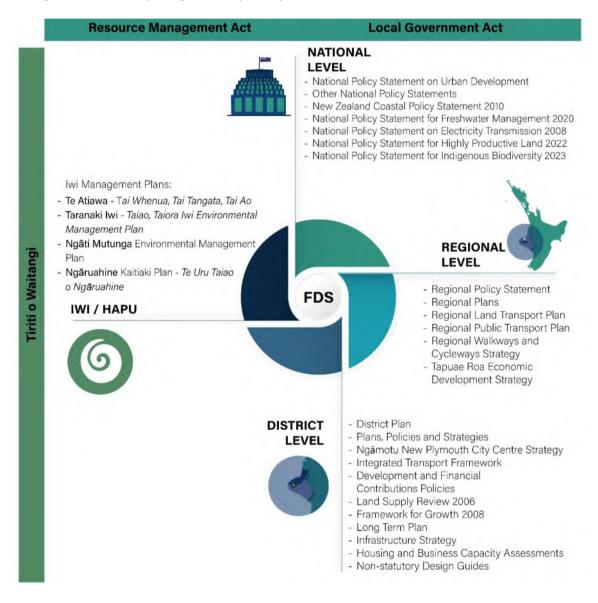
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¹ MfE, National Policy Statement on Urban Development 2020, (https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/)

1.2 Policy framework - Where does the FDS fit?

The FDS sits within a framework informed by legislation, Government policy, regional and district strategies and plans, as well as the values and aspirations of tangata whenua and the local community. Figure 1 below shows examples of the documents that have been taken into account in its development.

Figure 1: Documents informing the development of the FDS



Importantly, the Councils must also have regard to the FDS when preparing RMA planning documents. The Councils are also strongly encouraged to consider the FDS when considering long-term plans (LTPs), along with other plans and strategies developed under the Local Government Act, this is to ensure alignment of infrastructure and projects that facilitate delivery of a FDS.

1.3 Outcomes for the FDS

The FDS is guided by the following outcomes that set out how we want to provide for growth. These have been informed by our understanding of national policy direction, hapū and iwi development aspirations, and community and stakeholder views.

FDS OUTCOMES			
ACCESS	The district develops as a compact urban environment, where people can access jobs, services, education and open space.		
CAPACITY	There is sufficient development capacity available to meet the short, medium and long-term housing and business demands in the district.		
CENTRES	The district has a hierarchy of vibrant and viable centres that are the location for shopping, leisure, cultural, entertainment, residential and social interaction experiences and provide for the community's employment and economic needs.		
CHOICE	A variety of housing types, sizes and tenures, including papakāinga and other rohe-based housing responses and strategies, are available across the district in quality living environments to meet the community's diverse cultural, social and economic housing and well-being needs.		
COLLABORATION	The Councils, tangata whenua and the development community working responsively together to support appropriate development		
EMISSIONS	Urban form supports reductions in greenhouse gas emissions.		
ENVIRONMENT	Urban environments are designed to integrate and enhance natural features and minimise environmental impacts.		

FDS OUTCOMES

HEALTH, EQUITY AND AFFORDABILITY

Urban development and housing supports equitable health and wellbeing outcomes for the diverse needs of all residents.

HIGHLY PRODUCTIVE LAND

New Plymouth district's highly productive land is protected from inappropriate urban development. Urban rezoning of highly productive land is only appropriate where it is necessary to provide sufficient development capacity for housing and business land and there are no other reasonable and feasible options.

INFRASTRUCTURE

New and existing infrastructure to support growth is planned, funded and delivered in an efficient and integrated manner to maximise investment

PARTNERSHIP WITH TANGATA WHENUA

Partnership between Councils and tangata whenua provides for urban development and growth, and protection and preservation of the relationship of <u>tangata whenua</u> with their culture, traditions, ancestral lands, <u>waterbodies</u>, <u>sites</u>, areas and landscapes and other <u>taonga</u> of significance.

RESILIENCE

The urban environment is resilient to the likely current and future effects of natural hazards including climate change.

2 Growth Planning in New Plymouth

One of the key functions of Council is planning the way the district is shaped (where people live and work) and how people get around it. This means prioritising and managing future growth so that the community will know the expectations around how we will grow, the standard of amenity required and the supporting infrastructure requirements so that informed investment decisions can be made. Such decisions last for many decades and impact on people's day-to-day lives, so it is important to get it right.



6

2.1 Previous Growth Planning

This strategy builds on many years of comprehensive review and planning undertaken by New Plymouth District Council to provide for urban growth in the district. Notably, the Land Supply Review (2007) and the Framework for Growth (2008)². This work considered and identified appropriate locations for urban expansion and District Plan rezoning changes. The more recent District Plan Review (2015-2019) and Proposed New Plymouth District Plan (PDP) (2019-2023)³ processes have involved comprehensive land use analysis/audits and rezoning. Together with a directive strategic policy framework, these efforts are designed to provide housing and businesses in the right locations to meet our community's long-term needs.

Some key Proposed New Plymouth District Plan decisions on urban development and growth include:



A timeline of this previous work is shown in Figure 2 below. This work has provided a sound evidence base and background for the development of this FDS, by setting out where development capacity can be provided and the policy direction to deliver a well-functioning urban environment. Further detail can be found in the Technical Document supporting this FDS.

7

² NPDC, Framework for Growth (2008), (https://www.npdc.govt.nz/media/txeg5fvp/framework-forgrowth.pdf)

³ NPDC, Proposed New Plymouth District Plan Homepage, (www.proposeddistrictplan.npdc.govt.nz)

2007 Land Supply Review 2008 Framework for Growth The document represents the outcomes of the Land Supply Review and sets out the recommended growth direction for urban expansion within the New Plymouth District. NPDC Plan Change 15- Future Urban Development Overlay 2013 Adds Future Urban Development Overlays to protect our growth areas identified by the Council's Framework for Growth. Blueprint 2015 2015 Various rezoning Plan Changes 2013-2018 to rezone Future Urban Development Overlays to Residential Environment Area and adding Structure Plans to the Operative District Plan for Bell Block Area Q, Waitara Area A, Cowling Road/Frankley Road/Tukapa Street, Inglewood, and Johnston Street Waitara Draft District Plan and District Plan Review 2015-2019 2018 Infrastructure Strategy 2018-2048 2019 Housing and Business Capacity Assessment 2019 2020 Proposed District Plan and growth-related supporting Housing and Business Capacity Assessment 2021 2021 documents 2019-2023 Infrastructure Strategy 2021-2051 2022 Proposed District Plan 2023 Appeals Version 2023 Housing and Business Capacity Assessment 2024 2024 Infrastructure Strategy 2024-2054

Figure 2: Timeline of Previous Growth Planning Work

Growth planning undertaken as part of the recent PDP process preceded this FDS. However, the PDP process involved detailed analysis of New Plymouth's urban environment and significant work to determine the suitability of areas of land for various urban uses. In addition, the PDP itself is drafted to give effect to higher order policy direction, notably the NPS-UD and NPS-HPL.

2.2 Future Growth Planning

Collaboration and Transparency

The Councils recognise that the delivery of our district's growth and development will come from our development community. Relationships will be crucial for effective growth planning, PDP implementation, and the realisation of development capacity in well-functioning urban environments.

The Councils are committed to facilitating transparent processes to improve and build the growth model with ongoing collaboration with the development community. To ensure confidence in the data and expertise relied on, the Councils seek a culture of working together to explore different and responsive ways of doing things. This collaboration will inform future Council work programs and respond to changing conditions.

Collaboration and transparency will be supported by the following mechanisms:

- Ngāmotu Growth Advisory Panel
- Engagement with iwi and hapū
- Developers Forum and Technical Professional Group
- · Regular reporting to elected members

Ngāmotu Growth Advisory Panel

As part of the officers' response to submissions on the draft 2024-2054 FDS, a key initiative was to set up a Growth Advisory Panel to allow the Councils to work collaboratively with the development sector. The panel will be an independent advisory body and will not have statutory decision-making powers. However, the recommendations made by the group will inform the review and development of Council growth and development documents.

A key principle of the Ngāmotu Growth Advisory Panel is to provide more interactive opportunities to share and input on key issues, allowing issues to be raised early in the planning process to ensure a robust approach to growth planning. The group provides an elevated forum for information sharing and engagement with and between the development sector, iwi/hapū, and Council officers to identify opportunities for urban and other development.

The panel supports the provision of growth through best practice advice from interdisciplinary subject matter experts with experience in the District. The panel adds value to planning processes including (but not limited to):

- · Housing and Business Capacity Assessments;
- Development Contributions Policy;
- Structure planning and master planning for development areas;
- Spatial planning;
- Infrastructure scheduling;
- FDS and annually reviewed Implementation Plan; and
- PDP maintenance and implementation.

The role of the panel is to:

- provide independent growth and development advice to identify significant future development opportunities;
- work in partnership with Council to provide pre-consultation advice to inform growth and development work;
- provide peer review and feedback on Council documents and modelling;
- assist with development of Council's modelling and data information as appropriate;
- provide advice to Council on the current state of play in the development sector to help guide future planning work programs; and

 assist Council with ongoing monitoring of planning provisions to identify efficiency opportunities.

The anticipated membership of the Ngāmotu Growth Advisory Panel would include a range of professional expertise.

The panel is supported by Council officers, who liaise and involve as appropriate other local, regional and national government agencies, tangata whenua and other stakeholders.

Iwi and hapū engagement

Both Councils have established relationships with iwi and hapū and meet regularly to address resource management planning issues.

Ngā Kaitiaki Roopū was formed in 2016 specifically to provide feedback as part of the New Plymouth District Plan Review but the scope of its work has evolved and expanded since then. Ngā Kaitiaki consists of mandated representatives from iwi and hapū throughout the district. Ngā Kaitiaki meet with NPDC officers multiple times per year to provide opportunities for engagement.

The Taranaki Regional Council (TRC) freshwater policy work features an agreement with the eight iwi of Taranaki which enables greater iwi and hapū involvement in freshwater policy development. Supported by a dedicated pou taiao planner, members of this group are directly involved in the policy development process and also assist the Council in improving hapū involvement and relationships in respect of freshwater management. Three iwi representatives are also appointed to TRC's Policy and Planning Committee and the Operations and Regulatory Committee. Appointees chosen must have connections to one of the three Taranaki waka, and act in the interests of the committee they are part of, while bringing an iwi perspective to the table.

The district's iwi and hapū play an important role in relation to growth. The FDS and PDP embed the role of tangata whenua as cultural experts in resource management processes. Funding is identified within LTPs to support tangata whenua involvement in Council processes.

Developer's Forum and Technical Professional Group

The Developers Forum first began in 2016 as the "CBD Landowners and Developers Forum" and consists of landowners with interests in large land development projects. The Technical Professional Group was established in 2021 and consists of development professionals, such as architects, designers, builders, surveyors, engineers and planners. Council established these two groups and hold regular update meetings. Looking forward, Council seeks to facilitate more interactive opportunities aligned with the Growth Advisory Panel to share and input on key issues.



Figure 3: Relationship between the Ngāmotu Growth Advisory Panel and other forums

Regular reporting to elected members

For increased transparency, NPDC will regularly report to the Strategy and Operations Committee to update on growth planning and implementation, to provide good information to elected members and the community using this public process. This would involve reporting at least every six months of statistics around infill, changes to the modelling since the last report, and actively show that housing capacity and growth planning is not static. This will give elected members, planning officers and the development community opportunities to identify and raise issues early.

Doing things differently

The way the district grows will need to differ from past patterns of development. In the past the district's large rural area provided opportunities for subdivision and lifestyle living. Along with the rest of the country, however, we have realised that the productive capacity of rural land is a finite resource and cumulative effects of rural lifestyle subdivision result in fragmentation of the rural environment. Previous urban development in the district was characterised by urban sprawl with low density development and car-dependent lifestyles.

The purpose of the new National Policy Statement for Highly Productive Land (NPS-HPL) is to ensure the availability of New Zealand's most favourable soils for food and fibre production, now and for future generations. It provides clear direction that using highly productive land for housing and

business growth is only appropriate where it is necessary to provide sufficient development capacity and there are no other reasonable and feasible options.

The Councils want to support the development community to approach growth differently. We need to consider whether the current model for greenfield developments in the district, which has largely resulted in large-lot residential sites, is an efficient use of land.

In order to deliver increased housing capacity in a more coherent manner, NPDC is taking a new strategic approach for enabling growth through the provision of infrastructure, instead of leaving it to developers to install this on a project-by-project basis as and when individual landowners decide to develop. The Puketapu Structure Plan Development Area is the first area intended to be approached in this manner, with roading, bridges, comprehensive stormwater management, parks, wastewater and water all budgeted for in the draft LTP.

The FDS and PDP signal a shift to modern master-planned suburbs instead of traditional greenfield development. It is considered appropriate that when master planning structure plan development areas and future urban zones, NPDC and the development community consider methods to provide greater densities with good urban design in appropriate locations. These methods could be regulatory, non-regulatory or a mix of both.

Examples of possible regulatory methods include:

- Removing minimum lot size and maximum building coverage requirements in the PDP General
 Residential Zones provided that housing developments will be well laid out and designed. This
 will help developers to supply a variety of lot sizes and housing designs, allowing a more
 diverse mix of people from a larger pool into the market.
- Use of inclusionary zoning. This is a planning technique implemented through district plan zoning which aims to address housing affordability by ensuring that a proportion of new residential units are offered at prices that are accessible to a broader range of income levels, e.g. developers could be required to sell or rent 10-30 percent of new residential units to lower income residents in new Residential Zones, developers could be required to pay an "affordable housing financial contribution" in new Residential Zones, whereby the money is given to a registered community housing provider supplying them with an ongoing funding stream to construct or facilitate access to affordable housing.

Examples of non-regulatory methods include:

- NPDC could enhance the services it provides to developers to help them navigate the
 consenting process, e.g. free pre-application meetings, case management and urban design
 peer review.
- Developers could be given density bonuses and financial incentives by NPDC if they will
 provide well laid out and designed developments that contribute positively to the district's
 residential intensification needs, e.g. allowing them an extra floor over and above the height
 limit specified for the zone in the PDP, waiving resource/building consent fees, rates remission
 during the development phase, reduced development contributions.
- NPDC could improve the public's perception of medium density housing through educational material.

Spatial Plans

Concurrent work is underway on spatial plans for Waitara and Bell Block, with a spatial plan for Inglewood scheduled to commence in 2026. Spatial plans help guide investment and provide much needed assurance to the people that live in those areas that the Council and other key agencies are committed to working collaboratively to develop a plan that connects the natural environment, built environment, infrastructure, land use and destination spaces for the benefit of all who live there now and future generations.

This work takes a holistic long-term strategic view of those areas and will help to inform any new growth opportunities for those communities. It will be an input for both residential, industry and business capacity and the outcomes of the spatial plans will inform the next FDS.

The spatial plans to be developed relate to a specific township as well as its wider surrounding area. The boundaries for each spatial plan would be identified as part of that planning process. Through the spatial planning process, new areas will be considered for additional residential and business growth.

Other next steps

Through submissions on the draft FDS 2024-2054, Council has acknowledged that an omnibus plan change is a mechanism to address some of the difficulties the development community have experienced with the Proposed District Plan. A decisions version of the Proposed District Plan was released in May 2023 and implemented a policy shift (and therefore a rules shift) in many Overlay chapters. The FDS submissions and hearings made a clear case there are pinch points in some of the District Plan rules. Council's Growth and Services team are committed to looking into fine tuning the mechanics of plan that developers believe are impinging development implementation.

3 Development Context

3.1 Providing for our Growing and Changing Population

Population growth is a consistent trend in our district. Since 2001, we've experienced an annual growth rate of 1-2 per cent, resulting in a current population exceeding 89,000. This upward trajectory is projected to continue, with a population of approximately 98,800 by 2034 and around 110,400 by 2054.

NPDC forecasts that the district's population will grow over the next 30 years as follows:⁴

	2024	2029	2034	2039	2044	2049	2054
Population	89,000	93,500	98,800	102,400	106,400	108,500	110,400

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⁴ NPDC, Housing and Business Capacity Assessment (2024)

The key driver of population growth in New Plymouth has been, and will continue to be, people moving from other parts of New Zealand and overseas which drives housing demand. Other drivers, such as demand for visitor accommodation, student accommodation and seasonal worker accommodation, are relatively minor compared with other parts of New Zealand.

On average we will need an additional 368 houses per year over the next 30 years.

Our demographics are also changing. As a district, we are getting older, with the greatest increase in the 65 and over age group. By 2048, almost 30 per cent of the population will be aged over 65. A bigger ageing population and single-person and couple-only households will result in greater demand for rest homes and retirement villages and for smaller, accessible housing options. Noting that increased housing choice will have long-term benefits for our district, an ageing population means that we are likely to see an increased percentage of fixed income ratepayers resulting in downward pressure on rates.

New Plymouth is increasingly being enriched by a variety of cultures and demographics that require a variety of housing sizes and types, including different mixes of housing for both smaller and larger households. Typical housing options currently available aren't suitable for all family structures. This is particularly evident when considering housing concepts important to tangata whenua, such as intergenerational living arrangements.

The availability of affordable, healthy long-term rental options is closely tied to demographic factors, as is the need to increase the availability of accessible housing for disabled individuals, lower-cost accommodation, and social housing.

A mix of housing densities enables communities to respond to the changing needs and demographics of its residents through their lifecycle. The ability for people to remain living in the same community with their social networks nearby is hugely important.

Looking at the housing trends in the district, overwhelmingly the most predominant building type is the three-to-four-bedroom detached house and there is a considerable lack of other types of houses such as units, flats, townhouses, studio accommodation etc.:

	Standalone Houses	Townhouses, flats, units, and other dwellings	•	Retirement Village Units
Last 12 months	81%	6%	2%	12%
Last five years	80%	7%	2%	11%
Last 10 years	61%	6%	10%	22%

The Housing and Business Capacity Assessment 2024 projects that:

- Based on market trends and projected household composition growth, it is estimated there
 will be an increase in the number of attached multi-units to about a quarter of all new housing
 in New Plymouth by 2051.
- The remaining three quarters of all new housing in New Plymouth will be standalone dwellings by 2051. Standalone dwellings will continue to require an average minimum floor space of 180m² and accommodate 3-4 bedrooms.

- In the long-term it is estimated that apartments will make up a small portion of the demand.
- The demand for retirement villages which presently is around 5-8 per cent of all resource
 consent applications, is expected to continue. Retirement Villages are anticipated within the
 residential and centres zones, however given their scale, finding suitable land within these
 areas to accommodate the scale of the activity can be challenging.

Under the current market offer, greenfield development is typically more feasible than infill development, with greater economic feasibility for residential greenfield development compared to infill development. Thinking about our changing demographics and the need to provide a for a variety of housing choices, it is anticipated that the increased demand for smaller houses, units, flats, etc. will drive a change in development trends.

Rezoning rural land for greenfield development needs to be carefully considered as this can result in ad hoc urban form and infrastructure networks and disconnected neighbourhoods.

3.2 Managing Urban Growth

Urban population growth comes with benefits and challenges. Benefits may include:

- New and modernised housing that increases supply, potentially reducing pressure on house and rental costs, and increases health and wellbeing;
- Economic growth and the development and expansion of the labour force;
- Greater availability and variety of consumer goods and services such as cafes and shops;
- · New and varied amenities that increase health and wellbeing;
- Opportunities for education, employment and civic amenities;
- Opportunities for social cohesion and interaction and cultural diversity; and
- Cheaper transport costs.

Key challenges may include:

- Ensuring feasible, serviced and developable land is available to meet the growing population's demands;
- Ensuring that subdivision and development is carefully planned and managed;
- Managing the type and location of growth to minimise infrastructure servicing costs; and
- Maintaining housing affordability in the face of increased demand.

To ensure that we gain the benefits, we need to plan carefully so that future urban growth is appropriately located and managed, and that it occurs predominantly in identified areas that are suitable for growth.

Well-planned and 'compact' urban areas generally result in the most efficient use of land and provide for development where services and infrastructure already exist. Compact towns can improve the quality of life for residents and reduce the environmental footprint of growth. They also support a sustainable and effective transport system.

At a day-to-day level, the community benefits from being able to live within easy walking distance to efficient public transport, shops, community facilities and public amenities such as pools, and to areas of employment. These benefits make living in the district more affordable and better for our general health and wellbeing. They also counter the potential negative consequences of 'urban sprawl', such as increased traffic congestion and demand for new infrastructure and services. Compact towns reduce the need to commute, air pollution from the use of vehicles and the potential for traffic accidents. A community that rides and walks to their destinations can better manage any potential secondary health impacts caused by insufficient exercise.

3.3 Planning for and Provision of Infrastructure

The district's infrastructure, encompassing a combination of public and private network utilities as well as social infrastructure, is critical to the social, economic and cultural wellbeing of our community. Network utilities include transport networks (land, sea and air), piped networks (water, wastewater and stormwater reticulation), waste management infrastructure and services, flood protection infrastructure (stop banks and spillways), transmission and distribution networks (electricity, gas and liquid fuels) and radiocommunication and telecommunication networks (wired and wireless). Social infrastructure includes medical and health services, community corrections activities, justice facilities (such as police stations and courts), educational facilities, public open space and community infrastructure.

To support New Plymouth's growing population, there is a need to look after existing infrastructure networks through operational expenditure (i.e. maintenance and upgrades) and as well as to provide new infrastructure networks and services (i.e. capital expenditure/new builds).

From the Councils' perspective, the ability to provide infrastructure has limitations in relation to both affordability and deliverability. It is therefore essential that growth is appropriately located and connected to existing urban boundaries and can be efficiently serviced by infrastructure. It is also important that landowners pay an appropriate share of the infrastructure investment that they will benefit from. The Councils therefore need to have a clear understanding of what is required, what is affordable, how it will be paid for and how to get the best value from the investments we decide to make.

Ad hoc or isolated infrastructure networks can result in greater financial costs (capital and lifecycle) when compared to building in established urban areas.

Clearly understanding and planning the timing of delivery for key infrastructure projects to support urban growth is also essential. The lead in times relating to investigation, design and delivery for these pieces of work all require considerable time. It is also not financially viable to deliver these projects at one time. As such, the Councils need to carefully consider how and when to fund and deliver infrastructure to enable growth and development in a cost-effective and efficient way. Strategic documents like NPDC's Draft Integrated Transport Framework (ITF) and Infrastructure Strategy help in this planning and decision making.

The Draft ITF is a 30-year framework to help guide transport decision making and investment in the district and to prioritise projects and initiatives for implementation in the next 10 years. The Draft ITF seeks to consolidate existing transport strategies to create clear, effective plans while working alongside our national and regional partners, such as Waka Kotahi, Taranaki Regional Council, and other key stakeholders. It seeks to highlight key drivers for change – drivers that will form the

foundation of our framework into the future. The Draft ITF identifies four key outcomes that it seeks to address through initiatives and interventions including: improving public transport; fixing a fragmented active travel network; reducing reliance on private cars and adapting to urban development.

With regards to the provision of public transport (PT), the Councils recognise that broad changes will need to be undertaken to better integrate transport options with current and future urban development. TRC are currently in the process of undertaking a Single Stage Business Case with Waka Kotahi, to investigate options for a step change in PT provision. The FDS is a feeder document to this work stream. As such, the detail of how PT services will respond to future growth is not known at this point in time, but growth scenarios are informing the development of options and ultimately funding bids for future PT services. This work stream is reflected in TRC's Regional Land Transport Plan (RLTP) (as a no.2-priority) and LTP.

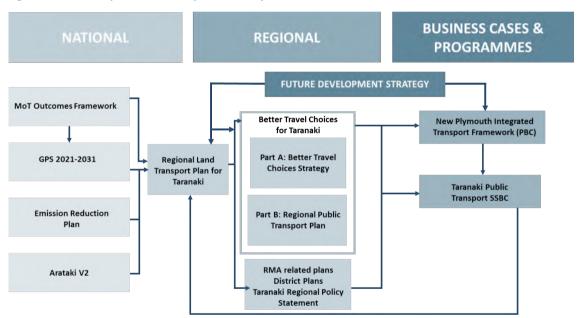


Figure 4: Relationship between Transport Hierarchy and the FDS

The PDP has enabled a greater level of intensification across existing urban areas, which will increase the need to upgrade and provide new infrastructure to support this. Similarly, enablement of greenfield areas will require significant upfront planning and investment in infrastructure. The Implementation Plan in Section 6 provides an overview on proposed projects and their timing that will enable the Councils to accommodate the identified growth, in particular delivering the infrastructure that will be required for these areas.

3.4 Protecting the Natural Environment

The New Plymouth district is home to a unique natural environment with significant areas of indigenous vegetation, rivers and waterways, and black-sand beaches. The New Plymouth urban area has one of the highest vegetation coverage of any urban area in New Zealand.

The health and protection of the natural environment is a strategic issue for the district. The ecological health of the natural environment and the community's access to it are critical to the success of urban

spaces. A well-functioning urban environment relies on a well-functioning natural environment, which is resilient to natural hazards and the effects of climate change.

Development and intensification can put pressure on the natural environment, particularly impacting on provision of connected areas for water, soils, plants and animals to thrive. Growth planning should work with the environment rather than against it and should be planned in a manner that allows space for natural environmental features and processes, improved biodiversity, enhanced water quality, ecological health, natural hazard resilience, water supply security, and recreational and amenity values. This will require the Councils and developers to prioritise outcomes that integrate the built and natural environment.

There is an opportunity to integrate in a balanced way protection of natural and cultural values with landowner aspirations. Past growth has negatively impacted the mauri (life force) of the natural environment. By taking a mātauranga Māori approach development can be planned to protect and restore our ecological taonga as urban spaces grow and change.

While certain natural areas may require modification to support urban development and the associated infrastructure needed for growth, not all areas will be suitable for expansion. Some might face constraints or limitations for providing additional residential and business capacity. Section 4.4 of this FDS recognises the importance of the natural environment in the spatial identification of constraints on development.

3.5 Climate Change

Taranaki is both one of the sunniest and windiest regions in Aotearoa. Our moderate climate often enjoys more than 2,500 sunshine hours a year, but we are exposed to weather systems migrating across the Tasman Sea that influence our rainfall intensity.

However, it is recognised that our local climate is changing. The National Institute of Water and Atmospheric Research (NIWA) in the report Climate change projections and impacts for Taranaki (2022)5 predicts increases of 0.5 to 1.0°C by 2040 and 1.25-3.0°C by 2090.

The impacts of climate change on our environment and communities are anticipated to be significant. Climate change will bring warmer temperatures, extreme weather patterns, including increased rainfall intensity, and rising sea levels. Natural hazards such as droughts and flooding will become more severe, and existing challenges around coastal erosion and stormwater flooding will be exacerbated. Ecosystem health, water quality and availability will need careful management. We need to make space for water and look after ecosystem services. These factors affect our existing urban areas and needs to inform where and how we accommodate growth.

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⁵ NIWA, *Climate change projections and impacts for Taranaki* (2022), (https://www.trc.govt.nz/assets/Documents/Environment/Climate/Climate-change-projections-and-impacts-for-Taranaki-May-2022.PDF)



Coastal Erosion at Motukari Reserve, Onaero

The NPS-UD sets direction for New Zealand's urban environments to support reductions in greenhouse gas emissions and be resilient to the effects of climate change. Land use planning documents such as the District Plan and the FDS, and other planning documents such as Council's Climate action framework (2019)[§]; Emissions Reduction Plan (2023)⁷; Adaptation Plan (drafting underway); and the 10-Year Plan for "Planting our Place"[§] have a key role in supporting a reduction in greenhouse gas emissions and ensuring that communities can adapt to the effects of climate change.

The PDP contains provisions that relate to:

- Compact urban form that reduces the need for private motor vehicles and considers energy efficiency;
- Transportation planning that allows for electric vehicles and a reduced need for private vehicles;
- Managing growth and development carefully in respect of known risks from natural hazards, including the effects of climate change;
- Adaptive management to support communities impacted by natural hazards, including the effects of climate change;
- Protection of significant natural areas (SNAs) and promoting restoration of water bodies and indigenous biodiversity; and
- Recognising emerging technologies that offer potential for a transition to a low-emission economy.

(https://www.npdc.govt.nz/community/a-greener-district/climate-response/)

(https://www.npdc.govt.nz/council/strategies-plans-and-policies/plans/emissions-reduction-plan/))

(https://www.npdc.govt.nz/community/community-partnerships/funding-and-grants/te-korowai-o-tane-planting-our-place/))

⁶ NPDC, Climate action framework,

⁷ NPDC, Emissions Reduction Plan,

⁸ NPDC, Te Korowai o Tāne - Planting Our Place,

Our planning needs to take a long-term view of what our community will need to live, work and travel in a low-emissions future. The Councils can continue to encourage a compact urban form and focus on building communities with infrastructure that enables increased public transport use and active travel, such as walking and cycling. We can plant our green spaces to offset emissions and follow legislation to consent homes and buildings that are warmer and more energy efficient.





NPDC Electric Rubbish Truck

Planting our Place



Cycling to school along Paynters Ave overpass

Support electrification of the economy

The National Policy Statement on Electricity Transmission (NPS-ET) preamble states that ongoing investment in the transmission network and significant upgrades are expected to be required to meet the demand for electricity and to meet the Government's objective for a renewable energy future, therefore strategic planning to provide for transmission infrastructure is required.

Throughout New Zealand including New Plymouth, the National Grid will play a critical role in electrification of the economy to reduce greenhouse gas emissions. This means ensuring that existing National Grid assets in the district are able to be operated, maintained, upgraded and protected from inappropriate subdivision, land use and development. It also means that new development of the National Grid including transmission line connections to renewable energy generation will be required in the future.

4 Inputs to our Spatial Response



4.1 Hapū and Iwi: Values and Aspirations for Growth

The NPS-UD requires the FDS to include a statement of hapū and iwi values and aspirations for urban development. This statement was developed through NPDC's Ngā Kaitiaki hapū and iwi resource management working group. The Councils did not receive any further comments on or proposed changes to the aspiration statements through the submission period.



The preservation of the wider environment should be at the centre of urban design

It is imperative that urban design extends beyond the confines of physical structures. The vitality of our lands and waters, and the holistic well-being and preservation of the natural environment must be accorded greater significance compared to architectural design.

The alteration, contamination, and degradation of waterbodies, the imposition of inappropriate stormwater infrastructure, and the dismantling of natural landforms and established flora deeply unsettle tangata whenua within our district. These actions reverberate through the interconnected ecosystems, impacting not only the physical environment but also the socio-cultural fabric that binds us.

Development affecting sites and areas sacred to Māori, coupled with the preservation of heritage features and critical viewshafts, stands as an ongoing concern for tangata whenua within our district. The loss of these culturally significant spaces erodes the foundation of our identity, disrupts social structures, and hampers the intergenerational transmission of knowledge and connection to the whenua.

It is paramount that our approach to urban development transcends mere accommodation and integrates a profound respect for the intrinsic values held by mana whenua. This approach should not only mitigate the adverse effects of urban development on the environment and social structures but actively promote practices that rejuvenate, safeguard, and enhance the interconnected relationships between the land, water, people, and culture. This, in turn, will foster a sustainable, harmonious, and flourishing future for all within our district.

44

The integration and manifestation of the tangata whenua world view shapes the physical and cultural essence of our environment

Mana whenua seek not only recognition but a profound integration of their worldview into the very fabric of the environment. The desire is for tangata whenua to not only be seen but to witness a reflection of themselves in the landscapes that shape our collective existence. This approach safeguards the tangible markers of cultural heritage but also ensures an ongoing and dynamic presence within the evolving urban landscape.

Empowering tangata whenua in the co-creation of subdivisions, structure plan areas, public spaces, and built forms serves as a potent catalyst in amplifying the visibility of Te Ao Māori within our district. Historically, this visibility has been regrettably absent, despite the enduring historical and cultural presence of tangata whenua in the Ngāmotu district.

Recognising that each hapū possesses unique tikanga and a distinctive narrative for the cultural landscape within their rohe, our future urban development should champion the manifestation of these diverse expressions. The undertaking of Māori cultural and purposeful activities, coupled with the infusion of language, technology, design, and public art, as well as culturally significant signage for key developments, public spaces, buildings, and road names, becomes pivotal in bringing forth the richness of Te Ao Māori.

The preservation of sites and areas of profound significance to Māori, coupled with their adaptive management in the urban environment, emerges as a crucial element in fortifying their visibility.

In envisioning future urban development in the New Plymouth district, it is imperative that we go beyond token gestures and actively weave the tapestry of Te Ao Māori into the very essence of our surroundings. The collaborative engagement of tangata whenua in shaping the physical and cultural landscape ensures a vibrant, inclusive, and culturally rich environment for generations to come.

66

It is incumbent upon the community to dismantle the barriers to enable tangata whenua to participate in urban development decision making

The enduring impacts of colonisation, ramifications of the raupatu, the confiscation of whenua through the transgressions against Te Tiriti, and the perpetual loss of ancestral lands resonate profoundly within the hearts of iwi and hapū today.

In charting future urban development for the New Plymouth district, it is incumbent upon the community to dismantle the barriers of the past, fostering an environment that empowers the revitalisation of Māori land and the flourishing of papakāinga. This strategic vision must encapsulate not only physical development but also a commitment to redress historical injustices, honouring the values that underpin the enduring connection of tangata whenua to their whenua.

The far-reaching consequences of colonisation, encompassing physical, social, and cultural dimensions, demand a conscientious acknowledgment to pave the way for healing and reconciliation.

In Ngāmotu / New Plymouth district, the scarcity of Māori land stands in stark contrast to the historical abundance. Past policies and barriers, entrenched in district plans and legislative frameworks, have erected formidable obstacles hindering the development and utilisation of Māori and ancestral lands. This historical context underscores the imperative to rectify past injustices and pave the way for a more inclusive, equitable, and collaborative future.

The PDP represents a pivotal juncture, recognising the importance of papakāinga development across various zones in the district, including the Māori Purpose Zone. Papakāinga, reflective of the sacred values of kaitiakitanga, ūkaipōtanga, rangatiratanga, and kotahitanga, emerge as profound expressions of cultural identity. Papakāinga serves as a living testament to these values, showcasing multigenerational living and the potential for harmonious coexistence between tradition and progress.

44

Using Mātauranga Māori and Māori design principles benefits good urban design outcomes for the whole community

Harnessing Mātauranga Māori and embracing Māori design principles signifies not only good urban design but a harmonious relationship with the entire district, deeply rooted in mana whenua perspectives.

For Māori, urban design transcends physical structures. It intricately weaves together the relationship between buildings and the people who inhabit them, considering the interconnectedness of location, sense of place, and the profound impact on the mauri of the land, waterways, and biodiversity. It is a holistic approach that goes beyond aesthetics, emphasising the restoration and enhancement of the very essence of our environment.

Tangata whenua aspire to actively participate in the ongoing design of the urban environment. This engagement is not only a current desire but a commitment to future collaborations, ensuring that their values, aspirations, and principles are not only acknowledged but integral to the development trajectory. It is a call for recognition and proactive consideration of their enduring relationship with the district.

A shining example of co-design that embodies culturally distinctive expression and exquisite design is Te Hono – New Plymouth Airport. This project goes beyond being infrastructure; it stands as a testament to the unique identity not only of Ngāmotu but of Aotearoa / New Zealand as a whole. It encapsulates the potential for collaborative design that respects and celebrates the cultural richness of the land and its people. However, Mātauranga Māori can be incorporated in all scales of development, including landscaping, subdivision, and land use to provide for culturally distinctive expression and beauty that is unique not only to Ngāmotu, but to Aotearoa / New Zealand.

In envisioning urban development for the New Plymouth district, the integration of Mātauranga Māori and Māori design principles should be at its core. This approach not only fosters good urban design outcomes but ensures a sustainable, culturally enriched, and harmonious district that respects and uplifts the values of mana whenua.



4.2 Constraints on Development

When considering future growth and development capacity, it is important to understand potential constraints on development. All land could contain factors that constrain development to some extent. While some constraints may make any form of development or growth inappropriate, many others can be overcome with appropriate design and planning considerations. This may require additional expertise to explore opportunities or resolve issues, enabling development to occur (albeit at extra cost). The extent to which land is constrained varies based on the quantity and type of constraint present. There are also some gaps in the information we have available on some constraints that may need to be explored in more detail through pre-development scoping work (e.g. mapped wetlands). See the Technical Document for further information.

Table 1 below outlines the main types of constraints there may be on development.

Table 1: Development Constraints

DEVELOPMENT	EXPLANATION
CONSTRAINT	
Highly Productive Land	Growth areas should ideally avoid encroaching onto highly productive land. Maintaining access to some of this region's most productive soils is crucial for food production, generating economic gains from exports, providing employment opportunities, and supporting the social wellbeing of our rural communities.
Hazards and Risks	Natural hazards such as slope instability, fault lines, flooding, and coastal erosion may pose risks to people, property and the environment. Some land is contaminated due to previous use involving hazardous substances. A risk management approach applies to existing development and infrastructure, while a risk reduction (including avoidance where appropriate) approach applies to new development within identified hazard areas. Climate change is expected to increase many types of natural hazard risk over time.
Scheduled Features and Protected Land	In some localities, development may be considered inappropriate, or need to be carefully managed, because of important values and uses, such as significant natural, historic or cultural environmental values (for example notable trees, sites and areas of significance to Māori and heritage buildings). The presence of scheduled features does not necessarily preclude urban development but may have an impact on housing yield and increase costs. Land protected under the Conservation Act or Reserves Act is not appropriate for urban development.
Infrastructure	Regionally and nationally significant infrastructure such as the National Grid, gas distribution pipelines, the roading network (including state highways) and provision of public transport must be considered when determining appropriate growth areas and designing subdivisions within them. The location and topography will influence whether the land is able to be feasibly serviced or 'infrastructure ready'.
Reverse Sensitivity and Direct Effects on Infrastructure	Development may be inappropriate in some localities because of existing lawfully established uses that are not compatible next door to residential living, including highways, industrial activities and intensive farming and the National Grid.

A lack of infrastructure or the need to upgrade infrastructure to cope with more dwellings can constrain development. While some localities are suitable, sometimes topography or ground conditions means that the cost of the infrastructure to service the area can only be realised in the long-term, or in some cases, not at all.

These have been key considerations in the evaluation of growth areas within the PDP as outlined in the scenario testing contained in section 4.5 below. Detailed information on spatial constraints, including maps of the major constraints across the study areas are shown in the FDS supporting Technical Document.

4.3 Spatial Scenarios

The physical growth pattern of the New Plymouth district has been influenced by many factors. Initially Māori, and later European, settlement was influenced by proximity to natural resources (such as the coast, waterbodies and fertile land) and topography. Later, factors like land availability and its capacity to be serviced by infrastructure, demand for affordable housing, and the ease of access to employment, education institutions, community amenities, along with retail and leisure opportunities, have all played a role in our growth story.

The FDS has looked at alternative ways the district may grow and change physically in the future. Understanding these various options for the future shape of the district helps us enable the best pathway forward. This section sets out the alternative spatial scenarios investigated and the learnings that inform the spatial response.

When thinking about the land available for local business needs, economic analysis undertaken as part of the PDP process indicates that the district has sufficient commercial and industrial zoned capacity to accommodate future business land demand over the long-term. Given future business growth of the district is well catered for (including an element of spare capacity), we primarily have looked at the alternative ways in which residential growth in the district can be delivered in the long term.

We have identified, analysed and discounted a number of different spatial scenarios including: further intensification of existing PDP Medium Density Residential Zones; rezoning PDP Rural Lifestyle Zone to General Residential Zone; intensification of rural land and dispersed development (market led in all zones).

For more detail on the alternative spatial scenarios considered, how the targeted spatial scenarios were developed and assessed, and maps showing the boundaries for new growth areas considered, refer to the Technical Document.

Residential growth assumptions and alternative spatial scenarios

The draft FDS has examined various spatial scenarios to understand the spatial distribution of residential land and how different models might support meeting the district's anticipated demand for housing over the next 30 years.

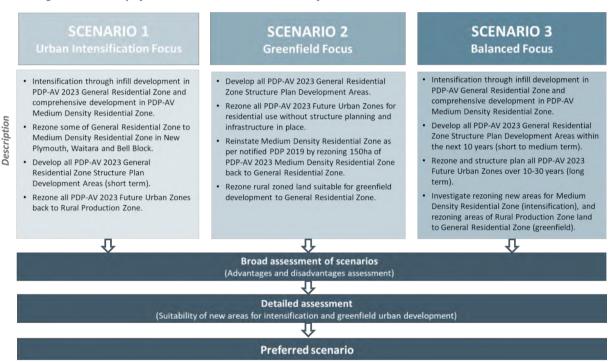
As required by the NPS-UD, we have considered the advantages and disadvantages of different spatial scenarios and whether they provide sufficient capacity to achieve a well-functioning urban environment and assist in the integration of planning decisions with infrastructure planning and funding decisions. The scenarios assessed include an urban intensification focus, a greenfield focus and a balanced focus. Following consideration of advantages and disadvantages, we have undertaken more detailed assessments of specific areas where land could be included to a preferred scenario, in order to determine their appropriateness for inclusion in the FDS. A summary of the scenarios considered, and the process followed for this assessment is outlined within Figure 3.

In developing and assessing the alternative spatial scenarios, the following assumptions have been applied across all scenarios:

 A range of housing typologies will be delivered in line with the PDP Medium Density Residential Zones (e.g. small-scale standalone, terraced and multi-unit developments);

- In time, existing PDP General Residential zoned greenfield areas will be built out and developed at densities consistent with their existing structure plans;
- Undeveloped or vacant parcels of zoned land across the existing urban area of New Plymouth,
 Inglewood and Waitara will be developed over the next 30 years in line with the planned character of the PDP General Residential Zone; and
- Projected business demand can be catered for in existing zoned commercial / industrial areas.

Figure 3: Summary of Scenarios Considered and Process for Assessment



For a full description of the other growth scenarios used for the consultation of the draft FDS 2024-2054, refer to our FDS Supporting Technical Document. This document provided the background and analysis undertaken in preparing the draft FDS.

4.4 Preferred Spatial Scenario

Scenario 3 – Balanced Focus was generally supported by submitters on the FDS and is the preferred scenario for managing future growth and the development capacity required to meet community needs in the district. It will provide opportunities for intensification and the benefits associated with this approach, while also allowing for flexibility and choice in the market through greenfield development.

This means enabling intensification in appropriate locations near amenities, along key transport routes etc. while providing greenfield expansion in a staged way which can be efficiently serviced by infrastructure.

Scenario 3 promotes:

- More intensive housing concentrated in and around the city centre, town centres, local centres, and key transport routes and amenities;
- More infill housing development located throughout the district;
- Greenfield residential development on undeveloped residential land and new residential communities on the fringes of existing urban environments; and
- The consolidation of commercial, community and industrial activities within existing commercial and industrial areas.

The HBCA 2024 has indicated that the PDP has an insufficiency in long-term supply of residential land available to meet projected demand. Recommendations are made in the FDS and FDS Implementation Plan to address this shortfall. In relation to the suggested rural greenfield areas to be considered for urban development (beyond what is already zoned through the PDP), based on the information we currently have available, there is justification to include some additional areas as shown in the Implementation Plan.

However, as our analysis has shown that greenfield rural areas (that are identified as highly productive land) in Scenario 2 may warrant further investigation for long term growth potential, subject to monitoring and review of land supply. Therefore these area have been included in the Implementation Plan.

In implementing this strategy, further consideration will be given to possible growth areas identified.

The existing Future Urban Zones still play a clear role in the future provision of residential land in the district. However, it is also apparent that these areas are not needed in the short-term and that there are significant advantages associated with delaying the development of these areas, particularly given the high cost of providing infrastructure to these areas and further investigations needed. At this stage it is most appropriate to consider the size, make-up and timing of these areas.

5 Our Growth Strategy

Residential Growth

Our growth strategy, which includes the zoning included in the PDP, provides for a balanced approach, through both intensification in appropriate locations as well as greenfield development opportunities. These areas will provide the number and variety of new houses we need to meet the demand over the short, medium, and long term.

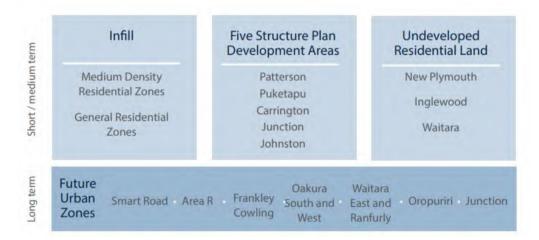
The FDS promotes:

- A combination of residential and commercial activities within the city centre, as well as town and local centres;
- More intensive urban form and housing to be concentrated within and around the city centre;

- More intensified housing across New Plymouth and surrounding townships in areas with good access to centres, transport options and services;
- Greenfield growth in areas close to the existing urban areas. These areas are natural extensions to our existing transport networks and infrastructure;
- Residential development through infill within existing neighbourhoods and undeveloped residential land;
- Sufficient supply of land suitable for retirement living; and
- Commercial, business and industry activities to grow within our existing commercial and industrial zoned areas.

To do this, we will take a balanced two-pronged approach. Growth will be provided through a combination of geographic areas, which in themselves provide for varying housing typologies and densities. These can broadly be described as infill and undeveloped residential land, structure plan development areas, future urban areas and existing centres. Table 4 below outlines the indicative timing for the development of these areas.

Table 4: Indicative Timing for Growth Areas



A compact city footprint offers a range of benefits for people, including easier access to goods and services, greater housing choices and lower long-term infrastructure costs. It also provides more opportunities to move towards a more carbon neutral urban environment, while protecting productive land.

The development capacity and the infrastructure required to support this approach is discussed within the following sections.

Infill and Undeveloped Residential Land

Infill and Intensification

A key part of our growth strategy will be to make use of our existing urban environments through encouraging and enabling infill and intensification via the PDP General Residential and Medium Density Residential Zones. Residential infill development is the establishment of new dwellings within

existing residential areas and is facilitated by the division of existing residential properties into smaller sections or using sites for multiple dwellings. Infill includes development where:

- The existing house is retained and an extra dwelling/s is added;
- The existing house is removed and the entire site is used for an extra dwelling/s; and
- Comprehensive redevelopment where the existing house is removed and the entire site is redeveloped typically for multi-unit developments.

The FDS supports increased infill development up to two stories with the General Residential Zone. A greater level of residential infill development will be provided in the Medium Density Residential Zone, supported by the PDP provisions that enable and support comprehensive multi unit developments. Other options for intensification are enabled in the city, town and local centres. Figure 4 below illustrates the location of key zones that provide for intensification.

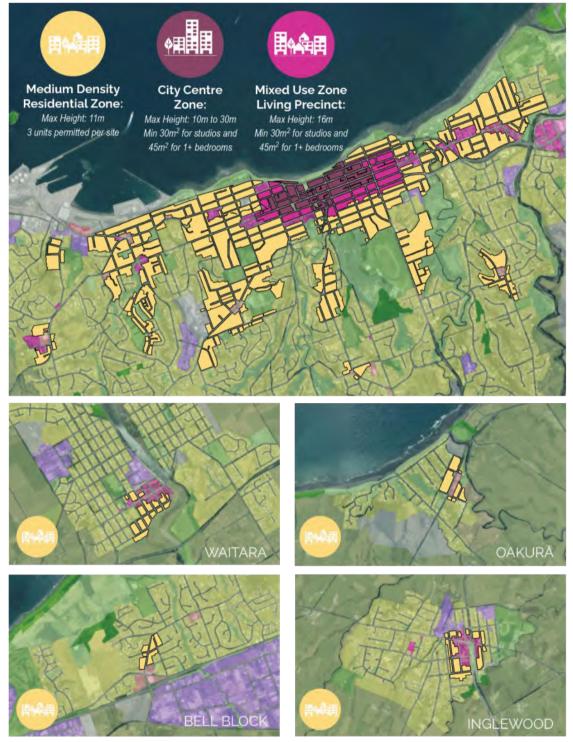


Figure 4: Location of Key Zones that Provide for Intensification

Medium density housing is typically underutilised within the district, where more traditional, detached housing typologies predominate.

The provision of land suitable for intensification (e.g. through the PDP Medium Density Residential Zone) may not lead to these areas developing in a way that achieves a well-functioning urban environment. Pre- FDS feedback has indicated that certain priority areas (for example Westown in New Plymouth) should be identified, and more detailed spatial planning of these areas undertaken. We support future work in this space as we agree the Councils will need to play a role in encouraging and incentivising further residential intensification and complementary business activities. This would provide additional certainty and direction to landowners and the community on how we will grow over the medium to long term.

Undeveloped Residential Land

In addition to this intensification, undeveloped residential land and infill development potential are dispersed throughout the district as shown in Figure 5.

These areas are generally in locations within, or on the fringes of, New Plymouth's existing residential limits. As such, they are relatively accessible to centres and other services. Waitara, Inglewood and Ōakura all currently have significant parcels of undeveloped residential land available. New Plymouth also contains large amounts of undeveloped residential land.

While zoned for development, at times undeveloped residential land can have challenges in delivering good quality urban development. This zoning can be perceived as a "green light". However, there are often other matters to consider, such as the cultural and ecological values of an area. Early engagement with NPDC and other interested partners is a key step in ensuring the consenting process runs smoothly.

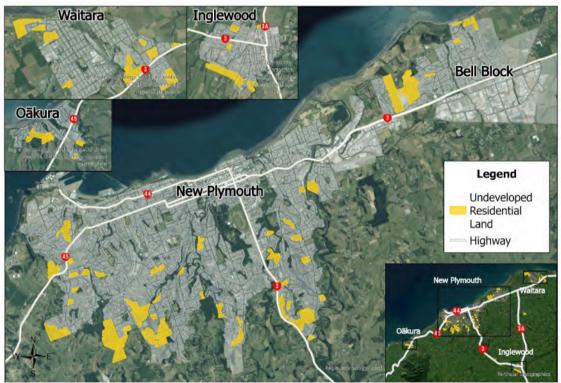


Figure 5: Undeveloped Residential Land

Infrastructure

The infrastructure required to realise the development potential within areas proposed for intensification as well as undeveloped residential land varies significantly across the district.

In relation to Medium Density Residential Zone areas, water modelling undertaken by NPDC show certain discrete issues in relation to servicing these areas. However, these known issues generally have solutions available that are budgeted for through NPDC's LTP.

In relation to undeveloped residential land, of particular note are current levels of service for stormwater and sewer within the Waitara and Inglewood networks. Upgrades to these networks are planned and have funding allocated through NPDC's LTP.

Full details of the planned infrastructure projects supporting this growth be found within the Technical Document.

Growth Areas

In addition to the existing residential areas, a key component of providing for future growth in the district will be through Structure Plan Development Areas that are included in the PDP.

Structure Plan Development Areas

Five structure plan development areas have been identified as being suitable for urban growth purposes. These form the basis for greenfield growth in the district over the short to medium term. Structure plans have been developed for each area which shows future development and land use patterns, the layout and nature of infrastructure, open space and other key features and constraints that influence how the effects of development will be managed.

Each of these areas are located on the periphery of New Plymouth and Waitara's existing urban boundaries, offering natural extensions to these urban boundaries. Being near existing infrastructure, these areas offer a relatively cost-effective approach to providing for greenfield growth in the district.

Tangata whenua have been heavily involved in the structure planning exercises for these areas. Of note, was the involvement during the preparation of the PDP where tangata whenua worked on the content of the structure plans and their associated provisions to better reflect tangata whenua values in relation to these areas.

NPDC has an extensive understanding of the infrastructure required to enable the development of these areas. Key projects requiring NPDC delivery are included within the LTP and Infrastructure Strategy.

There are instances where more "fine grained" structure planning can assist in ensuring these areas are developed appropriately, while giving landowners and developers confidence on what is expected in these areas. NPDC has recently been undertaking this work on certain priority areas (e.g. Puketapu Structure Plan Development Area). Both Councils will continue to consider the need to undertake these exercises on the remaining development areas.

The five structure plan development areas are described in detail within the Technical Document, while the following series of maps (Figures 6-11) spatially identify the infrastructure necessary to support them.



Figure 6: Location of Structure Plan Development Areas and Future Urban Zones



Figure 7: Puketapu Structure Plan Development Area

Figure 8: Carrington Structure Plan Development Area





Figure 9: Junction Structure Plan Development Area





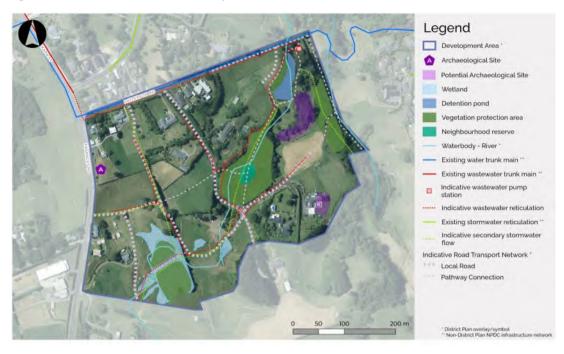


Figure 11: Patterson Structure Plan Development Area

Business Growth

Business Land

The district has a set of existing centres that operate in the following hierarchy:

- City Centre Zone the principal centre that provides a wide range of retail and business service
 activities, living activities, community facilities and visitor accommodation that serve the
 district and Taranaki region.
- Town Centre Zone the town centres of Fitzroy, Waitara and Inglewood that provide a range
 of business, retail and entertainment activities that serve the needs of each town centre's
 community and surrounding rural areas.
- Local Centre Zone rural service centres, village centres, suburban shopping centres and neighbourhood shops providing convenience-based business and retail activities that serve the needs of each local centre's community and surrounding areas.

The PDP also provides for businesses and retail activities located outside of the centres. These zones are:

• Mixed Use Zone – covers a large part of the one-way network wrapping around the City Centre Zone but is also located in parts of Inglewood, Waitara, small areas of New Plymouth and the Waiwhakaiho Valley. This zone is predominantly used for and characterised by commercial service, sport and recreation and community activities. The type and frequency of business and retail activities is limited in this zone to ensure the viability and vibrancy of the centres is not compromised. Commercial service activities may not be appropriate for the centres

because of the effects they generate or because of the unavailability of site large enough to accommodate store footprint requirements.

- Large Format Retail Zone an area in the Waiwhakaiho Valley. This zone is predominantly
 used for and characterised by large format activities. Further investigation of availability for
 these specialist activities is included in the Implementation Plan.
- The Commercial Zone is currently only applied in one location, being the <u>site</u> of the former Moturoa Coolstores at 20 Hakirau Street, New Plymouth. This land is identified as having specific values and presenting specific and unique opportunities for a new Commercial Zone, enabling mixed use, commercial and residential development near to the coast, Port Zone and culturally significant <u>sites</u> at the western end of New Plymouth City.

Industrial Land

The PDP consolidated four Industrial Environment Areas from the Operative District Plan (ODP) into one General Industrial Zone. Industrial land in the district is located near key transport routes at Glen Avon, Bell Block and Paraite, and around Port Taranaki. There is also General Industrial zoned land in Waitara, Inglewood and Egmont Village and some smaller industrial areas in suburban New Plymouth.

The General Industrial Zone provisions aim to prioritise the zone for industrial activities. The General Industrial Zone has a strategic role in supporting the Commercial and Mixed-Use zones. The non-complying activity status for retail and office activities (that are not ancillary to industrial activities) seeks to arrest the leakage of these activities out of the centre zones. The discretionary activity status for commercial service activities seeks to support the integrity of the Mixed-Use Zone. This role in supporting the vitality and vibrancy of the Commercial and Mixed-Use zones is captured in the objectives and policies of the General Industrial Zone.

A June 2021 report undertaken by Property Economics⁹ indicates that the district has sufficient industrial zoned capacity to accommodate future industrial land demand over the long-term. Future growth of the industrial sector is well catered for, including an element of spare capacity.

Future Urban Zones

Future Urban Zones will provide long-term growth (10-30 years) within the district. These areas apply to land that has been identified as being suitable for urban development in the future and are identified in Figure 12 below. When the land is needed for urban purposes, it will be rezoned to enable that to occur (e.g. to a residential or industrial zone). Through the hearing of submissions on the FDS, the timing for feasibility, master planning and plan changes have been brought forward for Frankley/Cowley, Area R, Oakura South, Smart Road and Oropuriri, as shown in the FDS Implementation Plan.

⁹ Property Economics (2021), New Plymouth Future Industrial Land Demand Economic Assessment, (https://proposeddistrictplan.npdc.govt.nz/media/hcsn00ag/hearing-10-appendix-3-property-economics-report.pdf)

Waitara

Waitara East
Oakura West

Ranfurly

New Plymouth

Legend
Future Urban
Zone
Highway

Waitara

New Plymouth

Oroputifi

Figure 12: Future Urban Zones

Each of these areas are located to provide logical extensions to existing urban boundaries.

Well-considered structure planning of Future Urban Zones will be vital to ensure development occurs in such a way that ensures the outcomes of this FDS are achieved. These processes can have long lead in times. As such, it is important that the Councils recognise the time and resource these processes take and begin to prioritise areas for future development.

Smart Road FUZ

Smart Road Future Urban Zone is the largest urban growth area in the district and totals 372.1 hectares. This area will see the logical extension of the New Plymouth urban area and maintain a relatively compact urban form, and allow access to schools, community services and the city centre.

Members of the development sector have strongly advocated for enabling the development of portions of this area within the short-term. In particular, interest has been shown in developing approximately 20 ha of land at the northern extent of the current boundary of Future Urban Zoning.

Significant investment in the planning, design and delivery of infrastructure is required prior to development of this area. Full details of the infrastructure required can be found within the Technical Document supporting this strategy. Of particular note is the need to increase level of service in relation to water supply. At present it is not possible to provide adequate firefighting flow to this area. The solution for resolving this requires an "all of catchment" approach, requiring the construction of a new reservoir at the southern end of Smart Road and an associated trunk main. Both wastewater and stormwater also require solutions to enable development of the land, including consideration of impact on existing river management schemes. As such, it will be difficult to develop a portion of the area "out of sync".

It is also important to note that no structure planning exercise has taken place for Smart Road. The typologies and densities of development enabled would be best determined through this process. Given the size of the area, it is likely that some provision for commercial services and social infrastructure would be appropriate. The Ministry of Education has also indicated that the development of Smart Road is likely the point at which additional education facilities would be required for the district.

Given the timing involved in the planning, design and delivery of both structure planning for the area and solutions to current three waters levels of service, it is considered appropriate for the area to remain as a long-term option for growth. However, given the importance of Smart Road to New Plymouth's overall growth, it would be appropriate for the Councils, over the short-term, to give further consideration to how and when the area will develop. Master planning of the Smart Road FUZ is included in the Implementation Plan.

Junction FUZ

The Junction Future Urban Zone is located next to the Junction Structure Plan Development Area. This area is located in Upper Vogeltown. The topography of the area is steep to undulating with the land dropping towards the south from Tarahua Road and a steep ridge extending north to south from the eastern end of Junction Street. The Te Henui Stream frames the area and provides high recreational value to the area. Totaling 9.9 hectares in area, this zone has the potential for 113 feasible lots although this is dependent on ground conditions which will be determined through subdivision.

Additional wastewater services to enable future development of the area are included in the LTP.

Ōakura South/West FUZ

The Ōakura growth areas were identified as part of the Ōakura Structure Plan process, under the guidance of the Coastal Strategy. Located on either side of State Highway 45 these areas provide potential land supply for the district.

Ōakura South is 13 hectares in size with the potential for 117 feasible lots. Areas along the Ōakura River have been removed from the area as they are not developable for residential use.

This area has been subject of a recent unsuccessful private plan change application. The landowner also pursued residential rezoning through the PDP hearings. These processes did not question the suitability of the land for development in the long-term (as it is currently earmarked), but rather that at present, there were sufficient reasons to not rezone to urban at this time.

The landowner has also indicated that this area should be included within this FDS as suitable for residential use in the short term. As per the decisions in each of these previous processes, it is considered appropriate to maintain this area for long-term development potential.

The Ōakura West area is 39.5 hectares with the potential for 355 feasible lots.

Both growth areas require comprehensive structure planning which will likely need to be informed by a social impact assessment. In order for Ōakura to grow, we need to understand how the social impacts of growth will be managed. Infrastructure considerations also need to be worked through. There are particular issues regarding access and the intersection of Wairau Road, with an intersection and consideration to the three waters is also required. Provision of open and recreation space, medical and educational facilities will also form part of this future analysis.

Frankley/Cowling FUZ

This Future Growth Zone is located on the south western pocket of the New Plymouth urban boundary. It is a large area of 138.5 hectares, with the potential for 814 feasible lots. The growth area is accessible to services and schools and has good roading connections to the central city. Located on the western side of the city the identification of this area balances future growth pressures and maximises the use of existing community facilitates and resources. It provides for the outward extent of urban growth, clearly defining the future urban boundary of New Plymouth city.

There are infrastructure constraints associated with the development of this land, particularly in regard to wastewater and potable water supply. Upgrades have been included in the Infrastructure Strategy.

Ranfurly Street, Waitara

This is a new area included in the PDP and is 11.6 hectares. This land is part of the original survey plans for Waitara and contains a grid layout of paper roads. It represents a logical boundary for urban containment of the western edge of Waitara. Using this area will allow existing pathways and road networks to be utilised and will help to ensure that the town is not compromised by sporadic and/or disconnected development. Whereas there are many natural hazards impacting Waitara, the Ranfurly FUZ contains no known hazards.

Waitara East

This Future Urban Zone is 19.2 hectares in size with the potential for 231 feasible lots. Through the PDP process, this area was reduced substantially in size due to the cultural values associated with the whenua and awa of the area and to better meet the urban growth needs of Waitara. Two other areas have been identified as more appropriate for growth in Waitara (further rezoning along Armstrong Avenue and a new Future Urban Zone over Ranfurly Park). These two new areas are considered to be more logical for residential development given their location to existing amenities and infrastructure, however this area also holds cultural importance to Manukoriki hapū. These cultural values will need to be taken into account in future subdivision processes. Note: The ODP Waitara West Future Urban Development Overlay has not been carried over into the PDP.

Area R

Area R is the eastern extent of development in the Bell Block area. There are access issues with the State Highway intersection that are being addressed through the Airport Drive Realignment project. NPDC has accelerated planning in this area and is progressing a designation to support the changes to the local roading network that will accommodate and support a local roading upgrade. The land is earmarked for future employment land, although there is potential for residential land to the west of the proposed Airport Drive realignment. Further economic work will help determine how the land should be utilised to complement established business land in and around Bell Block.

Oropuriri

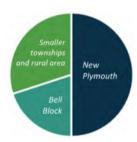
This area of 25.8 hectares is located between the State Highway and Oropuriri Road and has been investigated for future industry zoning (continuing the land-uses at either side) through previous district planning processes. Significant cultural values have been identified in this area by Puketapu and Ngāti Tawhirikura hapū. Any further roading connection is likely to impact cultural values impacting the ability for the area to be comprehensively developed. Further investigations are required regarding stormwater management and roading.

5.1 What capacity will this provide?

Residential Land

The FDS provides potential capacity for about 12,043 new houses in and around the New Plymouth district. This is slightly more than the projected demand of 11,027 New Plymouth district is required to accommodate over the next 30 years (by the end of 2054). This capacity is calculated based on the assumption that the measures associated with future plan changes identified in the FDS Implementation Plan are completed.

We estimate that the FDS will provide capacity for new houses across the New Plymouth district as follows:



Over the last five years, around 50 per cent of all new dwellings were in residential areas of New Plymouth, with an additional 20 per cent in the Bell Block residential area. The remaining 30 per cent are either in the residential areas of our smaller townships or the rural area. Bell Block is expected to continue to have a high number of consents in the short term to medium term, with the development of the Puketapu Structure Plan Development Area and a large proportion of undeveloped residential land.

Historically NPDC has seen a high proportion of consents in Rural Production Zone. However, policy changes to the PDP aim to decrease the number of applications in the rural environment (short to medium term) along with the zoning to Rural Lifestyle Zone.

The anticipated residential capacity distribution throughout the New Plymouth district is shown in Figure 13.

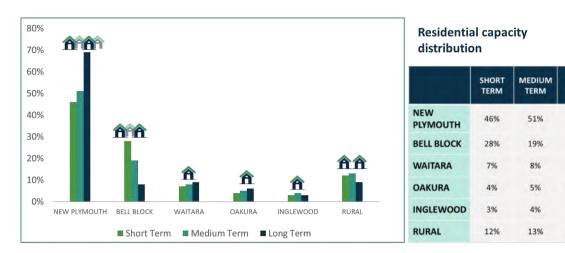


Figure 13: Anticipated Residential Capacity Distribution Throughout New Plymouth District

Business Land

Most of the district's long-term capacity designated for retail and commercial use is in the city centre and the adjacent Mixed-Use Zone. The overall potential plan-enabled, feasible, and suitable for development capacity amounts to 44.3 hectares.

In the short to medium term, the current potential capacity for industrial land in the district is met by the existing industrial land, totaling 163 hectares. To ensure sufficient capacity for long-term demands, NPDC has identified the Oropuriri FUZ, encompassing 44 hectares, as the designated area for future industrial development.

6 Implementation

The FDS is intended to provide direction, give confidence to, and help our partners to play their part in the growth and development of our urban areas. The FDS will not be delivered by the Councils alone and the delivery of many of the actions will require wider engagement through other processes. The Councils will need to partner with iwi and hapū, the Government, non-government organisations, businesses and community groups to achieve positive growth.

How can we best manage and foster relationships between the Council, the development community and other stakeholders for increased understanding of expectations and intentions?

The FDS is a long-term strategic document with a 30-year view of growth and development, and it cannot be delivered all at once. To achieve the FDS outcomes and implement the growth strategy, we need to take actions over a long period of time. The timing and staging of development are key components of implementation.

A FDS Implementation Plan will sit alongside the FDS as a single document, as required by the NPS-UD. An Implementation Plan provides guidance on how and where growth and associated infrastructure will occur. It also provides a framework for prioritising actions over the short, medium and long term.

LONG

69%

6%

6%

3%

9%

The Structure Plan Development Areas identified in the FDS form a key component of the FDS Implementation Plan. Where Council activities to support growth are included in the LTP, these have been included in the Implementation P

lan. We will align future LTP and FDS processes, to deliver the planning and delivery of key infrastructure to support growth.

In addition to the FDS Implementation Plan, NPDC already promotes the use of the Residential, Subdivision and City and Town Centre Design Guides in its day-to-day implementation of the PDP. In the future, opportunities to encourage and incentivise intensification may be explored. This will support a key outcome of the FDS, that being to achieve a compact city where people can easily access jobs, services, education and quality open spaces. It also follows the District Plan Review where a considerable area of land was upzoned to provide for intensification. The district now has over 400 hectares of medium density zoned land, and infrastructure upgrades will be required to support infill.

Implementation with a focus on collaboration:

As part of the ongoing implementation of the FDS, NPDC will continue to meet regularly with the Technical Professionals Group and Developers Forum. This will be complemented by the Ngāmotu Growth Advisory Panel which is envisaged to provide an elevated collaborative platform for the District's growth planning.

Collaboration with tangata whenua and a Māori growth planning project is also included in the FDS Implementation Plan. This will investigate opportunities for accelerated structure planning, future urban planning and papakāinga in partnership with iwi and / or hapū.

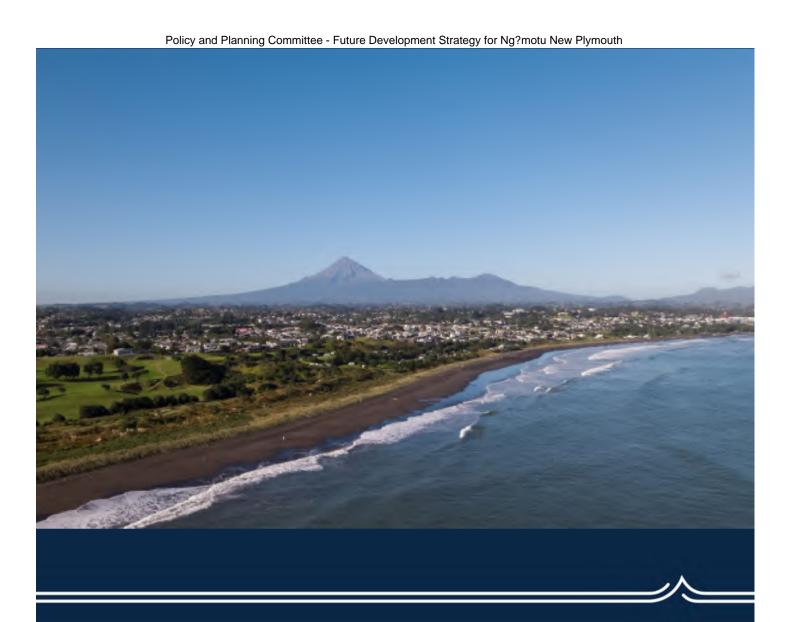
The Councils' role in future infrastructure planning will be transparent through the Implementation Plan, and there will be flexibility to consider out-of-sequence growth where developers wish to lead master planning and plan changes.

The FDS Implementation Plan does not require public consultation under the NPS-UD. It is a standalone document that sits alongside this FDS and will be reviewed and updated annually.

6.1 Monitoring and Review

The FDS is a long-term strategic document that cannot be delivered all at once and in itself will not result in immediate change. To achieve the FDS outcomes and to deliver housing, we need to take actions over a long period of time. Ongoing monitoring of development will assist evaluating how our urban areas are growing and whether there is a need to bring forward, push back, or re-align the zoning and infrastructure servicing of land in response to demand.

Monitoring, review and responding to change as necessary is essential. The Councils are committed to working alongside iwi, hapu and the development sector to continue to improve and refine modelling. This is an area of continuous improvement and also a continual cycle of monitoring, modelling and pivoting where needed.



Future Development Strategy for Ngāmotu New Plymouth 2024-2054

Implementation Plan





Introduction

What is the Future Development Strategy for Ngāmotu New Plymouth?

This Future Development Strategy for Ngāmotu New Plymouth (the FDS) has been prepared by Taranaki Regional Council and New Plymouth District Council (the Councils). Its purpose is to set out the strategic framework for providing for urban growth to meet the needs of New Plymouth district. It gives direction to the community about where new homes and businesses will be located. It describes the priority issues we need to start to address now, and the collective aspirations we have for the future of our urban areas.

This FDS is supported by a Technical Document that provides additional detail on the data and research that has been utilised to inform the FDS.

The Government introduced the National Policy Statement on Urban Development 2020 (NPS-UD) in August 2020 (updated 2022)¹. The NPS-UD outlines the requirements for what a FDS must show and be informed by. It states that the purpose of the FDS is to promote long-term strategic planning by setting out how the Councils intend to:

- Achieve well-functioning urban environments in their existing and future urban areas;
- Provide at least sufficient development capacity over the next 30 years to meet expected demand: and
- Assist with the integration of planning decisions under the Resource Management Act (RMA) with infrastructure planning and funding decisions.

To achieve a well-functioning urban environment, the NPS-UD requires that a FDS:

- Provides for a variety of homes that meet local needs and enable Māori to express their cultural traditions and norms;
- Provides a variety of land suitable for local business needs;
- Enables good accessibility for all people between housing, jobs, community services and open spaces, including by public or active transport;
- Supports the competitive operation of land and development markets;
- Supports reductions in greenhouse gas emissions; and
- Necessitates being resilient to the current and future effects of climate change.

For more information on the content requirements of a FDS refer to Section 2 of the Technical Document.

Policy framework - Where does the FDS fit?

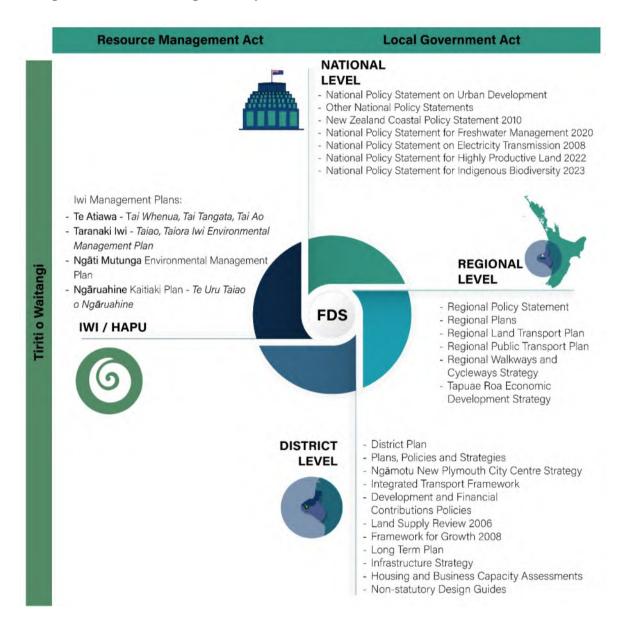
The FDS sits within a framework informed by legislation, Government policy, regional and district strategies and plans, as well as the values and aspirations of tangata whenua and the local community.

2

¹ MfE, National Policy Statement on Urban Development 2020, (https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/)

Figure 1 below shows examples of the documents that have been taken into account in its development.

Figure 1: Documents informing the development of the FDS



Importantly, the Councils must also have regard to the FDS when preparing RMA planning documents. The Councils are also strongly encouraged to consider the FDS when considering long-term plans (LTPs), along with other plans and strategies developed under the Local Government Act, this is to ensure alignment of infrastructure and projects that facilitate delivery of a FDS.

FDS Implementation

The FDS is intended to provide direction, give confidence to, and help our partners to play their part in the growth and development of our urban areas. The FDS will not be delivered by the Councils alone and the delivery of many of the actions will require wider engagement through other processes. The Councils will need to partner with iwi and hapū, the Government, non-government organisations, businesses and community groups to achieve positive growth.

The FDS is a long-term strategic document with a 30-year view of growth and development, and it cannot be delivered all at once. To achieve the FDS outcomes and implement the growth strategy, we need to take actions over a long period of time. The timing and staging of development are key components of implementation.

A FDS Implementation Plan will sit alongside the FDS as a single document, as required by the NPS-UD. An Implementation Plan provides guidance on how and where growth and associated infrastructure will occur. It also provides a framework for prioritising actions over the short, medium and long term.

The Structure Plan Development Areas identified in the FDS form a key component of the FDS Implementation Plan. Where Council activities to support growth are included in the LTP, these have been included in the Implementation Plan. We will align future LTP and FDS processes, to deliver the planning and delivery of key infrastructure to support growth.

In addition to the FDS Implementation Plan, NPDC already promotes the use of the Residential, Subdivision and City and Town Centre Design Guides in its day-to-day implementation of the PDP. In the future, opportunities to encourage and incentivise intensification may be explored. This will support a key outcome of the FDS, that being to achieve a compact city where people can easily access jobs, services, education and quality open spaces. It also follows the District Plan Review where a considerable area of land was upzoned to provide for intensification. The district now has over 400 hectares of medium density zoned land, and infrastructure upgrades will be required to support infill.

Implementation with a focus on collaboration:

As part of the ongoing implementation of the FDS, NPDC will continue to meet regularly with the Technical Professionals Group and Developers Forum. This will be complemented by the Ngāmotu Growth Advisory Panel which is envisaged to provide an elevated collaborative platform for the District's growth planning.

Collaboration with tangata whenua and a Māori growth planning project is also included in the FDS Implementation Plan. This will investigate opportunities for accelerated structure planning, future urban planning and papakāinga in partnership with iwi and / or hapū.

The Councils' role in future infrastructure planning will be transparent through the Implementation Plan, and there will be flexibility to consider out-of-sequence growth where developers wish to lead master planning and plan changes.

The FDS Implementation Plan does not require public consultation under the NPS-UD. It is a standalone document that sits alongside this FDS and it will be reviewed and updated annually.

Monitoring and Review

The FDS is a long-term strategic document that cannot be delivered all at once and in itself will not result in immediate change. To achieve the FDS outcomes and to deliver housing, we need to take actions over a long period of time. Ongoing monitoring of development will assist evaluating how our urban areas are growing and whether there is a need to bring forward, push back, or re-align the zoning and infrastructure servicing of land in response to demand.

Monitoring, review and responding to change as necessary is essential. The Councils are committed to working alongside iwi, hapu and the development sector to continue to improve and refine modelling. This is an area of continuous improvement and also a continual cycle of monitoring, modelling and pivoting where needed.

* Subject to 2024 Long Term Plan decisions

FDS IMPLEMENTATION PLAN			HORT TE 0-3 year					DIUM TI 3-10 yea				LONG TERM 10-30 years
FD3 INFELIMENTATION FEAR		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
KEY												
(x) = Included as a line item in the draft 2024 LTP				_						•		timings
= Funded via the K\u00e4inga Ora Homes and Communities Infrastructure Accommunities	celerat	ion Fur	nd		= Future	Urban	Zone ir	npleme	ntation	timing	S	
$\frac{I}{I}$ = No funding included in the draft 2024 LTP or Developer-led		c	HORT TE		= Urban intensification implementation timings MEDIUM TERM							LONG TERM
STRUCTURE PLAN DEVELOPMENT AREAS		3	0-3 year					3-10 year				10-30 years
Puketapu Structure Plan Development Area		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three waters: Parklands Ave Extension Sewer	<u> </u>											
- Three waters: Water supply upgrades	⊘											
- Three waters: Stormwater modelling completed to inform development	⊘											
- Complete finer grained structure planning	⊘											
- Three waters: Construction of stormwater assets – Phase 1	⊘											
- Three waters: Construction of stormwater assets – Phase 2	\oslash											
- Transport: Parklands Ave Extension Waitaha Stream Bridge to Airport Dr	⊘											
- Transport: Airport Drive/Parklands Avenue Roundabout	\oslash											
- Three Waters Bell Block Trunk Sewer – Capacity Upgrade	⊘											
- Transport: Shared pathway along the Waitaha Stream	⊘											
- Transport: Construction of bridge over the Waitaha Stream	\oslash											
- Transport: Construction of two underpasses - Waitaha Stream	\bigcirc				_							
- Land purchase – Area Q/Puketapu Growth Area	\bigcirc				_							
 Investigation of additional adjoining land for inclusion in Puketapu Structure Plan 												
Johnston Structure Plan Development Area		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three waters: New sewer main and road upgrading	\triangle											
- Potential Reserve purchases	\triangle											
Carrington Structure Plan Development Area		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three waters: Stormwater modelling completed to inform development	⊘											
- Complete finer grained structure planning	<u></u>				-							
- Land purchase – Upper Carrington Growth Area	<u></u> Ø				-							
- Three waters: Upgrading of the Huatoki Valley Sewer Main	<u></u>											
- Transport: Upper Carrington Road widening	<u></u>											
- Three waters: Construction of stormwater ponds	\triangle											
- Three waters: Water supply improvements	<u>∠</u>				-							
Junction Structure Plan Development Area		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three waters: Stormwater modelling completed to inform development	✓											
- Complete finer grained structure planning and investigations into		_			-							
flooding and liquefication issues - Three waters: Upgrade to sewer, construction of new sewer pump	\bigcirc				-							
station and further downstream sewer upgrades - Three waters: Construction of stormwater ponds	\triangle											
- Transport: Upgrade to Junction Street Bridge and seal widening	<u> </u>											
- Land purchase – Junction Growth Area	<u> </u>				-							
Patterson Structure Plan Development Area	•	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Transport: Frankley Road shared pathway	•>	, 22	,,=3	,,,,	,	,	,	,	,	,	,=-	
- Transport: Frankley Road Tukapa Street Intersection Upgrades	···											
- Transport: Patterson Road Seal Widening	<u> </u>											
- Transport: Patterson Road Sear Widening - Transport: Patterson Road Extension	•											
- Transport: Patterson Road Extension - Transport: Cycleway and Walkway over Sutherland Sewer												
- Transport: Cycleway and Walkway over Sutherland Sewer - Three Waters: Sutherland Sewer	(e)				-							
	<u>→</u>											
- Three Waters: Veale Road Pump Station inlet/outlet upgrade	⊘				-							
- Three Waters: Patterson Road Water Main	<u>••</u>				-							
- Land purchase – Patterson Growth Area (esplanade reserve)	⊘				-							
- Three Waters: Stormwater modelling completed to inform development	\bigcirc											

- Three Waters: Stormwater detention ponds	<u> </u>											
- Transport: Potential walkway over water main	<u> </u>											
- Complete finer grained structure planning	⊘											
Armstrong Ave (Specific Control Area)		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three Waters: Tangaroa stormwater management	⊘											
- Three Waters: Waiari stormwater management	\bigcirc											
 Complete finer grained structure planning and cultural values assessment 	\triangle											
- Transport: Upgrade of Armstrong Ave, Upgrade of Waitara High School	\triangle											
driveway and pedestrian/driveway upgrade for School buses. FUTURE URBAN ZONES		S	HORT TEI					DIUM TE				LONG TERM
Junction (Stage 2) Future Urban Zone		24/25	0-3 year 25/26	s 26/27	27/28	28/29	29/30	3-10 year 30/31	31/32	32/33	33/34	10-30 years 2034-2054
- Three Waters: Stormwater modelling completed to inform development	✓	,	,		,		,	,	,	,	,	
- Feasibility of FUZ / wider Junction areas	⊘				-							
	<u> </u>											
- Structure planning												
- Three Waters: Investigation work for all stormwater	^											
Three Waters: Investigation work for water supply Three Waters: Investigation work for sewer, including a potential new	\triangle											•
sewer pump station	\triangle											
- Transport: Investigation work for roading	\triangle											
Frankley/Cowling Future Urban Zone		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three Waters: Stormwater modelling completed to inform development $% \left(1\right) =\left(1\right) \left(1\right$	\bigcirc											
- Feasibility of FUZ (including consideration of adjoining sites)	\oslash											
- Potential Plan Change												
- Structure planning	\bigcirc											
- Transport: Cowling Road widening	\triangle											•
- Three Waters: Investigation work for all stormwater	A											•
- Three Waters: Investigation work for water supply	\triangle											•
- Three Waters: Investigation work for sewer, including a potential new	\triangle											•
sewer pump station - Three Waters: Waimea sewer extension	⊘											
Area R Future Urban Zone		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Three Waters: Stormwater modelling completed to inform development	⊘			,				,				
Feasibility of FUZ (Master planning as part of Bell Block Spatial Plan)	<u> </u>	-										
- Structure planning	<u> </u>				_							
- Three Waters: Investigation work for all stormwater												
	<u> </u>											
Three Waters: Investigation work for water supply Three Waters: Investigation work for sewer, including a potential new	<u> </u>											
sewer pump station	\triangle											•
- Transport: Investigation work for roading	\triangle											•
 Transport: Airport Drive/round-about realignment roading master planning 	\oslash											
Öakura Future Urban Zones (South and West)		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054
- Feasibility of FUZ West												
- Feasibility of FUZ South (including investigation into a retirement village												
proposal) - Potential Plan Change for Ōakura South												
- Structure planning	\triangle											
- Transport: Wairau/South Road round-about												
- Transport: SH45 Wairau Road underpass	\triangle											
- Transport. 5n45 Waliau Roau uniderpass - Three Waters New water supply main	\triangle											
	⊘											
- Three Waters Investigation work for stormwater	\triangle											
Three Waters Investigation work for water supply Three Waters Investigation work for sewer, including a potential new	<u> </u>											
sewer pump station	Λ											•
- Transport: Investigation work for roading	\triangle											
Smart Road Future Urban Zone		24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	2034-2054



COUNCIL PROCESSES	SHORT TERM 0-3 years	MEDIUM TERM 3-10 years	LONG TERM 10-30 years
Development of a PDP Implementation Plan to proactively assist change management and to achieve the outcomes sought by the PDP.	•		
 District Plan - Plan Change (omnibus plan change: to finetune the PDP and reduce duplication, inefficiencies and/or pinch points that are creating challenges for the provision of housing and development (in collaboration with the Growth Advisory Panel) 	•		
- District Plan - Plan Change (plan change specific to SASM/AS)			
- Retirement investigation/collaboration			
- Investigation of commercial land and land supply for LFR			
- Establish Ngāmotu Growth Advisory Panel			
- Ongoing regular meetings with Technical Professionals Group and Developers Forum			



Date: 30 April 2024

Subject: Office of the Auditor General - Audit on Managing Freshwater Quality

Author: A D McLay, Director-Resource Management

Approved by: S J Ruru, Chief Executive

Document: 3263227

Purpose

 The purpose of this memorandum is to update members on Council's participation in a follow up from the Office of the Auditor General (OAG) on regional councils' relationship with iwi and hapū for freshwater management.

Recommendations

That Taranaki Regional Council:

- a) receives this memorandum
- b) <u>notes</u> the Office of the Auditor General's Regional councils' relationships with iwi and hapū for freshwater management a follow-up report (2024)
- notes the positive progress made in the relationship between the Council and iwi and hapū in the region.

Background

- 2. In 2011 the Office of the Auditor General (OAG) published a report on how effectively Waikato Regional Council, Horizons Regional Council, Environment Southland and Taranaki Regional Council (the Council) managed the effects of land use on freshwater quality in their regions.
- A subsequent report was published in 2019 titled 'Managing freshwater quality: Challenges and opportunities'. In this report, the OAG assessed the progress that each council had made since the 2011 report.
- 4. Within the 2019 report, the need to strengthen Council's relationships with iwi and hapū within the rohe (region) to manage freshwater quality better was identified.
- Since the 2019 report, changes to the National Policy Statement for Freshwater Management (NPS-FM)
 have strengthened the requirements for regional councils to work with tangata whenua on managing
 freshwater.
- 6. In 2023, the OAG followed up with council officers and engaged with iwi and hapū representatives to see what progress had been made.
- 7. The report was released on 21 May 2024 and received some media coverage.

Discussion

- 8. In the OAG's 2019 report, it was noted that iwi and hapū felt their relationship with Council was transactional in nature, which resulted in a shift in our approach to engaging with iwi and hapū. The change from a consultative approach to a more collaborative approach has supported this and is noted within the report.
- 9. This change has allowed the Council to strengthen its commitment to bringing iwi and hapū aspirations into understanding freshwater planning and is improving the level of trust and confidence iwi and hapū have in their relationships with Council.
- 10. The report notes the positive changes in attitudes that Council staff have towards building relationships with iwi and hapū at all levels, and is shown through recruitment of strategic positions to build capabilities in areas such as matauranga māori. Engagement with iwi Chief Executives has also been a positive strategic step.
- 11. There is a desire from some iwi and hapū for these recent improvements to go further and the Council is committed to continue this mahi (work) as part of our journey.
- 12. The changes required to better manage freshwater and the relationship with iwi and hapū are long term journeys, and maintaining a positive relationship is imperative.
- 13. The Māori voice has been an integral part of our freshwater journey. The Council can't work to protect Taranaki's rivers, streams, lakes and wetlands without the invaluable contribution from iwi and hapū across the region.
- 14. Council's relationship with iwi and hapū is expanding with the development of a joint management agreement with Ngāti Maru and continuing work to establish the Waitara River Committee.
- 15. To facilitate the freshwater mahi, the Council funded two Pou Taiao. The Pou Taiao have worked closely with Council staff, contributing views and position papers so the views of iwi and hapū are part of the foundational work underway to create a new Land and Freshwater Plan for the region. The knowledge and understanding provided by the Pou Taiao of the Māori world has been really useful and appreciated. This mahi is continuing and is a vital element of the development of the Land and Freshwater Plan and ensuring Iwi and hapū have the capacity to contribute effectively to this process.
- 16. The other three councils that were part of the investigation also showed improved relationships between the councils and iwi and hapū. Feedback from councils who were not part of the investigation also shows the same positive trends.

Financial considerations—LTP/Annual Plan

17. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

18. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

19. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan.

Community considerations

20. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

21. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

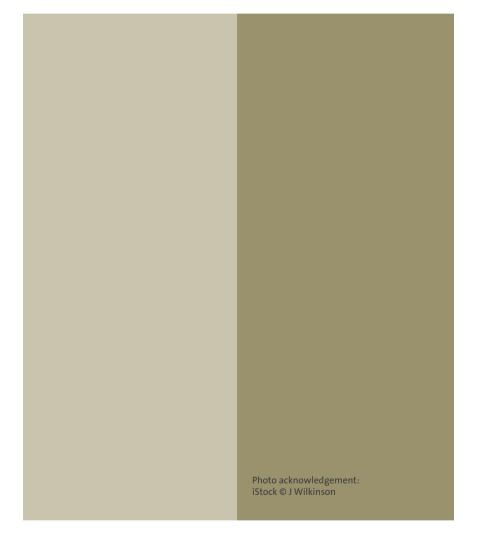
Document 3278600: Regional Council's relationships with iwi and hapū for freshwater management – a follow-up report.



B.29[24d]

Regional councils' relationships with iwi and hapū for freshwater management – a follow-up report





B.29[24d]

Regional councils' relationships with iwi and hapū for freshwater management – a follow-up report

Presented to the House of Representatives under section 20 of the Public Audit Act 2001.

May 2024

Contents

Auditor-General's overview	3
Why we did this work	5
What we did	7
What we found	9
Regional councils getting to know individual iwi and hapū creates the foundation for meaningful relationships Responding to individual iwi and hapū views on freshwater supports more effective freshwater	10
management Mutually beneficial relationships lay the foundations for effective long-term strategic freshwater	12
management	14
Waikato Regional Council's progress since 2019	16
Summary of key findings Changes to freshwater management in the Waikato since 2019 Waikato Regional Council has improved its approach to working with iwi and hapū Iwi in Waikato want more meaningful and enduring relationships with the Council	16 17 18 19
Taranaki Regional Council's progress since 2019	21
Summary of key findings Changes to freshwater management in Taranaki since 2019 Taranaki Regional Council is focused on working with iwi and hapū more collaboratively lwi and hapū in Taranaki want recent improvements at the Council to go further	21 22 23 24
Horizons Regional Council's progress since 2019	26
Summary of key findings Changes to freshwater management in Manawatū-Whanganui since 2019 Horizons Regional Council has strengthened its work with iwi and hapū on managing freshwater Iwi and hapū want strong relationships with a wider range of teams within the Council	26 26 28 29
Environment Southland's progress since 2019	31
Summary of key findings Changes to freshwater management in Southland since 2019 Environment Southland and Ngãi Tahu ki Murihiku are achieving positive freshwater outcomes	31 31 32

Auditor-General's overview

E ngā mana, e ngā reo, e ngā karangarangatanga maha o te motu, tēnā koutou.

Freshwater is one of New Zealand's most important natural resources. The quality of the water that flows through our lakes and rivers affects the lives and livelihoods of all New Zealanders. Changes to the way we use and manage land have affected many of our waterways, and climate change is putting further pressure on our freshwater ecosystems.

Improving how we manage freshwater quality in New Zealand is important work. It is particularly important for regional councils, who are responsible for managing freshwater quality in their regions.

Regional councils have statutory obligations to involve iwi and hapū in managing freshwater resources through the National Policy Statement for Freshwater Management, the Resource Management Act 1991, Treaty settlements and other legislation. Many iwi also exercise kaitiakitanga over freshwater in their rohe.

Regional councils need meaningful relationships with iwi and hapū because of the deep cultural and traditional connections that tangata whenua have with water bodies and water. These relationships can help regional councils better understand the values and aspirations that iwi and hapū have for freshwater management.

In 2019, we looked at how effectively Waikato Regional Council, Taranaki Regional Council, Horizons Regional Council, and Environment Southland were managing freshwater quality. We recommended that, to manage freshwater quality better, three of these regional councils (Waikato, Taranaki, and Horizons) strengthen their relationships with iwi and hapū in their regions. In 2023, we followed up with all four regional councils and spoke with iwi and hapū representatives to see what progress the regional councils had made.

We found that all four regional councils are focused on strengthening their relationships with iwi and hapū. We saw improvements in how they work with iwi and hapū to manage freshwater quality, and they all now involve tangata whenua in governance structures that oversee regional freshwater management.

However, we heard from iwi and hapū representatives that they want more enduring and meaningful relationships with regional councils. Some iwi and hapū still feel that regional councils tend to engage with them only on specific projects and focus only on what the councils want to prioritise.

At times this can lead to regional councils not taking the time to understand iwi perspectives on the different waterways in their rohe, or engaging with the wrong people.

Auditor-General's overview

Meaningful relationships that will endure, even when circumstances change or challenges arise, require a more strategic approach. A strategic approach should focus on shared long-term goals for freshwater management; a common understanding of each other's interests in, and concerns for, freshwater; appropriate structures for councils to hear and respond to iwi and hapū voices; and effective processes for sharing information. Working with iwi and hapū in this way should be a core capability for councils, as it is critical to good environmental planning, and a range of other responsibilities regional councils have.

A strategic approach will assist councils to better prioritise and manage freshwater projects in ways that benefit everyone, adapt processes to ensure they work for all those involved, avoid engagements feeling transactional, and sustain and strengthen relationships.

The four regional councils we looked at all intend to continue to improve relationships and involve iwi and hapū in freshwater management and policy. Iwi and hapū representatives we spoke with recognised this. I encourage all councils to consider how they can learn from the observations in this report and the approaches that different councils have taken to working more effectively with iwi and hapū to manage freshwater quality.

I thank the staff of the four regional councils and the iwi and hapū representatives who volunteered their time and expertise to support this work. My Office will continue to have an interest in how regional councils are working to build meaningful and enduring relationships with iwi and hapū in their regions.

Nāku noa, nā

John Ryan

Controller and Auditor-General | Tumuaki o te Mana Arotake

10 May 2024

1

Why we did this work

- 1.1 Effective freshwater management is an important focus for all regional councils who are responsible for managing freshwater quality in their regions. The quality of New Zealand's freshwater environment affects the lives of all New Zealanders. However, the way we use and manage land and freshwater is putting many of our freshwater ecosystems under pressure.
- 1.2 In 2019, we published a report looking at how well Waikato Regional Council, Taranaki Regional Council, Horizons Regional Council, and Environment Southland manage freshwater quality in their regions. We also looked at how well the Ministry for the Environment and Statistics New Zealand were using the data that regional councils collect to create a national picture of freshwater quality.
- 1.3 One of our recommendations in that report was:
 - ... that Waikato Regional Council, Taranaki Regional Council, and Horizons Regional Council strengthen relationships with iwi and hapū, especially those yet to complete Treaty settlement processes, by formally seeking their aspirations for involvement in strategic decision-making and identifying how those aspirations can be met.
- 1.4 The purpose of this follow-up work was to see what progress the three regional councils have made on this recommendation since 2019. Although we did not direct the recommendation at Environment Southland, we included it in this work to see how its relationships had also developed during this period. We followed up the four other recommendations we made in our 2019 report in a separate piece of work in 2023.²
- 1.5 Māori have deep cultural, traditional, and customary connections with waterways. These relationships to water have a special significance in Treaty settlements. As a result, regional councils have statutory obligations to involve iwi and hapū in managing freshwater resources through the National Policy Statement for Freshwater Management (NPS-FM) and the Resource Management Act 1991, as well as Treaty settlements and other pieces of legislation.
- 1.6 As we noted in our 2019 report, effective relationships help regional councils to better understand Māori values and aspirations for freshwater management and reflect them in freshwater management objectives. We expect regional councils to have enduring and meaningful relationships with iwi and hapū so that all parties can work towards shared long-term goals for managing freshwater.

¹ Controller and Auditor-General (2019), Managing freshwater quality: Challenges and opportunities, at oag.parliament.nz.

² Controller and Auditor-General (2023), Responses to our recommendations about managing freshwater quality, at oag parliament.nz.

Part 1 Why we did this work

- 1.7 The operating context for managing freshwater is changing. Enduring and meaningful relationships between regional councils and iwi and hapū can assist in navigating these changes.
- 1.8 The NPS-FM introduced the concept of Te Mana o te Wai, the life-supporting capacity of freshwater, in 2014. The NPS-FM was updated in 2020, and the update strengthened and clarified the role of Te Mana o te Wai as a fundamental concept in managing freshwater.³
- 1.9 The NPS-FM requires each regional council to give effect to Te Mana o te Wai by developing a long-term vision for freshwater management through discussions with communities and tangata whenua. Councils must involve tangata whenua in managing freshwater resources to the extent that they wish to be (including in decision-making processes and in monitoring and preparing policy statements and plans).
- 1.10 Councils must also investigate using tools available under the Resource Management Act as ways of involving tangata whenua. These tools include joint management arrangements, Whakahono ā Rohe: lwi participation agreements, and the transfer or delegation of powers.
- 1.11 Regional councils are also required to monitor progress towards achieving target attribute states and environmental outcomes for water bodies in their regions.⁵ They must include mātauranga Māori measures in the methods they use to do this. They also need to submit updated regional freshwater plans to the Ministry for the Environment by 31 December 2027.⁶
- 1.12 The Resource Management Act requires regional councils to involve iwi and hapū in managing freshwater resources. The Local Government Act 2002, Treaty settlement legislation, and other pieces of legislation also include provisions that require regional councils to involve Māori in decision-making processes.

 Treaty settlements can require regional councils to enter into joint management
 - 3 Ministry for the Environment (2023), Essential Freshwater policies and regulations: implementation guidance, at environment.govt.nz/acts-and-regulations/freshwater-implementation-guidance/.
 - 4 Mana Whakahono ā Rohe is a tool designed to assist tangata whenua and local authorities to discuss, agree, and record how they will work together under the Resource Management Act.
 - 5 An attribute is something that can be measured or monitored that describes the state of a river or lake. For example, the amount of nitrogen or phosphorus in the water. There are 22 compulsory attributes in the NPS-FM, many of which have a minimum standard, or national bottom line these contribute to understanding how freshwater provides for ecosystem health and human contact. Ministry for the Environment (2020), Action for health waterways: Information on attributes for managing the ecosystem health and human contact values in the National Policy Statement for Freshwater, at environment.govt.nz.
 - 6 On 19 December 2023, the deadline for notifying changes to freshwater plans was extended from 31 December 2024 to 31 December 2027 to allow the Government time to do the work needed to replace the NPS-FM and for regional councils to respond to the changes.

Part 1
Why we did this work

- agreements with post-settlement governance entities to manage natural resources.⁷
- 1.13 There are opportunities to develop relationships between regional councils and iwi and hapū through different types of work on managing freshwater. These include regional councils consulting with iwi and hapū on updates to their regional freshwater plans, seeking cultural impact assessments on resource consents from iwi and hapū, and working with iwi and hapū to monitor freshwater quality.
- 1.14 Expected changes to legislation might shift the context for freshwater management. In December 2023, the Government said that it would consult to replace the NPS-FM. It has signalled elsewhere that this work will include work to rebalance Te Mana o te Wai.⁸
- 1.15 The Spatial Planning Act and the Natural and Built Environment Act were repealed under urgency in December 2023. As a result, the Resource Management Act remains the primary legislation that controls how our environment is managed. It is also set to be amended as part of the Government's coalition agreements.
- 1.16 Changes to these pieces of legislation might affect how regional councils are required to involve tangata whenua in managing freshwater. However, meaningful relationships are the basis for constructive dialogue about water management.

What we did

- 1.17 For relationships between regional councils, iwi, and hapū to support effective freshwater management, all parties need a high level of trust and confidence in each other.
- 1.18 We examined how the four regional councils work with iwi and hapū to strengthen their relationships for managing freshwater quality. That included how they incorporate the views of iwi and hapū on freshwater into their strategic decision-making. This allowed us to understand some of the drivers of meaningful and enduring relationships in managing freshwater.
- 1.19 We spoke with staff at each of the four regional councils about their work with iwi and hapū on managing freshwater. We also reviewed relevant documents

Joint management agreements are an instrument under the Resource Management Act that provides for agreements between a local authority with one or more public authorities, iwi authorities, or groups that represent hapū to jointly perform or exercise any of the local authority's functions, powers, or duties under the Resource Management Act relating to a natural or physical resource. Post-settlement governance entities are legal entities set up to manage the collective assets received by the claimant group of a Treaty settlement.

⁸ New Zealand National Party (2023) Primary Sector Growth Plan, at national.org.nz.

Part 1 Why we did this work

- and talked to 25 representatives from a range of iwi, hapū, and post-settlement governance entities in the four regions about their views.
- 1.20 The findings of our 2022 report *Māori perspectives on public accountability* helped us to think about what might be important to iwi and hapū in building trusting relationships and informed our approach to this work.⁹
- 1.21 Iwi and hapū have a range of distinct views about their relationships with regional councils. Approaches to managing freshwater may differ in each region, as do the relationships between regional councils and each iwi and hapū.
- 1.22 We were not able to speak to all iwi and hapū working on freshwater in these regions, and our conclusions do not cover all the relationships that regional councils have with iwi and hapū. Instead, we focused on understanding what is working well (and not so well) in general so that our work can support councils to develop these relationships further.

⁹ Controller and Auditor-General (2022), Commissioned report: Māori perspectives on public accountability, Haemata Limited, at oag.parliament.nz.

2

What we found

- 2.1 Since our 2019 report, each of the four regional councils has carried out work to further understand iwi and hapū aspirations for managing freshwater. All four councils are working with iwi and hapū to develop freshwater plan updates as part of their work towards the NPS-FM.
- 2.2 Each council has also taken steps to involve tangata whenua in its formal governance structures. This includes providing for tangata whenua representation on key council committees for strategy and/or planning, which both have connections to freshwater policy.
- 2.3 Council staff who we spoke with were committed to working with iwi and hapū to improve freshwater quality. However, each council faces different challenges. The different regions vary in their geographical extent, their topography, the size and quality of their freshwater catchments, 10 the number of iwi and hapū in their region, the amount of progress towards Treaty settlements, and existing arrangements for managing freshwater.
- 2.4 All these factors influence how councils, iwi, and hapū work together. Despite this, all four councils share an appreciation of the importance and value of their relationships with iwi and hapū for making progress on managing freshwater.
- 2.5 Many of the iwi and hapū representatives we spoke with highlighted the growing strength of their relationships with their respective regional councils and their trust and confidence in council staff. However, some also told us that regional councils could still do more to support more enduring and meaningful relationships.
- 2.6 In our view, regional councils need to take a more strategic approach to building relationships with iwi and hapū that will support effective freshwater management. A more strategic approach should focus on shared long-term goals for freshwater management; a common understanding of each other's interests in, and concerns for, freshwater; appropriate structures for the council to hear and respond to iwi and hapū voices; and effective processes for sharing information. Working with iwi and hapū in this way should be a core capability for councils, as it is critical to good environmental planning, and a range of other responsibilities of regional councils.
- 2.7 A more strategic approach will allow councils to better prioritise and manage freshwater projects in ways that benefit everyone.
- 2.8 This includes being willing to adapt to fit the circumstances of different iwi and hapū and avoid engagements feeling transactional. This will support regional councils to meet their statutory requirements to work with tangata whenua while sustaining and strengthening relationships.

¹⁰ A catchment, or whaitua, is an area of land where rain flows into a common river, lake, or other body of water.

- 2.9 We found that all four regional councils had good intent and had made progress in their relationships with iwi and hapū. Where there are effective relationships, iwi, hapū, and the council learn from each other, build their capabilities, and work towards positive freshwater outcomes that reflect the broad needs of everyone in the community.
- 2.10 At times, regional councils, iwi, and hapū will have different or competing views on managing freshwater. When council staff, iwi, and hapū know each other well, relationships will be more resilient and people will be better able to work constructively through disagreement.
- 2.11 Our findings highlight what is needed to strengthen relationships and build trust and confidence. We acknowledge what the four regional councils have done since our 2019 report and that each council faces unique challenges in building enduring and meaningful relationships with iwi and hapū. We discuss each of the four regions individually in subsequent parts of this report.

Regional councils getting to know individual iwi and hapū creates the foundation for meaningful relationships

2.12 The foundation for relationships to grow is set when regional council staff understand each iwi and hapū in their region and how they prefer to work. Trust and confidence can be built when iwi and hapū see that regional councils are committed to learning about their unique perspectives, including their histories and the ways they work.

Invest time in learning about iwi, hapū, and their histories

- 2.13 Iwi and hapū representatives told us that meaningful relationships involve knowing people and feeling that they have a relationship with them, as well as understanding their position or role within the organisation.
- 2.14 This could mean being able to pick up the phone to get a quick answer from a familiar council contact, feeling comfortable to drop in at council or iwi offices for a cup of tea, or going the extra mile to give personal support to a staff member at a difficult time. In one example, we heard that the relationship between an iwi and regional council was built on strong personal connections like these, that had developed over a long time.
- 2.15 Iwi and hapū told us about the importance of being able to spend time with council staff. Some iwi and hapū representatives invest time with council staff to support them to better understand iwi and hapū histories and values more generally. These representatives saw these engagements as opportunities to lift

the council's capability and as a way to build trust between council members, staff, iwi, and hapū. Some of the iwi representatives we spoke with were interested in regularly setting aside time for whakawhanaungatanga with the council to maintain relationships, meet new staff, and talk about long-term aspirations.

- 2.16 However, we also heard frustration from iwi and hapū about some councils' staff's level of understanding, particularly where there was significant staff turnover. Some iwi and hapū felt that they had to explain their perspectives and values every time the council wanted to engage. In one instance, this was described as "an expectation that iwi would deliver 'Treaty 101' workshops" at every hui. Iwi representatives felt that needing to do this repeatedly wasted time that should be used to work together on managing freshwater.
- 2.17 Some councils are investing in the capability of their staff to better engage with and understand the views of iwi and hapū. For example, one council has developed a series of workshops that include visits to sites of significant cultural importance to iwi and hapū. It is offering this to staff throughout the organisation progressively. To date, feedback from staff has been positive, with comments focusing on how enriching staff had found the opportunities.
- 2.18 In our view, this kind of capability work can help reduce the burden that iwi and hapū feel to educate council staff about their iwi or hapū.

Understand how iwi and hapū operate and want to work

- 2.19 We heard that iwi and hapū approaches to making decisions can vary and that this has implications for how regional councils engage with them. Regional councils need to understand these different approaches and plan appropriate time and resources to allow for iwi and hapū representatives to seek input to form their views or make decisions.
- 2.20 For example, some iwi representatives felt that councils, in their planning, were not allowing appropriate time to engage with them on resource consent applications. Delays to iwi and hapū receiving resource consent applications can create the perception that it is iwi holding up the process.
- 2.21 It is also important for regional councils to take the time to make sure they understand who iwi and hapū representatives can speak on behalf of. This ensures that the council engages with the right people. We heard examples of councils engaging with iwi representatives on particular projects when it would have been more appropriate to engage with particular hapū. Not only does this waste time

- but this lack of understanding of who to talk to also makes it harder for iwi and hapū to have confidence in the council's processes.
- 2.22 We also heard of times when a regional council's approach to involving iwi and hapū was at odds with how iwi and hapū wanted to work. For example, some regional councils use collective consultation processes to bring together the views of tangata whenua from throughout the region. However, we heard that iwi prefer to be engaged independently, so that their distinct perspectives can be heard. This is particularly important where there are joint management agreements (or other arrangements) that have been secured through Treaty settlements.
- 2.23 Regional councils also need to understand who is best placed at the council to work with iwi and hapū so that relationships are meaningful. Some of the regional councils have specific roles to support their relationships with iwi and hapū, and many council staff, iwi, and hapū felt that these roles help ensure that tangata whenua perspectives feature more prominently in the council's thinking. We heard that iwi and hapū trust these staff to understand and reflect their views and that these roles can open doors to collaborative working and support better processes for councils to work with iwi and hapū.
- 2.24 However, at times, there is a tendency for regional councils to rely on these staff to manage all their relationships with iwi and hapū. ¹¹ Not only is this a large workload for an individual staff member (or a small group of staff) but, in some instances, iwi and hapū also want to be able to engage and build relationships with staff from other teams, such as staff in freshwater monitoring or resource consent.

Responding to individual iwi and hapū views on freshwater supports more effective freshwater management

- 2.25 Regional councils need to understand and respond to the views of iwi and hapū on managing freshwater to build trust and ensure that their relationships are meaningful. We saw evidence that freshwater management is more effective when it is driven by local knowledge and appropriately resourced.
- 2.26 Regional councils need to be able to support iwi and hapū to have enough time and resources to develop and share their views on, and aspirations for, managing freshwater. The NPS-FM requires regional councils to work with tangata whenua to give effect to Te Mana o te Wai. As a result, many iwi and hapū representatives we spoke with had been involved in work with regional councils to share their views on Te Mana o te Wai.

¹¹ This is similar to what we observed in other government initiatives in a recent performance audit. See Controller and Auditor-General (2023), Four initiatives supporting improved outcomes for Māori, at oag.parliament.nz.

- 2.27 We heard that some limited funding was provided through the Ministry for the Environment to support iwi engagement in Te Mana o te Wai. In some instances, this funding was helpful in developing the statements of iwi and hapū values that underpin Te Mana o te Wai. We also heard that some iwi had to compete with other iwi for this limited funding. As a result, some iwi did not get funding and had fewer resources for developing their values and working with councils.
- 2.28 In one example, a regional council engaged with an iwi early to develop its
 Te Mana o te Wai values. The council and iwi worked together to weave these
 values into the regional values underpinning freshwater management that the
 council had developed with the community. Early engagement enabled robust
 discussions and built trust between the regional council and iwi.
- 2.29 We also heard that understanding iwi and hapū views and aspirations can help councils to better respond to the tikanga and mātauranga that shape iwi and hapū approaches to managing freshwater.
- 2.30 In one example, an iwi took over the defishing of a river after the council's approach, which used an electric shock treatment, had killed a large tuna. The iwi removed the remaining fish by hand, demonstrating how their approach to defishing was safer for the fish and better for the health of the river. 12 The iwi told us that it now leads more of the regional council projects in its rohe.
- 2.31 A consistent frustration from iwi and hapū was that regional council staff didn't understand their views on managing freshwater. Iwi and hapū representatives sometimes felt that council staff view freshwater as a commodity and that when developing initiatives they do not use existing knowledge and documents, such as management plans, that outline iwi and hapū aspirations and values for managing freshwater.
- 2.32 For example, some iwi and hapū representatives we spoke with explained how the concept of awa tūpuna means that river catchments cannot be easily grouped with other waterways into a freshwater management unit.¹³
- 2.33 One person we spoke with told us a more diversified system of river management would reflect the distinct identities of three water catchments whose different land uses, such as forestry or farming, affect freshwater quality differently.
 - 12 Defishing ensures that freshwater species that would be affected by construction on a waterway are relocated to another habitat before construction begins.
 - 13 Awa tūpuna or awa tīpuna was explained to us as the ancestral connections that iwi and hapū have to waterways. For example, the Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 states that, to Waikato Tainui, the Waikato River is a tupuna that has mana and in turn represents the mana and mauri of the iwi. A freshwater management unit is a spatial area that includes a water body or multiple water bodies and catchments. They are intended to be the framework for freshwater planning and should be at a scale deemed by the regional council where freshwater can be appropriately cared for and give effect to Te Mana o te Wai.

Mutually beneficial relationships lay the foundations for effective long-term strategic freshwater management

- 2.34 Relationships that are mutually beneficial lead to more effective freshwater management. Not only does this support regional councils to meet their statutory requirements but it can have wider and long-term benefits for other work.
- 2.35 For iwi and hapū, we heard that there are mutual benefits in the way they work with regional councils on decision-making for resource consent applications or monitoring freshwater quality. Iwi and hapū see this work as valuable because it is more aligned with the way iwi work. For example, it can involve iwi and hapū working with council staff in their rohe, with their awa, directly in the place where freshwater outcomes are being sought.
- 2.36 These relationships also allow iwi and hapū to learn from the approaches that councils' scientific teams use, develop their understanding of council processes, and provide access to council equipment, information, and expertise to support their activities.
- 2.37 This can create the building blocks for more enduring relationships between the regional council, iwi, and hapū. However, we consider that councils do not always see the connection between this type of work and their engagements with iwi and hapū in other areas, such as consulting on regional plan updates.
- 2.38 In our view, iwi and hapū and regional councils will see greater benefit from their relationships if councils can integrate their engagement with iwi and hapū across different areas of their work.
- 2.39 By better integrating how different teams and areas of their work engage with iwi and hapū a wider range of staff can deepen their understanding of tikanga and mātauranga Māori about managing freshwater, and more generally, because of the time they spend working with iwi and hapū.
- 2.40 We saw examples where partnerships led to improvements in managing freshwater for the community. Reported benefits realised from co-governing a water catchment in one region included reducing contaminants flowing into the water, creating jobs, and developing mahinga kai for the iwi,¹⁴ as well as building knowledge and resources for farmers to reduce their business risk from future environmental regulations.

¹⁴ Mahinga kai generally refers to freshwater species that have traditionally been used as food, tools, or other resources. Their presence indicates the overall health of the water. It also refers to the places those species are found and to the act of catching them.

- 2.41 This had built trust between those in the farming sector and the iwi more generally, leading to the development of further initiatives to manage freshwater.
- 2.42 We also saw how mutually beneficial relationships can solve long-term issues in managing freshwater, such as workforce capacity issues. For example, we heard that collaboration with a council on monitoring work had led to increased education opportunities for young Māori, exposing them to potential careers in science and environmental management, and developing their practical and team-working skills. Some people felt that engaging with council scientific staff in the field (that is, in rivers and wetlands) is a valuable way of exploring the relationships between western science and mātauranga Māori for monitoring and managing water quality.

3

Waikato Regional Council's progress since 2019

Summary of key findings

- 3.1 In 2019, iwi who we spoke with in the Waikato said that their relationships with Waikato Regional Council were working well. However, representatives of iwi and hapū in the Waikato who were yet to settle Treaty claims were less positive. We encouraged the Council to continue to improve these relationships.
- 3.2 Although there has been significant progress in Treaty settlements for iwi and hapū in the Waikato, there are still a large number of iwi and hapū at different stages of their Treaty settlements. This has created challenges for the Council (and for some iwi and hapū) in strengthening relationships with all iwi and hapū. Council staff told us that these problems have been compounded by the significant reforms taking place in the local government sector and stretched the Council's limited resources.
- 3.3 Since 2019, Waikato Regional Council has continued to work with many iwi and hapū in its region to manage freshwater quality, focusing on being more agile and flexible in the way it operates. Several iwi and hapū representatives who we spoke with said that these relationships were mostly strong. However, the Council's effort still focuses on engaging with iwi and hapū to carry out specific pieces of work.
- 3.4 Other iwi representatives we spoke with said that their engagements with the Council needed to be more meaningful. They felt that it was not always clear how their views on, and aspirations for, managing freshwater were influencing decision-making or being embedded in policies and processes for managing freshwater. They felt that staff turnover at the Council made it hard to build enduring relationships. We heard similar concerns about turnover at the other councils.
- In our view, the Council needs a more strategic approach to building relationships with iwi and hapū. Council staff need to be more responsive to the ways iwi and hapū want to work with the Council and their views on, and aspirations for, managing freshwater.
- 3.6 We note that Waikato Regional Council has joint management agreements for river management with several iwi who have Treaty settlements in the region. Joint management agreements can outline agreed processes for input into resource consents, water monitoring, enforcement, and policy and planning. Joint management committees usually include representatives from iwi and the regional council.

Part 3
Waikato Regional Council's progress since 2019

- 3.7 While we did not look at the effectiveness of these joint management agreements in this follow-up work specifically, in our view these committees are a significant opportunity to strengthen relationships.
- 3.8 The Council also needs to ensure that it prioritises appropriate resources to support a more strategic approach to relationship building.

Changes to freshwater management in the Waikato since 2019

Recent legislation sets out new freshwater management arrangements between iwi and Waikato Regional Council

- 3.9 The Ngāti Tūwharetoa Claims Settlement Act 2018 provided for the establishment of a statutory joint committee, Te Kōpu ā Kānapanapa. Te Kōpu ā Kānapanapa comprises members from Te Kotahitanga o Ngāti Tūwharetoa, Waikato Regional Council, and Taupō District Council.
- 3.10 The Maniapoto Claims Settlement Act 2022 required Waikato Regional Council, Waitomo District Council, Ōtorohanga District Council, Waikato District Council, and Waipā District Council to enter into a joint management agreement with Te Nehenehenui Ngāti Maniapoto's post-settlement governance entity.
- 3.11 The Pare Hauraki Collective Redress Bill was introduced into the House in December 2022 and is still awaiting its first reading. As currently drafted, the Bill requires Waikato Regional Council to enter into a joint management agreement with the Hauraki iwi post-settlement governance entity.
- 3.12 Waikato Regional Council has been through a process to transfer functions to allow the Tūwharetoa Māori Trust board to take control of monitoring functions for freshwater at Lake Taupō. The power to do this is granted under the Resource Management Act.
- 3.13 Tūwharetoa is the first iwi to be granted these powers under the Resource Management Act. Under the new arrangement, Tūwharetoa Māori Trust Board now carries out water quality monitoring functions for summer bathing, regional rivers, rainfall, and groundwater.

Part 3
Waikato Regional Council's progress since 2019

Waikato Regional Council has set up a tangata whenua technical group to review its freshwater policy in line with the requirements of the National Policy Statement for Freshwater Management

- 3.14 Since our 2019 report, Waikato Regional Council has set up a tangata whenua forum, called Ngā Tira Mātauranga. The purpose of Ngā Tira Mātauranga is to increase the involvement of iwi, hapū, and tangata whenua in the freshwater policy review, provide a forum for technical discussion to assist council staff with developing policy, and disseminate project information to tangata whenua groups.
- 3.15 Ngā Tira Mātauranga comprises nominated representatives from tangata whenua entities within the Waikato region who wish to have representation at Ngā Tira Mātauranga. The work programme and terms of reference for the group incorporated tangata whenua representatives' recommendations about how the group should function.
- 3.16 Waikato Regional Council has also hosted open drop-in sessions for the freshwater policy review in different catchments in the region. Some tangata whenua have participated in these.

Waikato Regional Council has improved its approach to working with iwi and hapū

- 3.17 Council staff felt that the direction of travel in their relationships with iwi and hapū on freshwater quality management has been positive but that there is still progress to be made.
- 3.18 As we heard from the other regional councils, the demands on the Council to meet external deadlines makes it hard to invest the time needed to build trust with iwi and hapū in some areas. This is particularly so where the Council is forming new relationships with iwi or wanting to engage with iwi who have limited capacity and/or other priorities.
- The Council is working to improve its approach to engaging with iwi and hapū. This includes contracting with individuals who have long-standing relationships with iwi and hapū to work on behalf of the Council, paying iwi and hapū for their participation in freshwater policy review work, and broadening the Council's engagement with iwi and hapū beyond post-settlement governance entities. These changes were described as the start of a "shift in mindset" within the Council to support iwi and hapū to work with the Council to achieve better freshwater outcomes.

Part 3
Waikato Regional Council's progress since 2019

- 3.20 Council staff told us that the open engagement approach with tangata whenua facilitated by Ngā Tira Mātauranga enabled the broadest range of iwi voices across the Waikato region to be included within the Council's limited resources. However, they also recognised that some iwi prefer to be engaged individually and that it was likely they would be unhappy with the process the Council took.
- 3.21 When we carried out our work, we heard that the deadline to update the Council's regional freshwater plan by the end of 2024 placed some iwi and hapū at a disadvantage by limiting the time and resources available for them to develop their guiding values for Te Mana o Te Wai.¹⁵
- 3.22 Council staff recognised that building trust with iwi and hapū takes time and commitment from all parties. Council staff we spoke with want to be able to focus on building long-term enduring relationships with iwi and hapū. However, they are conscious that most opportunities for forming relationships come from engagements on individual pieces of work and do not offer the continuity needed to build deeper trust in the relationships.

Iwi in Waikato want more meaningful and enduring relationships with the Council

- 3.23 Iwi and hapū representatives we spoke with felt that some relationships with council staff for working on freshwater quality are strong.
- 3.24 Factors in strong relationships include council staff being able to invest time in understanding the iwi, engaging with iwi over a longer period of time, and being open to working collaboratively. Iwi in these relationships said that council staff were quick to offer support when it was requested.
- 3.25 Iwi and hapū representatives we spoke with also spoke highly of the Council's contractors who work with iwi. However, it is a challenge for iwi to see how using contractors supports long-term relationship building with the Council. Some representatives want to work more directly with senior staff at the Council and are concerned about the loss of institutional knowledge when contractors move on.
- 3.26 We heard that relationships between members of the joint management committees are generally good and that the people involved are able to have difficult conversations. However, some people we spoke with are concerned that the Council has not used their respective joint management committee meetings to consult with iwi about the Council's approach to updating its regional freshwater plan in line with the NPS-FM.
- 3.27 We heard concerns from some iwi and hapū that their relationships with the Council had not improved as much as they had expected since our 2019 report.

¹⁵ Our interviews took place before the Government extended the deadline to update regional freshwater plans to December 2027.

Part 3
Waikato Regional Council's progress since 2019

They felt that many engagements with the Council are "tick-box" — in that they are driven by the Council's priorities and time frames — and that it is not always clear how the Council uses their contribution. A lack of transparency about the Council's processes and decision-making creates barriers to building greater trust and confidence in the Council.

- 3.28 Iwi want to move forward in their relationships with the Council. However, cultural capability within the Council is a consistent issue that iwi feel is a barrier.
- 3.29 Some iwi felt they spend too much time educating council staff about the Treaty and/or explaining their iwi values related to freshwater. Others felt council staff might avoid engaging with iwi for fear of doing something wrong or inadvertently causing offense.
- 3.30 Resourcing is a significant issue for iwi when trying to engage with the Council.

 This means that iwi and hapū have to carefully manage their time and resources to ensure that their engagements with council are meaningful and valuable.
- 3.31 Iwi are sympathetic to the pressures that the Council faces. However, they told us that the views of iwi and hapū are specific and unique to their rohe and cannot quickly be aggregated into a regional tangata whenua perspective for Waikato.
- 3.32 Some people we spoke with felt that the Council would be in a much stronger position if it engaged with iwi individually to understand their values relating to freshwater management. This would allow the Council to understand the nuances of different iwi positions and different freshwater catchments, as well as the common points of agreement that can improve regional freshwater management.

Summary of key findings

- 4.1 In 2019, iwi and hapū representatives in Taranaki told us that they respected Taranaki Regional Council's staff and appreciated that staff make a genuine effort to work with them on freshwater. However, there was frustration at the "one way" and "transactional" nature of the relationship.
- 4.2 Since 2019, Taranaki Regional Council has shifted its approach to engaging with iwi and hapū. We heard that the Council is moving away from consultation and towards collaboration in its work with iwi and hapū. This was particularly evident in the Council's agreement with Ngā Iwi o Taranaki for resourcing and completing the review of its regional freshwater policy.
- 4.3 In our view, Taranaki Regional Council has improved its approach to bringing iwi and hapū aspirations into freshwater planning. Leaders of the region's eight iwi and senior staff at the Council have increased the frequency of engagement. In other areas, such as work on freshwater monitoring, we saw some improvements in the trust and confidence iwi and hapū have in their relationships with the Council.
- 4.4 The Council's commitment to building its mātauranga Māori knowledge and capability, including appointing a mātauranga Māori science advisor, has played a particularly important role in supporting iwi and hapū in their freshwater work. It has also helped to improve the Council's approach to monitoring freshwater quality. Integrating and aligning the Council's approach to freshwater management with mātauranga Māori provides a strong foundation for its work with iwi and hapū.
- 4.5 However, the Council still needs to do more to develop a strategic approach to building relationships. In our view, there are opportunities for the Council to draw on the strong relationships some of its staff have when developing a council-wide approach to working with iwi and hapū on freshwater. This will enable the Council to better respond to iwi and hapū views on, and aspirations for, freshwater. Less reliance on a small group of council staff to maintain relationships will also support more enduring engagement.

Changes to freshwater management in Taranaki since 2019

Recent Treaty settlements have introduced new mechanisms for Taranaki Regional Council to work with iwi and hapū

- In September 2023, Ngā Iwi o Taranaki and the Crown signed Te Ruruku
 Pūtakerongo the Taranaki Maunga Collective Redress Deed. Ngā Iwi o Taranaki is
 the collective name for eight iwi of Taranaki: Ngāti Tama, Ngāti Mutunga, Taranaki
 Iwi, Te Ātiawa, Ngāti Maru, Ngāruahine, Ngāti Ruanui, and Ngaa Rauru Kiitahi.
 Taranaki Maunga and the National Park were vested in a legal person, named
 Te Kāhui Tupua. A representative entity of Crown and iwi appointees will be set up
 to act in the best interests of Te Kāhui Tupua.
- 4.7 The Ngāti Maru (Taranaki) Settlement Act 2022 requires Taranaki Regional Council to have a joint management agreement with Ngāti Maru.
- 4.8 The Maniapoto Claims Settlement Act 2022 requires Taranaki Regional Council to have a joint management agreement with Te Nehenehenui the post-settlement governance entity of Ngāti Maniapoto.

Taranaki Regional Council and Ngā Iwi o Taranaki have entered into an agreement to carry out the freshwater policy review for the National Policy Statement for Freshwater Management

- 4.9 Taranaki Regional Council entered into an agreement with Te Runanga o Ngāti
 Tama, Te Runanga o Ngāti Mutunga, Te Kāhui Maru, Te Kotahitanga o Te Atiawa,
 Te Kāhui o Taranaki Iwi, Te Korowai o Ngāruahine, Te Runanga o Ngāti Ruanui, and
 Te Kāhui o Rauru to carry out the freshwater policy review for the Taranaki region.
- 4.10 The agreement was intended to assist with resourcing to meet the obligation for the Council to complete the review by 31 December 2024. The agreement set up an independent environmental unit that includes two full-time positions to carry out the review, funded by the Council. The iwi parties appointed these positions, and Te Kotahitanga o Te Atiawa provides administrative support for the unit.
- 4.11 The Council and iwi partners review the agreement's deliverables and outcomes every six months.

¹⁶ The agreement was made before the Government extended the deadline to update regional freshwater plans to December 2027.

Taranaki Regional Council is focused on working with iwi and hapū more collaboratively

- 4.12 Council staff told us that they consider that the foundations for positive relationships with iwi and hapū in the region are now in place. In their view, relationships between the Council, iwi, and hapū are healthier than they have ever been.
- 4.13 The recently set up senior-level governance group brings together chief executives of Ngā Iwi o Taranaki and senior council members to discuss freshwater and facilitate the process for updating the regional freshwater plan. The group has helped to build connections between iwi leaders and senior council staff.
- 4.14 We heard that Taranaki Regional Council is trying to take a more strategic approach to some aspects of the way it engages with iwi. For example, it is mindful of how challenging working with councils on issues such as freshwater can be for iwi, particularly when an iwi rohe spans more than one regional council boundary. Taranaki Regional Council is talking to other regional councils about working together more effectively for the benefit of those iwi.
- 4.15 The Council wants to form relationships that have long-term benefits for the Council, iwi, and hapū. It recognises that there is some way to go. Translating existing strong relationships between the Council, iwi, and hapū in specific areas to wider, lasting, and mutually beneficial relationships across a range of areas is a challenge. As with the other regional councils, limited council and iwi resources and high rates of staff turnover at the Council are persistent issues.
- 4.16 We heard about the challenge of integrating western scientific approaches to monitoring freshwater with mātauranga Māori. The Council acknowledged that there is still a tendency for the Council, iwi, and hapū to "talk past" each other. Council staff told us that a recent approach to studying eels and lamprey in the Waitara River helped to bring the different perspectives together and proved to be a very fruitful way of working for the Council and the hapū involved.
- 4.17 Council representatives were aware that some iwi prefer the Council to be engaging at the hapū level. They recognised that their engagement with hapū is currently not as strong as they would like. Council relationships with hapū generally focus on the day-to-day management of the resource consenting process rather than on processes for developing policy.

4.18 When we carried out our work, council staff told us that the pressure of the NPS-FM deadline had not been conducive to building long-term relationships. ¹⁷ In the Council's view discussions focused on meeting the deadline, rather than on how to use the update of the NPS-FM plans as a vehicle for deeper conversations about relationship building. However, the Council is committed to building longer-term relationships that extend beyond individual projects.

Iwi and hapū in Taranaki want recent improvements at the Council to go further

- 4.19 Iwi and hapū representatives who we spoke with consider that their engagements with the Council have improved since 2019. They felt this was driven by the NPS-FM. They told us about positive changes in attitudes that council staff have towards building relationships with iwi and hapū. Examples include the Council hiring a mātauranga Māori specialist and more opportunities to work alongside council scientists on, and contribute to, monitoring freshwater.
- 4.20 We also heard that, since Ngā Iwi o Taranaki was set up, there has been greater engagement between senior staff in the Council and the chief executives of the post-settlement governance entities of the eight iwi.
- 4.21 However, iwi and hapū representatives said that they want the Council to take a collaborative approach to relationships at all levels; with iwi, hapū, and mana whenua. Some iwi and hapū still used words such as "transactional" and phrases such as "tick-box" to describe their engagements with the Council.
- 4.22 Some iwi and hapū representatives told us that there is a tendency for the Council to make engagement work the responsibility of a small number of Māori staff. Iwi and hapū we spoke with have built strong relationships with these staff members. However, some felt that the Council's reliance on these staff is limiting opportunities for iwi and hapū to form relationships with other specialists at the Council who have knowledge and skills that iwi and hapū could benefit from.
- 4.23 In our view, it is a risk to rely on a few key staff for maintaining iwi and hapū relationships. If these staff leave, the relationships they have built for the Council with iwi and hapū could be lost.
- 4.24 Iwi and hapū representatives want the Council to build and maintain long-lasting engagement on managing freshwater. In areas such as policy development, iwi felt that the Council still tends to wait to consult them when policy proposals are well advanced rather than involve them when there is still an opportunity to influence the policy's direction.

¹⁷ Our interviews took place before the Government extended the deadline to update regional freshwater plans to December 2027.

- 4.25 We also heard frustrations that council staff do not always let iwi and hapū know when they are working in their rohe, which misses opportunities for the Council, iwi, and hapū to work alongside each other. Some of those we spoke with felt that, despite the Council's greater interest in exploring mātaruanga Māori, some council staff do not understand the significance or value of it. This can be a barrier to closer working relationships.
- 4.26 Some iwi and hapū representatives told us that their resources are stretched but that they consider that their work on consents or freshwater monitoring could be the foundation for longer-term relationships with the Council. One person described their freshwater monitoring work as an opportunity for hapū to open the eyes of their young people to the possibilities of a career in science.

5

Horizons Regional Council's progress since 2019

Summary of key findings

- 5.1 In our 2019 report, we found that the strength of Horizons Regional Council's relationships with the many iwi and hapū it works with varied. We encouraged Horizons to "build on its positive experiences, and further apply these good practices to wider iwi and hapū in the region".
- 5.2 Since 2019, there have been further Treaty settlements in the region. The Council is working to be more responsive to the ways that different iwi and hapū operate. The Council has also started funding iwi and hapū for the time they spend on developing partnerships with the Council for freshwater work. It has also supported tangata whenua involvement in the governance of environmental issues in the region.
- 5.3 We saw evidence that the Council is incorporating tikanga and mātauranga Māori in its management of freshwater quality, and that this is building trust and confidence. However, as with the other regional councils, this is happening in only some areas of the Council's engagement with iwi and hapū.
- 5.4 The location of the Council's offices and the centralisation of decision-making in Palmerston North mean that some iwi further from Palmerston North feel more disconnected from the Council than closer iwi. The Council needs to take a more strategic and consistent approach to building relationships with iwi and hapū that is more responsive to the ways that different iwi and hapū want to work.
- In our view, this could involve supporting council staff to work with iwi and hapū in their rohe and alongside the rivers and waterways more often. Iwi and hapū in the region view this type of visible support as a sign of the Council's long-term commitment to working together to manage freshwater quality. They consider that this is important to further build trust and confidence.
- 5.6 Some iwi also felt that more opportunities for iwi and hapū to sit down with senior staff at the Council to build relationships would be beneficial.

Changes to freshwater management in Manawatū-Whanganui since 2019

Treaty settlement legislation influences Horizons Regional Council's work on managing freshwater quality

- 5.7 Te Awa Tupua (Whanganui River Claims Settlement) Act was passed in 2017. This legislation is believed to be the first in the world to declare a river a legal person, recognising the significance of the Whanganui River to Whanganui iwi.
- 5.8 As required by the Act, Te Kōpuka was set up in 2019. Te Kōpuka is a strategy group made up of individuals and organisations with interests in the Whanganui River,

- led by iwi representatives. Its purpose is to work collaboratively to advance the environmental, social, cultural, and economic health and well-being of Te Awa Tupua.
- 5.9 The Ngāti Rangi Claims Settlement Act was passed in 2019. The Act established a framework for the Whangaehu River and catchment called Te Waiu-o-te Ika. Horizons Regional Council must recognise and provide for the values of Te Waiu-o-te Ika when making decisions about any application involving the Whangaehu River or catchment.
- 5.10 The Ngāti Kahungunu ki Wairarapa Tāmaki nui-a-Rua Claims Settlement Act was passed in 2022. This requires the appointment of a member to an advisory board (established under the Rangitāne o Manawatu Claims Settlement Act 2016) to provide advice to Horizons Regional Council on freshwater management issues concerning the Manawatū River catchment.

Oranga Wai is Horizons Regional Council's work programme to update its regional plan and policies for managing freshwater

- 5.11 Oranga Wai is Horizons Regional Council's work programme to meet the requirements of the NPS-FM. The Council's website describes it as a way for people to learn about, and be involved in, some key changes to freshwater management in the region.
- 5.12 One piece of work in Oranga Wai is developing the Council's approach to Te Mana o Te Wai in partnership with tangata whenua.

The Climate Action Joint Committee involves tangata whenua in governance of the region's response to climate change

- 5.13 Horizons Regional Council and the district councils in the Manawatū-Whanganui region set up the Climate Action Joint Committee in March 2021. The Committee is responsible for supporting a co-ordinated response to climate change from the councils and communities of the Manawatū-Whanganui region.
- 5.14 The Committee members work together to promote the social, economic, environmental, and cultural well-being of their communities in accordance with the principles of the Treaty of Waitangi and of sustainable management for current and future generations.
- 5.15 The Committee is made up of a member from each of the eight delegated local authorities in the Manawatū-Whanganui region and up to eight non-councillor members to represent the views of tangata whenua. The Council appointed the tangata whenua members on the recommendation of iwi leaders from throughout the region. A councillor and tangata whenua member co-chair the Committee.

Horizons Regional Council has strengthened its work with iwi and hapū on managing freshwater

- 5.16 Council staff told us that the Council has taken a more strategic approach to working with iwi and hapū on freshwater management since 2019. We were told that Oranga Wai had given greater strategic intent to the Council's engagement with iwi and hapū. Council staff also told us that Oranga Wai is a way to look at initiatives and work programmes as a whole and think more strategically about what better partnership looks like.
- 5.17 As with the other councils we spoke with, council staff told us that the pressure of the NPS-FW deadline and a lack of resources have challenged the Council's engagement strategy with iwi and hapū. Souncil staff told us that they would like to take time to build relationships with iwi and hapū. However, the Council's regulatory role and the demands of the annual planning and reporting cycle make it difficult to set aside the time to do this.
- 5.18 We heard that better staff cultural awareness throughout the Council could lead to stronger partnerships. Council staff pointed to the Council's programme for improving the cultural awareness of its staff as a recent positive factor in the Council's approach to partnership with Māori. They highlighted a cultural competency course, including opportunities for visiting marae, and support for increased use of te reo Māori as examples of progress.
- 5.19 Other staff acknowledged this council-wide effort to improve organisational capability but also highlighted that "on the job" experience had been the most useful way of building their understanding of te ao Māori.
- 5.20 The Council's decision to appoint a navigator to help with the consenting process in Whanganui is helping to build relationships between hapū and those seeking consents. Council staff talked about how this council-funded role could be developed further to help hapū build understanding of consent legislation and their role in it.
- 5.21 Council staff told us that, at the early stages, some iwi and hapū representatives had raised concerns about the Council's approach to Oranga Wai. The Council had engaged with iwi representatives collectively as part of Oranga Wai. Iwi indicated they would have preferred to be engaged about their views on managing freshwater individually.
- 5.22 Council staff were responsive to these concerns, and the Council now focuses on engaging with iwi and hapū individually or in smaller groupings. Staff noted that not all iwi and hapū have taken up the invitation to engage.

¹⁸ Our interviews took place before the Government extended the deadline to update regional freshwater plans to December 2027.

- 5.23 Council staff felt that short timelines for completing projects do not always allow them to spend time forming strong and lasting relationships. One staff member told us that there can be a difference between how much iwi want to be involved in freshwater work and how much they can be involved. Staff sometimes find it hard to know what factors influence current levels of iwi or hapū engagement.
- 5.24 We heard that a significant challenge for the Council is how to navigate the NPS-FM's focus on targeted catchments while respecting Te Awa Tupua and the evolution of Te Heke Ngahuru. ¹⁹ The Council is working with Whanganui iwi and hapū, and the Ministry for the Environment, on these issues.

Iwi and hapū want strong relationships with a wider range of teams within the Council

- 5.25 The location of the Council's offices and the centralisation of decision-making in Palmerston North mean that some iwi further from Palmerston North feel more disconnected from the Council than closer located iwi.
- 5.26 Iwi we spoke with felt that their relationships with Horizons Regional Council are moving in the right direction, but some felt that it is going slowly. They spoke positively about council staff who visit them in their rohe to carry out freshwater work and take the time to understand iwi and hapū perspectives on managing freshwater.
- 5.27 They also consider that increases in the number of resource consents that they receive for cultural impact assessment are a positive step forward in their relationships with the Council.
- 5.28 We heard that Oranga Wai, after some initial challenges, is enabling stronger relationships between the Council and some iwi and hapū. Iwi told us that the initial meetings about the Oranga Wai programme were difficult and that some problems persist, including the short time frames that the work has to be completed in.
- 5.29 Short time frames are a significant issue preventing people from taking time to establish relationships and build trust. We were told that "true partnership" will grow when government representatives are willing to spend time with iwi and hapū in their rohe, because this kind of engagement opens doors to better mutual understanding.
- 5.30 Ensuring that engagements with the Council are mutually beneficial is important to iwi and hapū. Some people we spoke with were interested in learning about the Council's approaches to freshwater management and creating opportunities for rangatahi to learn about managing freshwater. Others cited sharing their iwi's

¹⁹ Te Heke Ngahuru is the strategy for the Whanganui River required by Te Awa Tupua Act 2017.

- freshwater values as an opportunity to build council staff's capability in effective approaches to managing freshwater.
- 5.31 Relationships are stronger where iwi and hapū feel that council staff understand the value of mātauranga Māori and te reo Māori in freshwater management.

 People we spoke with appreciated the teams who worked with them on freshwater projects within their rohe and alongside the awa. Some acknowledged improvements in the Council's work to embrace mātauranga Māori and to listen and adapt when iwi want to manage freshwater in their rohe in different ways.
- 5.32 However, this has not always been a smooth process. Iwi described having to challenge the Council's standard processes to incorporate tikanga Māori and/or mātauranga Māori into freshwater management.
- 5.33 Sometimes, the Council responded positively to being challenged and changed its processes. One example of this which was described to us as "ground-breaking" was when an iwi was able to make a consent application orally in the presence of the awa that the resource consent related to. In another example, the Council made changes to an ecological plan to reflect an iwi's preferred ways of working.
- 5.34 Although this is positive, iwi and hapū felt that there needs to be a wider shift throughout the Council to support a more responsive approach to working with iwi and hapū.
- 5.35 Another area that iwi and hapū felt could be improved was more timely access to information from the Council. For example, one iwi told us that it had not yet heard back about a request for up-to-date water allocations in its rohe after several months.
- 5.36 Some people we spoke with felt that consent requests take too long to get to iwi or hapū for them to carry out their cultural assessments. This results in longer than necessary delays in processing consents for applicants, and creates the perception that iwi are holding up applications.
- 5.37 Iwi we spoke with wanted stronger relationships with a wider range of teams within the Council, from the senior level to operational staff. Being more responsive to the ways iwi and hapū want to work with the Council on managing freshwater was an important aspect of all of our discussions with iwi.
- 5.38 For example, some iwi want a greater council presence in their rohe, while iwi whose rohe cross multiple regional council boundaries would like regional councils to work together when engaging them on freshwater issues.

Environment Southland's progress since 2019

Summary of key findings

- 6.1 In 2019, we saw that Environment Southland had built strong collaborative relationships with Ngāi Tahu ki Murihiku on freshwater initiatives over many years. In this follow-up work, we wanted to see whether these relationships remained strong.
- 6.2 In our view, the foundations built from long-standing personal relationships between the Council and Ngāi Tahu ki Murihiku have created the conditions for enduring and meaningful relationships. This results in more effective freshwater management.
- 6.3 The Council has a flexible and responsive approach to working with the iwi, and there is a shared understanding of partnership in their relationship. The Council and the iwi successfully integrated community and iwi values for managing freshwater in their work on the NPS-FM.
- 6.4 We heard that trust and confidence between Environment Southland and Ngāi Tahu ki Murihiku has continued to improve since 2019. This has led to mana whenua being appointed to governance roles, improvements in iwi access to mahinga kai, and improvements in water quality in some catchments.

Changes to freshwater management in Southland since 2019

Environment Southland and Ngāi Tahu are developing their relationship through several freshwater management projects

- 6.5 Environment Southland has partnered with Te Ao Mārama the entity that represents the four rūnanga of Ngāi Tahu ki Murihiku on environmental issues on Plan Change Tuatahi.²⁰ The purpose of this work is to update the Southland Water and Land Plan in keeping with the 2020 update to the NPS-FM.
- As part of this work, Te Ao Mārama and Environment Southland have worked together to identify values that describe what matters about freshwater to the people of Southland. This was a two-year programme that involved Environment Southland identifying and consulting on community values to guide freshwater management and Te Ao Mārama identifying values at a catchment level.
- 6.7 Environment Southland and Te Ao Mārama staff then worked to bring together the iwi's and community's freshwater values into one set as the first step in preparing a national framework for freshwater management under the NPS-FM.

²⁰ Plan Change Tuatahi is Environment Southland's work programme to update the Southland Water and Land Plan in line with the NPS-FM.

Part 6
Environment Southland's progress since 2019

- 6.8 On 20 February 2019, the Council approved the appointment of two mana whenua members to each of the Regional Services Committee and the Strategy and Policy Committee.²¹ On 9 March 2022, the Council formally appointed the first mana whenua representatives to these committees.
- 6.9 Environment Southland has partnered with Hokonui Rūnanga to co-fund the surveying and monitoring of mahinga kai. It has also worked with Te Ao Mārama to develop a catchment context tool to provide easy access to catchment information for property owners preparing farm plans.
- 6.10 Environment Southland has worked with Te Rūnanga o Ngāi Tahu and other agencies on Whakamana te Waituna a trust set up in 2018 to co-ordinate activities to restore the mana of the Waituna Lagoon and catchment.
- 6.11 The Council is also part of the Enviroschools programme alongside Te Rūnanga o Ngāi Tahu, schools and kindergartens, and other local councils which involves students in environmental management.

Environment Southland and Ngāi Tahu ki Murihiku are achieving positive freshwater outcomes

- 6.12 Council staff spoke about how their recent work on freshwater has benefited from the Council's long-standing relationship with Te Ao Mārama. Council staff felt that the iwi and the Council have a mutual understanding of this partnership and that this has resulted in ongoing discussions about involving iwi in freshwater and environmental management.
- 6.13 Council staff spoke about being flexible and responsive to the way iwi want to work and the importance of ensuring safety for iwi and council staff in freshwater discussions to allow difficult conversations and different views to be worked through.
- 6.14 The iwi felt that council staff are helpful and that they understand the importance of Te Mana o Te Wai for achieving freshwater outcomes for the region. They spoke of a strong commitment to building and maintaining relationships throughout the Council.
- 6.15 The iwi felt that relationships with councillors are positive but that the three-year election cycle can make it hard to maintain long-term relationships. This means that the iwi needs to rebuild relationships when councils change. Recent appointments of mana whenua to council committees are a positive step that show that the Council's senior staff value iwi input.

²¹ The Regional Services Committee's responsibilities include governance for the Council on its non-regulatory implementation of council plans. The Strategy and Policy Committee's responsibilities include governance for the Council on its plans, policies, and strategies.

Part 6 Environment Southland's progress since 2019

- 6.16 We heard that the approach that Environment Southland and Te Ao Mārama have taken to integrate freshwater management values has built trust. Both the Council and the iwi invested a lot of time in making the process respectful and thorough. The Council set up reporting and feedback mechanisms at all levels of the Council and made conscious efforts to set up mechanisms for co-governance as part of the overall process.
- 6.17 We heard examples of partnerships between Environment Southland and mana whenua that have led to positive freshwater and social outcomes. Iwi involvement has led to sewerage being disposed on land rather than into Lake Te Anau, protecting its water quality. A recent evaluation of Whakamana te Waituna found improvements to the ecological health of the Waituna catchment and to mana whenua access to mahinga kai.²²
- 6.18 In their work on improving freshwater quality, Ngāi Tahu ki Murihiku and Environment Southland rely on a strong foundation of trust and confidence built over many years. This has proved to be effective, but without a Mana Whakahono ā Rohe agreement there is a potential risk to their enduring relationships if council staff or iwi representatives move on.²³
- 6.19 A strength of Environment Southland's relationship with mana whenua in managing freshwater is the value placed on discussions about their long-term relationship and how it might develop further. For example, we heard that the charter of understanding between Te Ao Mārama and local authorities in Murihiku, including Environment Southland, is being reviewed to consider how Te Rūnanga o Ngāi Tahu wants to work with councils.
- 6.20 We heard that the iwi and the Council felt that their joint work is leading to positive freshwater outcomes for the region, even though it takes a long time and can be frustrating for them both. They agreed that they need to better communicate this success to the public. The Council and the iwi both consider that it is important to keep the community aware and involved with their work in the future.
- 6.21 Implementing Plan Change Tuatahi will be the next big challenge for the iwi and the Council. Although there is uncertainty about potential changes in national policy settings, both the iwi and the regional council felt that their relationship will remain strong.

²² Whakamana te Waituna is the trust set up between Te Runanga o Ngãi Tahu, the Department of Conservation, Environment Southland, Southland District Council, and Fonterra to restore the mana of the Waituna Lagoon and catchment.

²³ Mana Whakahono â Rohe is a tool designed to assist tangata whenua and local authorities to discuss, agree, and record how they will work together under the Resource Management Act.

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Date: 11 June 2024

Subject: Interim Review of Regional Pest Management Plan for Taranaki

Author: L Hawkins, Policy Manager

Approved by: A D McLay, Director - Resource Management

Document: 3272565

Purpose

1. The purpose of this memorandum is to introduce the report Regional Pest Management Plan for Taranaki – Interim Review 2023 (the Report). A copy of the Report is appended to this item.

Executive summary

- 2. The Taranaki Regional Council (Council) adopted the Regional Pest Management Plan for Taranaki (the Plan) on 20 February 2018. The 10-year Plan was prepared under the *Biosecurity Act 1993* (BSA) and is the Council's rulebook for pest management in the region.
- Five years on, the Council has undertaken a **non-statutory** interim review of the Plan to ensure it is efficient, effective and remains relevant.
- 4. The interim review process involved a desktop analysis of key indicators and metrics relating to pest management and an assessment of any 'change' factors.
- 5. Key findings of the interim review are presented in the attached Report and include:
 - All 15 Plan objectives have largely been met and the 118 methods are being delivered.
 - The Plan continues to be relevant and no legislative or policy change factors were identified that require immediate change to the Plan.
 - In terms of emerging issues, land occupier compliance issues relating to the possum and mustelid sustained control programmes and resourcing issues to manage newly discovered infestations for eradication pest plants are highlighted.
 - To address emerging issues and constraints and enhance pest management outcomes in the region, the Report recommends that Council investigate:
 - declaring feral cats to be pests and included in a revised Plan;
 - changing the delivery of the Self-help Possum Control Programme from DIY to a service delivery model;
 - updating the Plan to better recognise pest management issues of significance to iwi, including protection of taonga species; and
 - increasing resourcing through a biosecurity levy to support the above plus provide additional resourcing to expand exclusion and pathway activities.

6. The aforementioned recommendations represent significant change to the current Plan. Further investigative work is therefore suggested to expand and test the concepts proposed. It is suggested that some of this investigative work could be undertaken as part of an early review of the *Taranaki Regional Council Biosecurity Strategy*.

Recommendations

That Taranaki Regional Council:

- a) <u>receives</u> this memorandum and attached report entitled Regional Pest Management Plan for Taranaki Interim Review 2023
- b) notes that this report gives effect to a Council commitment in the 2022/2023 Annual Plan to undertake an interim review of the Plan
- c) <u>notes</u> that the Plan continues to be efficient, effective and relevant and that no immediate change is required to the Plan
- d) <u>notes</u> that opportunities to build on the efficiency and effectiveness of the Plan as part of an earlier review of the Taranaki Regional Council Biosecurity Strategy will be investigated.

Background

- 7. The Plan was prepared under the BSA. The BSA provides regional councils (and others) with the necessary powers to "...exclude, eradicate and effectively manage pests" in their region.
- 8. The current Plan was made operative on 20 February 2018. It is the fourth pest management plan prepared by Council under the BSA.
- 9. The Plan sits within Council's wider biosecurity policy framework. On 20 February 2018, Council also adopted the *Taranaki Regional Council Biosecurity Strategy* (Biosecurity Strategy). The Biosecurity Strategy is a higher-level planning document. It contains no rules but sets out the Council's strategic framework for 'pest' management, including its vision, priorities, and actions both regulatory and non-regulatory.
- 10. The Plan is the Council's rulebook for pest management in the region. The Plan identifies and sets out management programmes, including rules, for 20 'pest' animal and plant species. Of the 20 organisms declared to be 'pests' in the Plan, four are harmful animal species (these being possums, ferrets, stoats, and weasels), while 16 are harmful plant species.
- 11. For five pest plant species, Council undertakes direct control to achieve their eradication. There are no rules. However, if necessary, Council may access the Part VI powers of the BSA to undertake works, e.g. entry onto land. For the other 15 pest species (referred to as sustained control pests), the Plan contains rules requiring land occupiers to control the pests on their property.
- 12. The Plan is a 10-year plan at which time Council is required to undertake a full statutory review of the Plan pursuant to section 100D of the BSA. However, while not statutorily required to undertake an interim review of the Plan, Council has chosen to do so as part of its practice of regularly reviewing all its strategies, plans, and programmes in a timely manner to ensure they are producing the best outcomes possible.
- 13. The 2022/2023 Annual Plan states that Council will undertake an interim review of its Plan. The commitment reads as follows:
 - "...Support the implementation of the Pest Management Plan for Taranaki, with an interim review and a ten-year full review to occur in 2022/2023 and in 2027/2028."

The attached report gives effect to that commitment.

The interim review – purpose, methodology and criteria

- 14. Five years on, it is timely to do an interim review of Council's experiences with implementing the Plan. To assist in the review, the Council commissioned a consultant, Mr Chris Spurdle, to undertake the review and prepare the attached report. Mr Spurdle has considerable knowledge and experience in biosecurity policy and Council's operations.
- 15. This is not a full review of the Plan but is an examination or 'half-time check' on the efficiency and effectiveness of the Plan and the emergence of any opportunities and/or constraints to do better.
- 16. The interim review involved an analysis to answer three key questions:
 - Is the Plan effective and efficient are we achieving what we hoped (objectives) and are we doing what we said (methods)?
 - Is the Plan still relevant are there any policy or operational drivers for change?
- 17. On the basis of the above, the interim review then assessed whether significant and immediate changes to the Plan are necessary and thereby necessitating an immediate full statutory review. It took into account the:
 - timeliness of any change, particularly in view of any proposed changes in legislation, new policies, changing community expectations and new or emerging pest management issues; and
 - costs and obligations to people and the region?
- 18. The interim review involved an examination of relevant information, including pest management datasets, annual reports, studies, investigations, and literature plus consideration of potential 'change factors'. Change factors refers to actual or potential policy or operational issues to emerge since the adoption of the Plan that might necessitate a change to the Plan. Examples include the promulgation of new laws and regulations, changing community expectations, and/or new information identifying opportunities and constraints for doing things better.

The Report

- 19. The attached report summarises the desktop assessment on the efficiency and effectiveness of the Plan, including opportunities and constraints to improve pest management outcomes. The Report documents key assumptions, risks, and uncertainties.
- 20. In brief, this review concludes that the Plan largely continues to be effective and efficient. Twenty pest species are successfully being addressed through rules and/or Part VI powers. However, compliance and resourcing issues with the implementation of some programmes have been highlighted.
- 21. Key findings set out in sections 3 and 4 of the Report are as follows:
 - To date, all 15 Plan objectives are largely being met.
 - All 118 methods for implementing Plan objectives are largely 'being delivered'.
 - Council resources are being stretched for some programmes and 'risks' involving the ongoing delivery of some Plan methods are highlighted. In particular:
 - the five eradication programmes may require more resourcing to address newly discovered infestations;
 - possum numbers in the Self-help Possum Control Programme are at the high end of what is considered acceptable (>10% RTC); and
 - further work (including increasing use and enforcement of the rule) is required to ensure farmers are maintaining traps in the Towards Predator-free Taranaki.
- 22. Section 5 of the Report concludes that the Plan continues to be relevant and that there are no legislative or policy change factors requiring immediate change to the Plan.
- 23. Section 6 of the Report canvasses emerging issues and constraints to existing Plan programmes plus opportunities for enhancing pest management outcomes in the region.

- 24. Key recommendations going forward are then presented in Section 7 of the Report. The Report recommends that Council investigate:
 - declaring feral cats to be a pest;
 - changing delivery of the Self-help Possum Control Programme from DIY to a service delivery model;
 - changing the 10% RTC target for possums (achieved through rule compliance) to a 5% RTC target (to be achieved through service delivery) to better protect sensitive and rare and threatened species on the ring plain and coastal terraces;
 - updating the Plan to better recognise pest management issues of significance to iwi, including protection of taonga species; and
 - increasing resourcing through a biosecurity levy to support the above plus provide additional resourcing to expand exclusion, pathway and eradication activities, and support possum and ungulate control work in the eastern hill country.
- 25. Further investigative work is required by Council to expand and test the concepts proposed. There is a need to address long-term planning (e.g. additional resourcing) and broader biosecurity considerations. Accordingly, officers recommend Council undertake some of this investigative work as part of an early review of its Biosecurity Strategy.
- 26. Finally, the aforementioned proposals represent significant changes to the Plan. Following the review of the Biosecurity Strategy, and assuming Council believes there is merit in proceeding with all or some of the proposals, the proposals will then be tested with the wider community as part of a full Plan review under section 100D of the BSA.

Financial considerations—LTP/Annual Plan

27. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

28. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

29. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum. The interim review included a review of all relevant iwi management plans in relation to biosecurity considerations.

Community considerations

30. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this item.

Legal considerations

31. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3266487: Regional Pest Management Plan for Taranaki – Interim Review 2023.

Document 3273210: PowerPoint – Interim review of the Regional Pest Management Plan for Taranaki.



Regional Pest Management Plan for Taranaki

Interim review 2023



Policy and Planning Committee - Interim Review of Regional Pest Management Plan for Taranaki

Prepared by Chris Spurdle

For Taranaki Regional Council

Status: Final

October 2024

#3266487 Word

Executive Summary

This report summaries the findings of an internal review on the efficiency and effectiveness of the *Regional Pest Management Plan for Taranaki* (the Plan).

The current Plan was made operative in 2018. Under 100D of the BSA, a full review of the Plan is not statutorily required until 10 years of it becoming operative. However, five years on, the Taranaki Regional Council (Council) has determined to undertake a **non-statutory** interim review of the Plan to ensure it continues to be relevant and effective.

Through this review process, Council is seeking to ensure that the Plan remains relevant, lawful and appropriate and that it is achieving its purpose in an efficient and effective way. Depending on the conclusions drawn from the review, the Council will then need to determine whether changes to the Plan are required now or can wait until the 10-year review of the Plan.

In brief, this review concludes that the Plan largely continues to be effective and efficient. Twenty pest species are successfully being addressed through rules and/or Part VI powers. In particular –

- To date, all 15 Plan objectives have largely been met. Notwithstanding that, emerging trends highlight risks to the future effectiveness of the Plan.
- Two Plan objectives relating to the possum and mustelid sustained control programmes are assessed as 'Generally achieved'. Across most metrics their respective objectives are still being achieved. However, land occupier compliance issues need to be acknowledged and addressed. In relation to the five eradication programmes, more resourcing is also likely to be necessary to address newly discovered infestations.
- All 118 methods for implementing Plan objectives are largely 'being delivered'. However, the review notes Council
 resources are being stretched in some areas and Council may need to review the delivery of some of the Plan
 methods if it wishes to achieve all Plan objectives, particularly its eradication and possum and mustelid control
 objectives.
- The Self-help Possum Control Programme is delivering sustained possum control and maintaining low possum numbers over 32% of the region. However, possum numbers are at the high end of what is considered acceptable (>10% BTC)
- The roll out of *Towards Predator-free Taranaki* is notable. It is a new programme, underpinned by new rules and to date has delivered sustained mustelid (plus possum and rat) control over 15.2% of Taranaki.
- Council continues to have a strong Inspectorial and enforcement focus.
- Most people follow the rules. However, monitoring shows that in the last two financial years some land occupiers
 have failed to undertake effective possum control to the extent that possum numbers across the Self-help Possum
 Control Programme have exceeded (slightly) the 10% RTC compliance target.
- In terms of the Plan's relevance, this report has not identified any change factors that require immediate change to
 the Plan. However, increased demands on councils to do more in relation to the maintenance and protection of
 indigenous biodiversity is noted.

This report further canvasses emerging issues and constraints to existing Plan programmes plus opportunities for enhancing pest management outcomes in the region. They include Council investigating –

- Declaring feral cats to be a pest.
- Changing the delivery of the Self-help Possum Control Programme from DIY to a service delivery model.
- Changing the 10% RTC target for possums (achieved through rule compliance) to a 5% RTC target (to be achieved

i

through service delivery) to better protect sensitive and rare and threatened species on the ring plain and coastal terraces.

- Updating the Plan to better recognise pest management issues of significance to iwi, including protection of taonga species.
- Increasing resourcing through a biosecurity levy to support the above plus provide additional resourcing to expand
 exclusion, pathway and eradication activities, and support possum and ungulate control work in the eastern hill
 country.

The aforementioned opportunities and constraints represent significant change to the current Plan.

Further investigative work will therefore be required to expand and test the concepts proposed (e.g. additional resourcing for delivery of eradication and possum control initiatives, biosecurity targeted rate). It is recommended that this work include an early review of its Biosecurity Strategy to ensure that broader strategic and financial considerations are settled prior to commencing a full review of the current Plan under section 100D of the BSA. During that time, we can also expect BSA and resource management reform to bed in.

Contents

Table of contents

EXECUTIVE SUMMARY	5.3 New Zealand Biodiversity Strategy
	5.4 PREDATOR FREE 2050
CONTENTS	5.5 IWI MANAGEMENT PLANS
CONTENTSIII	5.6 SUMMARY OFPLANS RELEVANCE
1 INTRODUCTION1	6 OPPORTUNITIES AND CONSTRAINTS
1.1 PURPOSE	6.1 DO WE NEED TO DO MORE FOR BIODIVERSITY OUTCOME
1.2 STATUTORY AND PLANNING CONTEXT	6.2 DO WE WANT INCREASED POSSUM CONTROL?
1.2.1 The Biosecurity Act	6.2.1 Increased level of control in the Programm
1.2.2 The Plan	6.2.2 More possum control in the hill country
1.2.3 The Biosecurity Strategy3	6.3 DO WE WANT FERAL CAT CONTROL?
1.3 STRUCTURE	6.4 DO WE WANT UNGULATE CONTROL?
	6.5 ARE WE GOING TO CONTINUE TO RELY ON SELF-HELP PO
2 INTERIM REVIEW OF THE PLAN4	CONTROL?
	6.6 If WE WANT TO DO MORE, HOW DO WE PAY FOR IT?
2.1 NEED FOR AN INTERIM REVIEW4	6.7 SUMMARY OF KEY OPPORTUNITIES
2.2 ASSESSMENT PROCESS AND METHODOLOGY4	
2.4 FINAL REPORT4	7 CONCLUSION AND RECOMMENDATIONS
3 EFFECTIVENESS OF PLAN OBJECTIVES6	
3.1 ERADICATION	REFERENCES
3.2 POSSUM SUSTAINED CONTROL	
3.3 MUSTELID SUSTAINED CONTROL	APPENDIX I: PLAN REVIEW PROVISIONS UNDER THE BSA
3.4 PEST PLANT SUSTAINED CONTROL	
3.5 SUMMARY OF PLAN EFFECTIVENESS	
	APPENDIX II: PEST ORGANISMS DECLARED TO BE PESTS.
4 EFFICIENCY OF PLAN METHODS10	
4.1 BIOSECURITY PLANNING — MAINTAINING AN OPERATIVE PLAN	APPENDIX III: BIOSECURITY STRATEGY - VISION AND
<u>10</u>	PRIORITIES
4.2 Service delivery10	
4.2.1 Direct control10	APPENDIX IV: ANALYSIS OF IWI MANAGEMENT PLANS
4.2.2 Biological control11	APPENDIX IV: ANALYSIS OF IWI MANAGEMENT PLANS
4.3 ENFORCEMENT OF RULES11	TARANAKI
4.4 SELF-HELP POSSUM CONTROL PROGRAMME12	NGATI MUTANGA
4.5 TOWARDS PREDATOR-FREE TARANAKI	TE ATIAWA
4.6 ADVOCACY AND EDUCATION14	NGĀRUAHINE
4.7 WORKING WITH OTHERS14	NGĀTI MANIAPOTO
4,8 SUMMARY OF PLAN EFFICIENCY14	
	APPENDIX V: IMPLEMENTATION HIGHLIGHTS 2018 – 202
5 POTENTIAL CHANGE FACTORS17	
5.1 LAW REFORM17	APPENDIX VI: SUMMARY OF POSSUM CONTROL SERVICE
5.1 LAW REPORK 17 5.2 OTHER REGULATION	DELIVERY OPTIONS
J.Z OTHER REGULATION10	

	5.7	TREDATOR TREE 2000
	5.5	IWI MANAGEMENT PLANS
	5.6	SUMMARY OFPLANS RELEVANCE
6	OP	PORTUNITIES AND CONSTRAINTS22
		DO WE NEED TO DO MORE FOR BIODIVERSITY OUTCOMES?22
		DO WE WANT INCREASED POSSUM CONTROL?
		.1 Increased level of control in the Programme 22
		.2 More possum control in the hill country 23
		DO WE WANT FERAL CAT CONTROL?
	6.4	
	6.5	
		<u>ot?26</u>
		If we want to do more, how do we pay for it? 29
	6.7	SUMMARY OF KEY OPPORTUNITIES
7_	со	NCLUSION AND RECOMMENDATIONS 30
RI	FERF	NCES
		7023
Al	PEND	IX I: PLAN REVIEW PROVISIONS UNDER THE BSA 34
		WALL DEST ODGANISMS DESIADED TO BE DESTS
Al	PENL	IX II: PEST ORGANISMS DECLARED TO BE PESTS 36
<u>Al</u>	PEND	IX III: BIOSECURITY STRATEGY – VISION AND
PF	RIORIT	IES 37
		NV IV. ANALYSIS OF IMILAGANA CENTENT DI ANG
Al	PENL	IX IV: ANALYSIS OF IWI MANAGEMENT PLANS 38
	TARAN	IAKI38
	NGATI	Mutanga38
		AWA
		JAHINE
		MANIAPOTO39
	TOAT!	THAT OF C
Δι	DENE	IX V: IMPLEMENTATION HIGHLIGHTS 2018 – 2023 40
	PENE	AV V. HVII ELIMENTATION HIGHEIGHTS 2010 - 2023 40
ΔΙ	PEND	IX VI: SUMMARY OF POSSUM CONTROL SERVICE

List of figures

Figure 1: The Taranaki region	2
Figure 2: Areal extent of the sustained control for possun	ns7
Figure 3: Areal extent of the mustelid programme	8
Figure 4: Mean RTC trends	26

List of tables

1 Introduction

1.1 Purpose

The purpose of this report is to document a **non-statutory** interim review by the Taranaki Regional Council (Council) of the *Regional Pest Management Plan for Taranaki* (the Plan).

This report evaluates the Plan in terms of -

- the effectiveness of its objectives and the efficiency with which Council has implemented its methods;
- its ongoing relevance of the Plan having regard to any legislative or policy drivers for change:
- opportunities and constraints to achieving Plan objectives; and
- on the basis of the above, identifies whether changes to the Plan are required as a matter of urgency, including any recommendations for change.

The term 'pest' has a narrow statutory definition. For the purposes of this report, and depending upon the context, references to pest management may have a broader meaning and include other harmful organisms.

1.2 Statutory and planning context

1.2.1 The Biosecurity Act

The Plan was prepared under the *Biosecurity Act* 1993 (the BSA). The BSA provides regional councils (and others) with the necessary powers to "…exclude, eradicate and effectively manage pests" in their region.

The BSA definition of 'pest' has a very narrow meaning –

"...**pest** means an organism specified as a pest in a pest management plan".

Imposing rules and associated costs are not decisions to be taken lightly. There are literally thousands of species in New Zealand causing significant adverse and unintended impacts on people and the environment.

Accordingly, regional pest management plans are only 'made' after satisfying certain tests under the BSA such as a determination that a pest species is having impacts of regional significance and that the benefits of intervention would outweigh the costs. The 'willingness' of the community to bear Plan costs and obligations is then tested and confirmed through a planning process.

Regional pest management plans are the rulebooks for pest management under the BSA.

Once a regional pest management plan is made, rules can be enforced, and Council may access Part VI powers of the BSA.

Non-compliance with rules is an offence under the

Regional pest management plans are 10-year planning documents. After ten years, they must be reviewed under section 100D of the BSA (refer **Appendix I**). Although plans can be reviewed earlier if needed.

1.2.2 The Plan

The current Plan was made operative on 20 February 2018. It is the fourth pest management plan prepared by Council under the BSA.

The Plan identifies and sets out management programmes, including rules, for 20 'pest' animal and plant species (refer **Appendix II**).

Of the 20 organisms declared to be 'pests' in the Plan, four are harmful animal species (these being possums, ferrets, stoats, and weasels), while 16 are harmful plant species.

For five pest plant species (referred to as eradication pests), Council undertakes direct control to achieve their eradication. There are no rules. However, if necessary, Council may access the Part VI powers of the BSA to undertake works, e.g. entry onto land. These pests are of limited distribution and eradication is considered a technically feasible objective.

For the other 15 pest species (referred to as sustained control pests), the Plan contains rules requiring land occupiers to control the pests on their property. These pests are much more widespread, and the purpose of rules is to ensure any infestations are managed to the extent that externality impacts are minimised. Sustained control pests are possums, mustelids (stoats, ferrets and weasels), giant buttercup, giant gunnera, gorse, nodding, plumeless and variegated thistles, old man's beard, wild broom, wild ginger (Kahili and Yellow), and yellow ragwort.

The Plan contains 19 rules comprising of -

- General rules ten rules that require the land occupier to control any pest infestations across the entire property.
- Good neighbour rules— nine rules that require the land occupier to control pest infestations in boundary situations only. These rules are designed to address (and minimise) the pest's externality impacts on neighbours.

Under the BSA, good neighbour rules are the only type of rules that may apply to the Crown. Crown land represents over 20% of the Taranaki region (see Figure 1 below).

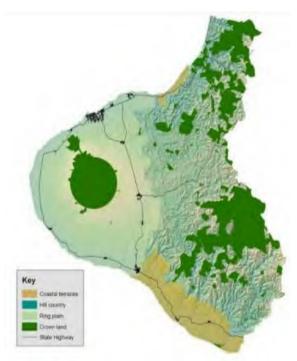


Figure 1: The Taranaki region



Figure 2: Biosecurity Strategy and Plan – the complete policy package for pest management

1.2.3 The Biosecurity Strategy

The Plan sits within Council's wider biosecurity policy framework. On 20 February 2018, Council also adopted the *Taranaki Regional Council Biosecurity Strategy* (Biosecurity Strategy).

The Biosecurity Strategy is a higher-level planning document. It contains no rules but sets out the Council's strategic framework for 'pest' management, including its vision, priorities, and actions – both regulatory and non-regulatory.

The Council's vision for pest management in the region, as set out in the Biosecurity Strategy, is –

Our vision

Taranaki has a high performing, integrated system for managing the risks and impacts of pests and other harmful organisms to the economy, environment and human health.

Agencies, community groups and individuals work cooperatively, taking an integrated, efficient and cost-effective approach that is based on sound science and a social mandate to undertake that work.

Together we are making a significant contribution to protecting our region, people, economy and natural resources by preventing the introduction or establishment of new pests and by reducing the damage caused by pests and other harmful organisms introduced in the past.

To achieve the vision, the Biosecurity Strategy sets out five priorities for Council with key actions (refer **Appendix III**) grouped around the themes of:

- Pathways and exclusion: Council undertakes pathway and exclusion activities to prevent the establishment of new harmful species to Taranaki or the exacerbation of existing problems.¹
- Eradication: Council undertakes direct control activities for harmful species present but not yet established in Taranaki (and where eradication is technically feasible).

- Sustained control: Council maintains a regional pest management plan and enforces rules for the control of declared pests.
- Working with others: Council supports the efforts of others contributing to pest management outcomes (includes site-led management).
- Regional leadership: Council leads regional responses on biosecurity planning, biological control, research, and advocacy and liaison.

1.3 Structure

This report has seven sections.

Section 1 introduces the report, including its purpose, the statutory and planning context, and structure.

Section 2 outlines the interim review process, including the need for the review, its methodology, and an overview of this report.

Section 3 evaluates the effectiveness of the Plan in terms of whether its objectives are being achieved.

Section 4 evaluates the efficiency of the Plan in terms of whether its methods are being implemented.

Section 5 examines the ongoing relevance of the Plan having regard to potential 'change' factors that have emerged since the adoption of the Plan, e.g. changes in law, Government policies and programmes, and other policy initiatives that might have a bearing on the Plan and its implementation.

Section 6 assesses whether there are any new or emerging 'operational' issues occurring that might necessitate changes to the Plan and an early review.

Section 7 presents the report's conclusions, including recommendations going forward.

Appendices are presented at the back of the report.

¹ Ministry for Primary Industries is responsible for border control to prevent the arrival and establishment of new harmful organisms to New Zealand. Council's focus is on responding to organisms established in New Zealand but not yet established in the region such as rooks and wallabies.

2 Interim review of the Plan

Section 2 outlines the interim review process, including the need for the review, its methodology, and an overview of this report.

2.1 Need for an interim review

The Plan was adopted in 2018. It is a 10-year plan at which time Council is required to undertake a full statutory review of the Plan pursuant to section 100D of the BSA.

While Council is not statutorily required to undertake a review of the Plan, it has chosen to do so as part of its practice of regularly reviewing all its strategies, plans, and programmes to ensure they are producing the best outcomes possible.

The 2022/2023 Annual Plan states that Council will undertake an interim review of its Plan. The commitment reads –

"...Support the implementation of the Pest Management Plan for Taranaki, with an interim review and a ten-year full review to occur in 2022/2023 and in 2027/2028."

Five years on, it is timely to do a review Council's experiences with implementing the Plan.

2.2 Assessment process and methodology

The review involved an analysis to answer three key questions –

- Is the Plan effective and efficient are we achieving what we hoped (objectives) and are we doing what we said (methods)?
- Is the Plan still relevant in 2023 are there any policy or operational drivers for change?
- On the basis of the above, are changes to the Plan significant thereby necessitating

an immediate full statutory review taking into account the:

- timeliness of any change, particularly in view of any proposed changes in legislation, new policies, changing community expectations and new or emerging pest management issues; and
- costs and obligations to people and the region?

To answer these questions Council commissioned a consultant to examine relevant information, including its pest management datasets, annual reports, studies, investigations, and literature.

The consultant further examined and assessed potential 'change factors'.

Change factors refers to policy or operational issues to emerge since the adoption of the Plan that might necessitate a change to the Plan. Examples include the promulgation of new laws and regulations, changing community expectations, and/or new information identifying opportunities and constraints for doing things better.

In the event of any deficiencies in the effectiveness, efficiency or relevance of the Plan, the consultant was asked to consider whether those deficiencies were significant or minor using assessment criteria developed for the purposes of this review.

As necessary, key findings and recommendations going forward have been regularly peer reviewed and 'tested' by Environment Services staff.

2.4 Final report

This report was authored by Chris Spurdle (Consultant) with Steve Ellis (Environment Services Manager) and Tim Weston (Programme Lead - Biosecurity) assisting with coordinating the provision of information and peer reviewing draft versions of this report.

This report summarises the desktop assessment of the effectiveness and efficiency of the Plan, including any risks or issues of concern (refer sections 3 and 4 below).

The report then summarises a desktop assessment of the ongoing relevance of the Plan, including opportunities to do better (refer sections 5 and 6 helow)

With regards to opportunities and constraints to improve pest management outcomes, the report documents key assumptions, risks, and uncertainties.

Conclusions and recommendations arising from the interim review are presented in Section 7 of this report.

Report recommendations have been assessed as to their significance and whether changes sought would necessitate an immediate full review of the Plan. If changes sought are relatively minor, they may wait until the Council undertakes its scheduled full review in 2028.

Of note, report recommendations are preliminary only. They have not been formally considered by Council. Also, should Council accept any recommendation involving significant change to the current Plan, these changes will be tested further as part of a full public planning process under section 100D of the BSA.



3 Effectiveness of Plan objectives

Section 3 evaluates the effectiveness of the Plan in achieving its objectives to date based on annual plan reporting and supporting datasets.

There are 15 Plan objectives. For the purposes of this report, objectives are grouped according to Plan programme type. These are eradication, and possum, mustelid and pest plant sustained control.

For each programme type, progress towards meeting the Plan objective(s) is evaluated. The success or otherwise of achieving Plan objective(s) is determined based upon the following criterion:

- Achieved objective sought is being achieved across all measures.
- Generally achieved objective sought is largely being achieved with generally positive trends/outcomes across most (but not all) measures. Negative results represent significant risk that the Plan objective may not be achieved.
- At risk- significant operational impediments are being experienced that the objective may not ultimately be achieved across all measures.
- Not achieved objective is not being achieved across all measures.

3.1 Eradication

The Plan has five objectives targeting climbing spindleberry, giant reed, maderia (mignonette) vine, moth plant, and Senegal tea for eradication in the region. Plan eradication objectives read –

"Over the duration of the Plan eradicate [insert pest plant name], by destroying all infestations known at the date the Plan becomes operative and, where practicable, destroy any new infestations that are identified, to prevent adverse effects on [insert values impacted] in the Taranaki region."

The objective has two key elements – first, destroy all infestations known as at 2018 and, second, destroy any new infestations discovered over the life of the Plan.

With regards to eradication pest plant species recorded as present at the time of adopting the Plan, all 185 infestation sites have and continue to be treated where required.

In addition, Council investigates, surveys, and endeavours to treat new infestations. Each year, over the 'life' of the Plan, Council staff have been discovering new infestations of eradication pest plant species through regular monitoring and surveillance activities. Council also undertakes publicity programmes using press releases, newspaper articles and social media to encourage public reporting. This has resulted in the identification of hundreds of new sites.

When new infestations of eradication pest plants are discovered, Council maps and plans treatment of them.

The persistent nature of these pest plant species means that even when treated, new growth often occurs, therefore requiring multiple treatments.

Taking into account that some species seeds can remain viable in the soil for 30+ years all sites need to be inspected regularly to prevent further seeding.

As at 30 June 2023, there are a total of 417 pest plant eradication sites. Of these sites, 206 (49.4%) have been treated, with the untreated sites (most of them recently identified) being targeted for treatment this financial year. ² However, the ongoing discovery of new infestations, on top of the ongoing necessity to treat existing infestations, is incrementally placing more and more demands on Council resourcing. Officers are concerned that not all infestations can be effectively managed within current budgeted resources.

² In 2022/2023, Council surveys and a publicity campaign resulted in 184 more infestations, mainly of moth plant, being confirmed.

Plan objectives for the five eradication pest plant programmes are assessed as being 'At risk'. Existing known infestations have been treated and newly discovered infestations are being identified and, as resources permit, destroyed. However, a 'backlog' of untreated infestations has emerged with not enough resourcing available to address newly discovered infestations last financial year.

3.2 Possum sustained control

The Plan targets possums through a sustained control programme. The Plan objective for possums reads –

"Over the duration of the Plan, sustainably control possum numbers on land within the Self-help Possum Control Programme, and elsewhere as appropriate, to avoid or minimise adverse effects on pastoral production, animal health, and indigenous biodiversity values in the Taranaki region."

The objective has two key elements – first, implement the Self-help Possum Control Programme and, second, suppress possum numbers in the Programme to avoid or minimise adverse effects.

The Self-help Possum Control Programme is the world's longest running community possum control programme. Approximately 232,000 hectares (ha) or 32% of the region is in the Programme covering most of the ring plain and coastal terraces (refer Figure 3).

In terms of suppressing possum numbers in the Self-help Possum Control Programme, Council has been largely keeping possum numbers below the target 10% residual trap catch (RTC). ³ In 2018/2019, possum infestation levels in the Programme were, on average, 6.9%. However, in the last two financial years, possum infestation levels in the Programme have been (slightly) exceeding the 10% RTC compliance target.

Of concern is the risk that unless possum numbers are returned to below 10% RTC, the Plan may no longer be meeting its objective of avoiding or

minimising adverse effects on indigenous biodiversity values.

Of note, is a project trialling the eradication of possums over 4,467 ha of farmland surrounding the Kaitake Range and preventing re-infestation that is also successfully contributing to the Plan objective. The farmland surrounding the Kaitake Range has now been free from possums for over two years,⁴

The Plan objective for possums is assessed as being 'Generally achieved'. Low possum numbers are being maintained across much of the Taranaki landscape. However, possum numbers at or above the 10% RTC compliance level are of concern and that part of the objective relating to avoiding or minimising adverse effects on indigenous biodiversity values is at risk of not being met (this is discussed further in section 6.2.1 below).

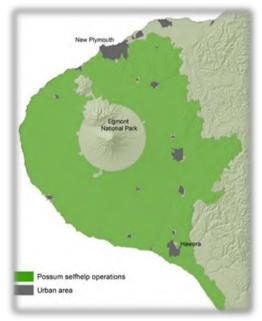


Figure 3: Areal extent of the Self-help Possum Control Programme

³ For further information on the Self-help Possum Control Programme, including programme design and activities, please refer to section 4.4 helps

⁴ The success of the trial has enabled Council to secure additional funding from Predator Free 2050 Limited to increase the area by up to 5,800 ha. Source: Taranaki Regional Council, 2023.

3.3 Mustelid sustained control

The Plan targets mustelids through a sustained control programme. The Plan objective for mustelids reads –

"Over the duration of the Plan, sustainably control mustelid numbers on land within a Predator Control Area, and elsewhere as appropriate, to avoid or minimise adverse effects on indigenous biodiversity values in the Taranaki region."

The Plan objective has two key elements – first, establish Predator Control Areas and, second, suppress mustelid numbers in those areas to avoid or minimise adverse effects on indigenous biodiversity.

With regards to the establishment of Predator Control Areas, Council received \$11.5 million from Predator free 2050 Limited, the government owned company tasked with funding strategic landscapescale predator programmes to 'roll out' the programme each year.⁵

First commenced in 2018/19, each year, the control is expanded to new areas. ⁶ As at 30 June 2023, Predator Control Areas have been established and Council is delivering sustained mustelid control over approximately 110,218 ha on Taranaki's intensively-farmed ring plain or 15.2% of the region (refer Figure 4).

Taranaki is already starting to see the results of mustelid control. Monitoring found up to a 90% reduction in mustelids in Predator Control Areas. With the reduction in mustelid numbers, indigenous biodiversity values in the area are being significantly enhanced and restored.

Long term monitoring is needed to quantify what the 90% reduction in mustelid numbers equates to in biodiversity gains and if landowner maintenance can sustain this reduction However, the benefits are anticipated to be significant. For example, the *Taranaki Mounga Project* noted that the threatened species whio (blue duck) is thriving in the national park following predator control. According to *Taranaki Mounga Project*, there has been a 70% increase in whio pairs since 2011. There

have also been sightings of kiwi and toutouwai (North Island robin), which are spreading through the national park and in the surrounding farmland. ⁷ Through sustained mustelid control, adverse effects on indigenous biodiversity values are being minimised across large parts of the region.

Plan objective for the mustelid sustained control programme is cautiously assessed as being 'Generally achieved'. While plan objectives appear to be on track with the establishment of Predator Control Areas, officers believe further work (including increasing use and enforcement of the rule) is required to ensure farmers are maintaining traps. Not all farmers are believed to be undertaking the necessary mustelid control.

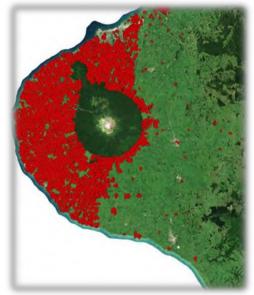


Figure 4: Areal extent of the mustelid programme

3.4 Pest plant sustained control

The Plan has 11 sustained control objectives (i.e. a regulatory approach) targeting giant buttercup, giant gunnera, gorse, old man's beard, nodding,

⁵ This regulatory programme is an integral component of a much wider programme — the Taranaki Predator-free programme, which aims to restore Taranaki's biodiversity by removing introduced predators such as possums, rats, and mustelids.

⁶ Refer https://www.trc.govt.nz/environment/working-together/towards-predator-free-taranaki/rural/

⁷ Refer https://www.trc.govt.nz/environment/working-together/towards-predator-free-taranaki/predator-free-news/ring-of-traps-surround-mt-taranaki/.

plumeless and variegated thistles, wild broom, yellow and kahihi ginger, and yellow ragwort. Pest plant sustained control objectives for the Plan read—

"Over the duration of the Plan, sustainably control [insert pest plant name] to avoid or minimise adverse effects on [insert values impacted] in the Taranaki region."

The objectives have one key element – to suppress infestations to minimise externality impacts.

All 11 sustained control pest plants are well established in Taranaki and require ongoing sustained effort to minimise their externality impacts on neighbours and the region generally. Officers regularly find localised problems that if left unmanaged, can quickly become problematic and impose significant costs on others.

For agricultural production pest plant, there is an element of self-interest with farmers motivated to undertake timely control. However, where problems occur, Council intervenes in an enforcement capacity and ensures land occupiers undertake the required pest control.

Over the life of the Plan, Council has increasingly focused on ensuring landowners also prioritise control of environmental pest plants such as old man's beard, gunnera, and wild ginger.

As discussed further in section 4.2.1, there have been demonstrable gains in rolling back heavy infestations of old man's beard in the Kaūpokonui and Waingongoro catchments.⁸

Plan objectives for pest plant sustained control programme are assessed as 'achieved'. Adverse effects from these pest plants on agricultural production and indigenous biodiversity values are being successfully avoided and indeed rolled back.

3.5 Summary of Plan effectiveness

This review confirms that the Plan is <u>largely</u> on track in achieving its objectives.

Plan objectives were assessed as 'achieved' for the pest plant sustained control programmes.

Plan objectives for the possum and mustelid sustained control programmes are assessed as 'generally achieved'. Across most metrics their respective objectives are still being achieved. However, land occupier compliance issues need to be acknowledged and addressed (this issue and options going forward are discussed further in section 6 below). In relation to the five eradication programmes, more resourcing is also likely to be necessary to address newly discovered infestations.

Set out in Table 1 below is a summary of the effectiveness of the Plan in achieving its objectives.

Table 1: Summary of effectiveness in achieving Plan objectives

Plai	n objectives relating to	Are the objectives being achieved?	Comments
1.	Pest plant eradication programmes	At risk of not being achieved	100% of known infestation sites treated. However, a 'backlog' of untreated infestations is developing as new infestations are being discovered. More resourcing is going to be necessary to eradicate newly discovered infestations for the remaining duration of the Plan
2.	Possum sustained control programme	Generally achieved	32% of the region has sustained possum control. However, increasing possum numbers are a concern (>10% RTC).
3.	Mustelid sustained control programme	Generally achieved	15.2% of the region has sustained mustelid control focused on the ring plain. However, greater enforcement will be required to ensure land occupiers continue to undertake effective control
4.	Pest plant sustained control programmes	Achieved	Business as usual for the 11 species. However, significant gains in rolling back old man's beard infestations are noted

⁸ Previous plans have exempted land occupiers from rules requiring the control of old man's beard where infestations have been within 50 meters of the Waingongoro, Kaupokonui and Pātea rivers. This was based on infestations being so heavy that the cost of any control was considered overly onerous and unreasonable to impose on land occupiers. Through this programme, Council is undertaking initial control incrementally along the Waingongoro and Kaupokonui rivers prior to land occupier obligations applying.

4 Efficiency of Plan methods

Section 4 reviews annual reports and other sources to evaluate the efficiency of the Plan in terms of whether principal measures (methods) are being delivered (or not).

The Plan contains 118 methods. For the purposes of this report, methods are grouped as follows –

- 1. Biosecurity planning
- 2. Service delivery
- 3. Inspections and enforcement of rules
- 4. Self-help Possum Control Programme
- 5. Towards Predator- Free Taranaki
- 6. Advocacy and education
- 7. Working with others.

4.1 Biosecurity planning – maintaining an operative Plan

Council is committed to the preparation, adoption and maintenance of a publicly considered pest management plan (i.e. the Plan).

The current Plan was made operative on 20 February 2018. Council subsequently undertook and completed a partial review on 1 June 2021 to include mustelids and is now undertaking this interim review (2023).

Council is spending in the order of \$6 million per annum on Plan and other pest management activities. ⁹ Annual planning and reporting is undertaken every year to ensure proper resourcing for the implementation of all Plan methods, including rules (refer sections 4.2 to and 4.7 below).

As at 30 June 2023, the Plan method for maintaining the Plan in accordance with statutory requirements is assessed as 'being delivered'.

4.2 Service delivery

4.2.1 Direct control

Direct control involves Council undertaking pest control itself. This service is generally provided where the public good outweighs private benefits.

Over the life the Plan, Council has undertaken -

- (a) Direct control on 226 sites to eradicate climbing spindleberry, giant reed, madeira (mignonette) vine, moth plant, and Senegal tea infestations.¹⁰
- (b) Initial control on 80 properties to destroy old man's beard infestations along the Waingongoro river. This equates to approximately 18 kilometres of control. Because of typography, control work has been very technically challenging requiring follow-up treatment.
- (c) Direct possum control in 2019, on 422 properties covering a combined area of 28,000 ha surrounding Te Papakura o Taranaki (Egmont National Park). This work was carried out to support the *Taranaki Mounga Project* and Department of Conservation's (DOC) joint aerial 1080 operation.
 - (d) Direct control to eradicate possums on 4,467 ha, including the Kaitake range, surrounding farmland and the township of Oākura. Direct control involved aerial 1080, ground baiting and trapping. Followed up with dogs and thermal cameras to detect and remove any survivors. This operation is a trial and part of zero possum control area funded by Predator Free 2050 Limited (refer Figure 5). This work is part of the *Towards Predator-free Taranaki* programme. Council continues to detect

⁹ This includes Council's share of Predator-free funding. Source: Taranaki Regional Council, 2023.

¹⁰ This does not include the direct control of other invasive weeds not yet established in Taranaki including boneseed, chameleon plant, purple loosestrife, royal fern, and alligator weed.

and remove individual possums using motion sensing cameras followed by intensive trapping or hunting with thermal cameras and possum detection dogs.

(e) Initial control for mustelids covering 110,218 ha as part of Towards Predatorfree Taranaki. This involved engagement with land occupiers, the establishment of a trapping network through the targeted areas, and the regular checking and maintenance of those traps.

Direct control activities are contributing to eradication objectives and reducing the pest impacts of old man's beard, possums and mustelids. Direct control for possums and mustelids is particularly notable for its delivery of pest control at a landscape scale.

As at 30 June 2023, the Plan method for Council to under-take direct control is assessed as largely 'being delivered'. As previously noted in section 3.1, in relation to direct control for eradication purposes, further work and more resourcing in the future is going to be required for the Council to address new recently identified infestations and to continue to meet its eradication objectives.



Figure 5: Zero possum control area

4.2.2 Biological control

Biological control involves Council sourcing, releasing and distributing natural enemies of pests. Council contributes to the Landcare's biological control research programme, which is part of a sector-wide approach to the sourcing, release and distribution of biological control agents across New Zealand.

Each year, Council procures and undertakes three to nine biocontrol agent releases, excluding last financial year.

In 2022/2023, Council chose to temporarily halt further biocontrol agent releases to undertake a stocktake of what has been released to date, including where and when, and review the adequacy of tangata whenua engagement on the topic.

The use of bioagents is an alternative to the widespread use of toxins to undertake pest control, which has been identified as an issue of concern in some iwi management plans (refer **Appendix IV**). However, to date there has been no meaningful engagement with Taranaki's iwi and hapu on Council's biological control programme. Council is seeking to undertake more structured engagement with tangata whenua, including education and awareness raising, prior to any more bio-agent releases.

Notwithstanding 2022/2023, overall, the Plan method involving the provision of biological control agents is assessed as **'being delivered'**.

4.3 Enforcement of rules

Council's sustained control programmes for pest plants, possums and mustelids are underpinned by a comprehensive inspectorial and enforcement regime to ensure land occupiers comply with Plan rules. This involves —

- visiting properties and monitoring to determine the presence or absence of pests, and whether rules are being complied with; and
- responding to any non-compliance through enforcement action (i.e. action on default, prosecution).

Council's compliance monitoring programmes comes in many forms. Ranging from quick visual inspections to the adoption of quite sophisticated monitoring techniques such as the use of wax tags, RTC monitoring lines, or Econode technology (a wireless sensor attached to mustelid traps that send a signal when a trap has gone off).

In relation to checking compliance with pest plant rules, each year, Council monitors farms, urban properties, parks and reserves, road reserves, quarries, and plant nurseries. Council also responds to and investigates public complaints. Over five years, Council carried out 7,493 property inspections for pest plants. This is an average of 1,498 property inspections per annum.

Generally, public complaints relate to the presence of pest plants on neighbouring land and road and rail reserves.

Sometimes Council will target specific pest plants or areas. For example, in 2023, Council undertook a large urban monitoring exercise targeting New Plymouth suburbs east of the Waiwhakaiho River. The focus was on environmental pest plants (both eradication and sustained control). That survey identified 54 properties where land occupiers were advised that pest plant control will be required (two additional eradication pest plant infestations were also identified). Compliance will be followed up this calendar year.

In relation to possums, each year, Council uses wax tags and trap catch monitoring to ascertain possum infestation levels (and land occupier compliance) across the Self-help Possum Control Programme.

Over the last five years, Council carried out 2,718 property inspections to monitor compliance with Plan rules. This equates to an average of 554 inspections per annum.

In 2022/2023, of the 143 RTC monitoring lines undertaken to monitor land occupier, 40 (28%) were significantly over the required 10% RTC target. These properties were required to undertake additional control to resolve the issue.

In relation to mustelid control, because of the 'young' age of the programme (noting there were no rules for mustelid control prior to 2021), the focus has primarily been on educating land occupiers on their obligations. However, it is expected that the enforcement component will ramp up over time.

For all sustained control programmes, where inspections identify problems, Council issues notices of direction requiring land occupiers to undertake pest control. Over the last 5 years, 628 notices of direction have been issued – 461 for pest plant control and 163 for possum control. This

equates to an average of 125 notices of direction issued per annum.

Compliance with Plan rules and/or in response to notices of direction is generally good overall. Most land occupiers respond quickly to pest problems once identified.

For ongoing non-compliance, further enforcement action can be taken in the form of default work out (where the Council undertook the pest control at the land occupier's expense) or prosecution. Since the adoption of the Plan, only one default action has been undertaken and no prosecution action has been required.

As at 30 June 2023, the Plan method involving inspections and enforcement of Plan rules is assessed as 'being delivered'. Council's commitment of significant resources and adoption of a broad suite of compliance monitoring techniques is particularly noted as is its adoption of innovative thinking such as remotely wireless monitoring systems.

4.4 Self-help Possum Control Programme

The Self-help Possum Control Programme was a flagship programme when Council prepared its first pest management plan in 1996.

Over the years, Council has incrementally expanded the Self-help Possum Control Programme into new areas until it now covers 32% of the region. ¹¹ As new areas were brought into the Programme, Council carried out initial control, reduced possum numbers to very low levels (usually between 3 to 5% RTC), with the land occupier then assuming responsibility through rules to keep possum numbers at <10% RTC.

There are 4,234 properties in the Self-help Possum Control Programme. Though it is a regulatory programme, Council works closely with the land occupiers to support their possum control efforts. This involved regular and ongoing liaison, advice and education to land occupiers including often repeated phone calls reminding them of their obligations. However, the nature of that liaison has changed over time. Council has sought efficiencies to better manage the competing priorities of the

¹¹ This is the first plan that Council has not sought to expand the Programme. Its focus has been on maintaining the gains to date.

pest plant programme and the introduction of predator control maintenance requirements. This has necessitated the replacement of letters and phone calls with emailed bulletins that both remind landowners of their obligations and promote wider pest management messages.

Essentially the Self-help Possum Control Programme has moved to an inspectorial and enforcement regime similar in type to that adopted for pest plant. The new regime has been supported with increased monitoring that ascertains possum infestation levels in the area that, in turn, determines what level of possum control is needed. When monitoring indicates that possum control is required in an area. Council liaises with land occupiers and provides technical advice, assistance, and support to land occupiers regarding pest control techniques and products, including the use of contractors. Should officers determine that a land occupier is not undertaking the necessary control and is continuing to not meet the 10% RTC target, then a Notice of Direction is issued.

As at 30 June 2023, the Plan method involving implementation of the Self-help Possum Control Programme is assessed as 'being delivered' However, as previously noted in section 3.2, possum numbers at or above the 10% RTC compliance level are of concern and that part of the objective relating to avoiding or minimising adverse effects on indigenous biodiversity values is at risk of not being met. The efficiency of this method, including opportunities and constraints, are discussed further in section 6.2.1 below.

4.5 Towards Predator-Free Taranaki

Taranaki Taku Tūranga -Towards Predator-Free Taranaki aims to support the eradication of mustelids (and rats and possums) across all intensively farmed land in Taranaki by 2050.

Towards Predator-Free Taranaki has, so far, involved \$2.5 million of Council funding supported by more than \$11 million from Predator Free NZ. 12 It involves the trialling of new control methodologies and tools, including remote sensors, wireless nodes and a trapping app. This high-tech

equipment makes trapping more efficient and less time consuming by sending an alert to the user when a trap goes off.

There are three elements to the *Towards Predator-*Free Taranaki project –

- (a) Zero density possums Council removed possums over 4,467 ha of farmland adjacent to the Kaitake Ranges. This operation has continued to detect and remove individual possums as necessary (refer sections 3.2 and 4.2.1).
- (b) Urban predator control Council has provided traps to homeowners within urban areas in the project, including New Plymouth, Bell Block and Ōakura and Ōpunakē. Community 'champions' continue to join the project and are providing excellent localised support to backyard trappers.
- (c) Rural landscape predator control In 2022/2023, Council undertook initial mustelid control over an additional 15,000 ha, bringing the total to 110,218 ha now in Predator Control Areas.¹³ This involved the use of contractors to establish a network of traps placed along a combination of habitat, races and farm tracks.

Since 2018, the rural landscape element of the programme has been incrementally expanded. It closely replicates the approach adopted in the Selfhelp Possum Control Programme. After successful initial control, land occupiers purchase and maintain the traps on their property. The traps are significantly subsidised.

Since 2021, new rules have applied requiring land occupiers to maintain low mustelid numbers following initial control. Areas where Council has undertaken initial control and where rules now apply are referred to as 'Predator Control Areas'. Each year, Council monitors trap use across Predator Control Areas and Council organises and coordinates mustelid control.

As at 30 June 2023, Predator Control Areas now cover 110,218 ha (or 15.2%) of the region. Plan method involving Council providing property

¹² Initially 5-years with agreement for a further 3 years funding.

¹³ Taranaki Regional Council, August 2023.

planning extension services to support mustelid control is assessed as 'being delivered'.

4.6 Advocacy and education

Council provides general purpose education, advice, awareness and publicity activities to land occupiers and the public about pest management.

Every year, over the life of the Plan, Council undertook a media and publicity campaign on pest plants to encourage their reporting (in the case of eradication species) or to encourage their control (for sustained control species), including the use of alternative garden species.

Council further responds to public requests for information and provides ongoing technical advice to people undertaking pest control,

Over the life of the Plan, Council maintained webpages, and prepared and distributed pest management advice and information to increase public awareness and encourage pest control.

Council regularly provides, on request, technical advice and information over the life of the Plan to –

- facilitate or support land occupier efforts,
 e.g. as part of the Self-help Possum Control
 Programme and possum and Towards
 Predator-Free Taranaki;
- facilitate or support community and other agencies' efforts to maximise the effectiveness of their control; and
- (c) promote best practice to contractors and others in relation to pest pathways, e.g. in plant nurseries and road reserves.

As at 30 June 2023, the Plan method involving Council undertaking advocacy and education activities to support pest management is assessed as 'being delivered'.

4.7 Working with others

While the Plan is the rulebook for the region, Council works closely with other key players in a non-regulatory sense to promote proactive and/or more effective pest management.

In relation to pest plant sustained control programmes, Council works closely with crown agencies such as DOC, Waka Kotahi NZ Transport

Agency, Kiwi Rail, and Kāinga Ora (Housing NZ) to minimise and address pest plant problems on Crown land.

Council also works with district councils to promote pest plant management in their parks and reserves. Of note are recent efforts to work with New Plymouth District Council (NPDC) to deliver more positive and timely pest plant management. Council is trialling an approach where Council monitors and plots any pest plant infestations in NPDC's parks and reserves using a GIS application with the information forwarded to Parks and Reserves for them to prioritise control as part of their maintenance. So far, this approach has been very successful, and Council is considering its broader application to include NPDC's road reserves team, and Stratford and South Taranaki district councils.

In relation to its possum and mustelid sustained control programmes, including the *Towards Predator-Free Taranaki*, Council works with and regularly support the *Taranaki Mounga Project* and DOC's predator control work on the mounga.

Council also undertakes activities to support community pest control. This includes assistance to Tiaki Te Mauri o Parininihi Trust, East Taranaki Environment Collective, Lake Rotokare Scenic Reserve Trust and the Rapanui Grey Faced Petrel Trust.

Council is a member of and provides financial and other support for Wild for Taranaki.

As at 30 June 2023, the Plan method involving Council working with others is assessed as 'being delivered'.

4.8 Summary of Plan efficiency

The Plan has been generally efficient in the implementation of its methods.

Plan methods were assessed as largely 'being delivered'. However, the review notes Council resources are being stretched in some areas and Council may need to review the delivery of some of the Plan methods if it wishes to achieve all Plan objectives, particularly its eradication and possum and mustelid control objectives. Resourcing and funding opportunities and constraints are discussed further in section 6.6 below.

Policy	and Planning	Committee -	Interim	Review	of R	egional	Pest	Management	Plan	for '	Tarana	ki
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Set out in Table 2 overleaf is a summary of the efficiency of the Plan and progress in its implementation.

Table 2: Summary of Plan efficiency and progress in implementing Plan methods¹⁴

		Wh	at have we heen do	na?			
Principal Plan measures (methods)	What have we been doing?						
` ,	2018/19	2019/20	2020/21	2021/22	2022/23		
Biosecurity planning	Operative Plan adopted		Partial review (mustelids)		Interim review	Commitment is being delivered	
Eradication control of pest plants (no. of infestations)	168 (100% treated)	106 (100% treated)	121 (100% treated)	233 (100% treated	417* (46.3% treated).	Commitment is being delivered	
Initial control for old man's beard (km)	17	0.7	1	2	0**	Commitment is being delivered	
Initial control for mustelids (ha)	14,000	28,000	30,300	22,918	15,000	Commitment is being delivered	
Biological control	3 releases for wild broom, woolly nightshade, & tradescantia	4 releases for wild broom, woolly nightshade, & tradescantia	6 releases for yellow ragwort, thistles, tradescantia, & Japanese honeysuckle	9 releases for old Man's Beard, tradescantia & Japanese honeysuckle	No releases	Commitment is being delivered	
Enforcement of rules (no. of properties)	Inspections 1,309 (plants) 428 (possums) Notices of direction	Inspections 1,256 (plants) 747 (possums) Notices of direction	Inspections 1,498 (plants) 786 (possums) Notices of	Inspections 660 (plants) 479 (possums) Notices of directions	Inspections 2,780 (plants) 278 (possums) Notices of directions	Commitment is being delivered	
	176 (plants) 19 (possums)	96 (plants) 39 (possums)	133 (plants) 24 (possums)	27 (plants) 55 (possums)	29 (plants) 26 (possums)		
Implementation of the Self- help Possum Control Programme***	4,181 properties 240,200 ha	4,211 properties 240,200 ha	4,224 properties 240,200 ha	4,234 properties 240,200 ha	4,234 properties 232,000 ha	Commitment is being delivered	
Implementation of Predator- free Taranaki (total hectares)	14,300 ha	28,000 ha	42,000 ha	95,000 ha	110,000 ha	Commitment is being delivered	
Advocacy and information****	149 public responses	127 public responses	173 public responses	353 public responses	425 public responses	Commitment is being delivered	
	Annual media & publicity	Annual media & publicity	Annual media & publicity	Annual media & publicity	Annual media & publicity		
Working with others	Member of & support for Wild for Taranaki	Member of & support for Wild for Taranaki	Member of & support for Wild for Taranaki	Member of & support for Wild for Taranaki	Member of & support for Wild for Taranaki	Commitment is being delivered	

^{*} In 2022/2023, in conjunction with an expanded surveillance programme a successful publicity programme was undertaken, a large number of previously unknown infestations of moth plant were identified making it difficult to treat all infestations that financial year.

^{**} In 2022/2023 there was no extension of the programme as Council undertook a complete retreatment of previously treated areas

^{***} There has been no extension of the Self-help Possum Control Programme and therefore no new initial possum control. Differences in the number of properties and spatial extent is a statistical anomaly partly attributed to changes over time in farm amalgamations and creation of new lifestyle properties etc, and the removal of the Zero possum control area from the Programme.

^{****} Years 2018/2019, 2019/2020 and 2020/2021 do not include advocacy and education associated with other harmful plant and animal species.

¹⁴ This section is based largely on information contained in Council's annual reports prepared under the Local Government Act 2002. For a fuller reading of pest management activities in the annual reports, please refer to **Appendix V**.

5 Potential change factors

A lot may change in five years.

Section 5 evaluates the on-going relevance of the Plan in terms of major changes in law and/or other policy drivers that have emerged since the adoption of the Plan and which have the **potential** to impact or impinge on that Plan.

For each potential change factor, an assessment is made on the significance and timeliness of making changes to the Plan (i.e. commencing an immediate full review of the Plan).

5.1 Law reform

Potential changes in law have been assessed for their implications on Plan's objectives and delivery.

Since 2018, no new legislation has so far been enacted that has a bearing on the Plan although Government proposals to reform the BSA, consider the development of a nationwide cat management framework, and, to a lesser extent, reform the resource management system may have implications in the near future.

In July 2019, the Government announced that they would overhaul the BSA. Amongst other things, the Government is seeking to amend the Act to –

- include a purpose statement;
- include a set of guiding principles;
- address how Te Ao Māori should be reflected in biosecurity regulation;
- ensure there is clear and consistent roles and responsibilities across the biosecurity system; and

 address gaps in the legislation that biosecurity responses and other events have revealed.¹⁵

Progress on this review has been slow. Council has been involved in early sector discussions with Ministry for Primary Industries. However, to date, the consultative process has not formally commenced (it had been expected to commence in late 2023) and with the general election there has been minimal progress on the reforms. However, the sector is optimistic that reform will still occur.

Without pre-empting the outcomes of that process, issues raised to date are technical of nature and no fundamental overhaul of the pest management planning system is anticipated.

In August 2023, the Environment Select Committee reported back to Government with recommendations to develop a nationwide cat management framework.

The Environment Committee has recommended to government that legislation is developed to implement a nationwide cat management framework outlining that cats should be registered, desexed and microchipped with appropriate exemptions. This model would help New Zealand achieve the national goal of being predator free by 2050.

A large number of interest groups support the concept. The introduction of a national approach to cat management supports the principles of responsible cat ownership while also being integral in addressing and reducing the number of unwanted cats in New Zealand as well as protecting New Zealand wildlife.

The Environment Select Committee report acknowledged there had been a marked change in the public's attitude towards responsible dog ownership since the introduction of the *Dog Control Act* in 1996 and believed that a similar approach to cats would be a positive and significant move.

¹⁵ Ministry for Primary Industries, July 2019.

The Government was due to respond to the Environment Select Committee's report recommendation by October 25 2024, but has yet to do so. At this point in time, no change is required to the Plan. However, the Select Committee's recommendations are aligned with Council thinking and has potential implications should the Council seek to change its Plan to include feral cats in the near future (refer section 6.3 for further discussion).

This review concludes that **no significant change** is required to the Plan arising from law reform to date. However, Council will need to keep a 'watching brief' on imminent law reform, particularly when the BSA is overhauled.

5.2 Other regulation

The National Policy Direction for Pest Management adopted in 2015 remains the only national policy direction so far prepared by the Government pursuant to section 57(7) of the BSA. No changes have been made to that Direction since its promulgation. The Plan complies with the direction and no changes are required.¹⁶

For the purposes of this review, other recently promulgated national policy instruments were also assessed for their implications on the Plan.

On 7 July 2023, the Government promulgated its National Policy Statement for Indigenous Biodiversity (NPS-IB)¹⁷ under the Resource Management Act 1991 (RMA).¹⁸

The NPS-IB seeks to better protect New Zealand's indigenous biodiversity. While the NPS-IB does not have any explicit provisions relating to pest management (nevertheless some of these provisions are unlikely to be achieved without effective and sustained pest control.

Of potential relevance to this review, the NPS-IB includes requirements for Council to –

- protect both acknowledged and identified taonga (clause 3.19(4) of the NPS-IB);
- restore degraded significant natural areas, threatened and rare ecosystems, important buffering or connectivity areas, wetlands, urban areas or other areas that align with national priorities (clause 3.21 of the NPS-IB): and
- prepare biodiversity strategies that include actions and methods intended to promote the maintenance (clause 3.23 and Appendix 5 of the NPS-IB).

Other national policy statements under the RMA such as the *National Policy Statement for Freshwater Management 2020* were also examined but were concluded not to have provisions that impact or impinge on the Plan.

This review concludes that **no significant change** is required to the Plan arising from the promulgation of new national policy directions or regulations. However, increased expectations from the Government for councils to achieve enhanced indigenous biodiversity outcomes are noted and there maybe merit to address new concepts such as taonga species when Council next reviews its Plan and/or as part of a review of its Biosecurity Strategy.

5.3 New Zealand Biodiversity Strategy

In August 2020, the Government released Te Mana o te Taiao – The Aotearoa New Zealand Biodiversity Strategy. ¹⁹ This strategy is not legally binding but sets out a strategic framework for 2020 to 2050 on how New Zealand will seek to protect, restore and sustainably use indigenous biodiversity. The Strategy supports New Zealand's international obligations under the United Nations Convention on Biological Diversity.

¹⁶ Pursuant to section 74(a)(i) of the BSA, regional pest management plans must not be inconsistent with the national policy direction.

¹⁷ Ministry for the Environment, July 2023.

¹⁸ Regional Councils are responsible for protecting indigenous biodiversity under section 30(1)(ga) of the RMA. These responsibilities will be retained under the proposed reforms.

¹⁹ Department of Conservation, August 2020.

Te Mana o te Taiao contains 54 goals grouped under three pou (pillars) or priority areas: Tūāpapa – getting the system right, Whakahau – empowering action, Tiaki me te Whakahaumanu – protecting and restoring.

On 20 April 2022, the Minister of Conservation, launched the implementation plan for *Te Mana o te Taiao*. ²⁰ The implementation plan sets out a pathway for achieving the outcomes of *Te Mana o te Taiao* over the next 30 years, with an immediate focus on establishing systems that will stimulate and sustain nationwide action.

The implementation plan identifies central and local government actions to achieve a number of these goals by 2025 and specifies who is leading those actions.

Not surprisingly, the implementation plan identifies "...addressing the ongoing threat of introduced pest species and weeds, which is being extended by the increasing range of new biosecurity threats driven by a changing climate" as a priority. There is an expectation that councils prepare pest management plans, undertake advice and information, provide funding support for pest management activities. Activities that Council (and others) has been doing for a while.

This review concludes that **no significant change** is required to the Plan. Through preparation, adoption and implementation of the Plan (and Biosecurity Strategy), Council is already giving effect to *Te Mana o te Taiao* and its implementation plan.

5.4 Predator Free 2050

In 2016, the Government set an ambitious goal to eradicate possums, mustelids and rats by 2050. These three introduced predators were identified as causing the greatest harm to New Zealand's indigenous fauna.²¹

This goal and programme of work is carried out under the banner of *Predator Free 2050*. The government has set up a company (Predator Free 2050 Limited) to fund predator control projects and work with others, including tangata whenua, volunteers, government agencies, businesses,

councils, scientists, non-governmental organisations (NGOs), philanthropists and community groups.²²

Towards Predator-Free Taranaki is the only Predator Free 2050 funded initiative in Taranaki. It supports and complements another project, the Taranaki Mounga project. The Taranaki Mounga project is a collaboration between DOC, Taranaki iwi Chairs forum and philanthropic investors NEXT Foundation, and Toi Foundation. The project includes 34,000 ha of national park encompassing Taranaki, Pouakai, Kaitake and the protected Ngā Motu/Sugar Loaf Islands. Taranaki Mounga aims to restore and revitalise the environment so wildlife will once again flourish in this treasured place. Both initiatives support and complement each other's efforts.

This review concludes that **no significant change** is required to the Plan. Council is already giving effect to and advancing *Predator Free 2050* objectives. However, as discussed in section 6.3 below there may be opportunities to advance predator control further through a Plan change that declares feral cats to be a pest.

5.5 Iwi management plans

There are eight recognised iwi within the boundaries of the Taranaki region. Six of the eight iwi have developed iwi management plans.

Iwi management plans are resource management plans prepared by an iwi as an expression of rangatiratanga to help exercise their kaitiaki roles and responsibilities in relation to resource management. Under the RMA. Councils must take into account these plans when developing their own plans.

At the time of this review, there are six iwi management plans – four of these were released subsequent to the adoption of the Plan –

- Te Korowai o Ngāruahine Trust –
 Ngāruahine Kaitiaki Plan, Te Uru Taiao o
 ngāruahine (2021)
- Ngati Mutunga Iwi Environmental

²⁰ Department of Conservation, August 2020.

²¹ Department of Conservation, 2021.

²² Department of Conservation, August 2020.

Management Plan (2019)

- Te Atiawa Tai Whenua, Tai Tangata, Tai ao (2019)
- Taranaki Iwi -Taiao, Taiora (2018)
- Ngati Ruanui Environmental Management Plan (2012)
- Ngaa Rauru Kiitahi Puutaiao Management Plan (post 2008, date not specified in the plan).

Appendix IV sets out pest management provisions set out in iwi management plans.

A review of the aforementioned iwi management plans identifies pest management to be an issue of significant concern to iwi. Iwi management plans highlight the significant harm caused by introduced pests are having in their rohe, particularly in relation to impacts on indigenous biodiversity which, in turns, negatively affects mahinga kai and the mauri and wairua of the environment generally and the continuing traditions and practices of tangata whenua.

Iwi see it as important that pest management and biosecurity measures are in place to protect and enhance biodiversity throughout Taranaki and minimise the threats of pest plants and animals. The need to protect the Taranaki Mounga is a consistent theme across most iwi management plans.

Some iwi management plans voice a lack of engagement with them on biosecurity and pest control matters and seek more involvement in the management and control of invasive species. In addition to the above, some plans are concerned about the chemicals used for pest control on land and the possibility of chemicals entering waterways through run-off. More recently iwi and hapu have voiced some concerns about the use of biocontrol agents being released to control pest plants (which Council is currently addressing).

This review concludes that **no significant change** is required to the Plan arising from the development of iwi management plans. In most respects, the Plan already gives effect to tangata whenua

expectations. Notwithstanding that, going forward, there is merit in Council reviewing its Governance,²³ engagement and operational arrangements to better engage with tangata whenua during planning processes and to incorporate their issues and Te Ao Māori world view in future plans.

5.6 Summary of Plan relevance

After having regard to change factors, this review confirms that the Plan **continues to be relevant**. There have been no changes in legislation or in national and local policy settings that necessitate immediate Plan change.

While it is noted that there are increasing national and local expectations on councils to do more to protect indigenous biodiversity values.

Nevertheless, as demonstrated by Council investment in strategies, plans and programmes, it is already well placed to meet these challenges. Indeed, the Plan has stood the test of time well.

Set out in Table 3 overleaf is a summary of the relevance of the Plan having regard to potential change factors.

²³ In some respects, this is not starting from scratch. Council has already made progress with this with the adoption of a Māori ward, iwi representation on the Council's Policy and Planning Committee and Consents and Regulatory Committee, and iwi representation on Wild for Taranaki.

Table 3: Summary of change factors and the ongoing relevance of the Plan

Pot	ential change factors	Is the Plan still relevant	Comments
1.	Law reform	Yes	Council will need to keep a 'watching brief' on Government proposals to reform the BSA. However, at this point in time, there is no need to change the Plan.
2.	Other regulation	Yes	Increased regulation relating to protecting biodiversity. However, at this point in time, there is no need to change the Plan
3.	NZ Biodiversity Strategy	Yes	Non statutory strategy that Council is already giving effect to. At this point in time, there is no need to change the Plan
4.	Predator Free 2050	Yes	Council is already giving effect & advancing <i>Predator Free 2050</i> objectives. At this point in time, there is no need to change the Plan
5	lwi management plans	Yes	Four of the six iwi management plans were developed following adoption of the Plan. The Plan already largely gives effect to iwi expectations & aspirations relating to pest management. At this point in time, there is no need to change the Plan. However, future Plan reviews need to better recognise tangata whenua issues & Te Ao Māori

6 Opportunities and constraints

Section 6 discusses opportunities and constraints to do more and/or address operational issues highlighted in the previous chapters. Seven questions are posed —

- 1. Do we need to do more for biodiversity?
- Do we want increased possum control in the Self-help Possum Control Programme?
- 3. Do we want to do more possum control in the eastern hill country?
- 4. Do we want feral cat control?
- 5. Do we want ungulate control?
- 6. Are going to continue to rely on land occupier obligations for possum control?
- 7. If we want to do more, how to we pay for it?

In relation to questions posed, recommendations are presented. Some of the recommendations (if adopted) would necessitate changes to the Plan.

6.1 Do we need to do more for biodiversity outcomes?

Section 5 of this report highlights increasing Government and community expectations for Council to do more in relation to avoiding, remedying or mitigating the impacts of 'pests' on indigenous biodiversity.

The first thing to note, is that Council is well placed to do more. However, not everything requires a regulatory response (or needs to be addressed in the Plan)

The Biosecurity Strategy includes a suite of significant but non-regulatory programmes essential to protecting biodiversity values in the region. They include activities targeting pathways for invasive species not declared pests and undertaking site-led pest control in Key Native Ecosystems for all harmful plant and animal species (and not just declared pests).

The second thing to note is that through its Plan and Biosecurity Strategy (and Biodiversity Strategy) and supporting programmes, Council is already meeting many of these expectations. In particular, the Plan includes ambitious innovative programmes that are, amongst other things, rolling back old man's beard infestations in the Kaūpokonui and the Waingongoro rivers, and expanding predator control across the ring plain.

The third thing to note, is that should Council wish to do more in relation to a regulatory response (with possible changes to the Plan), it is well placed to leverage off existing programmes to achieve superior indigenous biodiversity outcomes. In particular, there are opportunities for Council to do more —

- 1. possum control (refer sections 6.2 below);
- feral cat control (refer section 6.3 below);
- ungulate control (refer section 6.4 below).

6.2 Do we want increased possum control?

This section discusses two opportunities for Council to achieve better indigenous biodiversity outcomes through possum control. First, Council could increase the level of control undertaken. Second, Council could expand sustained possum control into new areas.

6.2.1 Increased level of control in the Programme

The level of possum control sought depends on the values being protected. The Plan's compliance level for possums in the Self-help Possum Control Programme is 10% RTC.

Five years on, it is questionable as to whether 10% RTC is sufficient to protect indigenous biodiversity values properly.

While 10% RTC is suitable for the protection of broadleaf vegetative canopy, it does not address the predator aspects of possums. Nor does it protect more sensitive fauna species. Where

possums are present, there is inevitably a reduction in the vigour, density and diversity of native flora and fauna species in the area.

RTC targets in conservation operations are typically <3% or <5%.²⁴ Residual possum densities required for conservation will vary depending on how sensitive local species/ecosystems are to possum impacts (*Reddiex et al. 2007*). For example, RTC of 3% or less was required to protect mistletoe (Sweetapple et al. 2002); common broadleaf species at Matamateaonga could tolerate possum densities up to 25% RTCI (*Nugent et al. 2001*).

To reduce the Plan's 10% RTC target to 3 or 5% would significantly enhance the benefits of possum control for biodiversity benefits.

First, it better addresses the predator aspects of possums and supports *Predator Free 2050* objectives. Aiming for maintaining possum numbers at a 3 to 5% RTC would allow our indigenous natural taonga species like native birds, bats, and invertebrates to recover and thrive in remnant areas (and the wider environs).

Second, many remnant areas contain rare and endangered flora species – species that may be particularly sensitive to possum browsing habitats such as native mistletoe.

The challenge for Council is that a 3 to 5% RTC represents a significant change in the obligations and cost of the Plan and would necessitate a full review of the Plan. It would also involve a reconsideration of some of the underlying premises underpinning the current Self-help Possum Control Programme. For example, is it realistic to expect farmers to have the technical expertise or bear the cost of meeting a lower compliance target when they are already struggling with complying with the 10% RTC compliance target? Second is it fair, to impose such obligations and costs on farmers when the public benefits exceed the private benefits? It is suggested that such a level would be more appropriately delivered by Council and funded by the region. This is discussed further in sections 6.5 and 6.6 below.

6.2.2 More possum control in the hill country

In the eastern hill country, outside of the Self-help Programme, possum numbers are much higher at around 30% RTC.

To date, Council efforts in the eastern hill country has been on encouraging voluntary possum control. Council has been providing technical advice and support for community groups such as Lake Rotokare, East Taranaki Environment Collective, and Paraninihi. Historically, this has included Council undertaking direct control, particularly where community projects were reliant upon Council's technical expertise (and powers) to undertake aerial 1080 operations.

Many of the community-led projects are significant in scale. East Taranaki Environment Collective involves possum (and other) control over on 13,000 ha in the remote country east of Inglewood. Its pest operations protect kiwi, kokako, New Zealand longtailed bats and other native species. ²⁵ Parininihi consists of 2000 ha of coastal to inland forest, stretching from the dramatic Whiteliffs inland to Mt Messenger where Ngāti Tama has been undertaking pest control, species recovery and translocations to protect the area. ²⁶ There are also a significant number of large Key Native Ecosystems in the eastern hill country that provide an important buffering and connectivity role.

The Plan's underlying premise that it is unfair to require (through rules) private land occupiers to undertake possum control in the eastern hill country has not changed. Possum numbers are too high and the presence of large tracts of public conservation estate makes control problematic. It would be unfair to expect land occupiers to bear the cost of control when the benefits are principally public. Accordingly, any increased possum control in the hill country should be publicly funded.

If the Council is interested in undertaking more possum control in the eastern hill country to promote biodiversity outcomes, additional funding support needs to be considered.

²⁴ Glen (2014) notes that the percentage RTC target set for possum control operations depend on the values to be protected, and the sensitivity of species to possum browsing.

²⁵ Refer <u>https://etec.org.nz/projects/.</u>

²⁶ Refer https://parininihi.co.nz/pest-control/.

Consideration also needs to be given on whether that control needs to be delivered through a regulatory or non-regulatory programme. A non-regulatory programme does not necessitate a change to the Plan. However, if success of the programme depends on accessing Part VI of the BSA to enter onto land and undertake works, this would represent a significant change. A full review would therefore be necessary to test the proposition.

6.3 Do we want feral cat control?

The 'pest' impacts of feral cats in New Zealand have been well canvassed.²⁷ It has been argued that feral cats or stray cats are a bigger threat to native birds than ferrets or stoats.²⁸ In addition, feral cats pose a risk in spreading toxoplasmosis in marine environments²⁹ and may contribute to the spread of bovine tuberculosis among cattle.

Accordingly, there have been persistent and ongoing calls for Council to declare feral cats to be a pest. Morgan Foundation and Royal Forest and Bird both sought for feral cats to be included in the Plan during its development in 2018.³⁰

In 2021, during the partial review, Forest and Bird again sought that feral cats be declared a pest arguing feral cat control was necessary in the Council's attempts to make the region predator free by 2050. At the time, Council declined the relief sought but did undertake to further investigate the case for making cats a pest.

In November 2021, a forum was held by Wild for Taranaki to discuss how to progress cat control within the Taranaki region. An outcome of the forum was a request that Council develop a regional cat management strategy (along with district councils, DOC and interested parties). It was suggested that a strategy would provide a definition for feral cats, require microchipping and

de-sexing, and adopt other practical measures to protect native wildlife.

In response, Council agreed to report back on what a regional cat strategy might look like but noted that any strategy would be non-regulatory and, for rules to apply, its Plan would need to be reviewed as part of a statutory process.

Subsequently, Council commissioned the report *Review of Cat Management Options*. ³¹ The report, which was based on recommendations by the New Zealand Cat Management Strategy Group (NZCMSG), examined potential options to managing cats at a regional level. ³² It discussed cat category types (feral, stray, and domestic) and the feasibility of potential programme goals.

The report presents a ten-step roadmap for developing a regional cat management strategy and presented options on where Council could undertake or lead in relation to cat control. Most of the report's recommendations for Council are non-regulatory – except for the recommendation that Council consider amending the Plan to include feral and stray cats.

This review concurs that there would be significant advantages to amending the Plan to include feral cats as a pest. Inclusion of cats in the Plan would enable clear objectives and measures to be set to manage cats within the region. Regulatory control (through rules and/or access to the Part VI powers of the BSA) would allow for more strategic and coordinated feral cat control that would not be possible by relying on non-regulatory means alone. It would help support restoration efforts for areas containing sensitive wildlife such as roosting birds and rare and threatened fauna species.

If Council is agreeable to the above, further work is required to confirm programme design. However, as a starting point, programme design should include the following key element –

• declare feral and stray cats to be a 'pest'

²⁷ New Zealand Cat Management Strategy Group (2020). <u>New Zealand National Cat Management Strategy Group Report.</u>

²⁸ Place Group report 2023 noted that more feral cats than mustelids are being caught in Hawke's Bay's predator control programme.
²⁹ Toxoplasmosis, which is spread by cat faeces entering waterways, is believed to be the primary cause of deaths of the rare Maui's and Hector dolphin along the North Island's west coast.

³⁰ Taranaki Regional Council, 2017.

³¹ Place Group, 2020.

³² NZCMSG includes representation from Local Government NZ, SPCA and the Morgan Foundation. Refer NZCMSG, 2020.

and declare domestic cats a 'pest agent';33

- include definitions for feral cats, stray cats and domestic cats based on them being micro chipped and de-sexed;
- develop a site-led programme targeting feral/stray cat control (and restrictions) for the protection of sensitive wildlife areas;
- through the site-led programme, Council to undertake direct control of feral and stray cats to protect sensitive wildlife areas, including access to Part VI powers of the BSA;³⁴
- develop a rule for feral/stray cats prohibiting people from their actions or inactions from exacerbating feral cat impacts on sensitive wildlife areas; and
- consider developing pest agent rules for domestic cat that:
 - prohibits the holding, keeping, or harbouring of domestic cats in or near sensitive wild area unless desexed and microchipped; and
 - prohibits the release of any domestic cat into the wild (as an offence under Section 154N of the BSA).

Declaring feral cats to be a pest would clearly be a contentious action but aligns with the Environment Select Committee's (refer section 5.1 above) recommendation for improved management of cats. Any proposal to include feral cats in the Plan represents a **significant change** and is likely to generate significant public interest and. A full review would therefore be necessary to test the proposition.

6.4 Do we want ungulate control?

Ungulates refers to any animal with hooves and includes feral goats, deer, and pigs.

The impacts of ungulates on indigenous biodiversity and ecosystem health in New Zealand are well documented. Where present in moderate to high densities, ungulates' browsing habits reduce the density and complexity of forest understorey.

Feral goats and deer will eat the foliage of most trees and plants and quickly destroy all vegetation within their reach, eating seedlings, saplings and litter-fall off the forest floor. They do however have strong preferences and will eat out favoured species first such as broadleaf (*Griselinia littoralis*) and mahoe (*Melicytus ramiflorus*) before moving on to less desirable plants. Goats and deer will also strip bark off trees and by eating young seedlings can effectively put a stop to forest regeneration.

Feral pigs can also be very damaging through their foraging and rooting habits. Feral pigs are contributing to the decline in the numbers of native snails (*Powelliphanta spp.*) by destroying snail habitat and eating snails and their eggs. Pigs can also directly threaten ground-nesting birds.³⁵

In Taranaki, feral goats have been successfully eradicated in Te Papakura o Taranaki (Egmont National Park) and the Park has no deer or pigs. On the ring plain, ungulates are not a problem. However, in the eastern hill country, high numbers of ungulates do represent a major problem.

The costs of undertaking ungulate control are such that control should be voluntary. Land occupiers (including DOC and other interested parties) are better placed to make decisions on necessity to undertake control. Notwithstanding that, significant community-led ungulate control is being undertaken in the hill country and there may be opportunities for Council to leverage off and support these projects to achieve more substantial and wider biodiversity gains in the hill country.³⁶

This review suggests Council consider, as part of its

³³ Pest agent, in relation to any pest, means any organism capable of— (a)helping the pest replicate, spread, or survive; or (b) interfering with the management of the pest (Section 2. BSA).

³⁴ Recognises that farmers are busy and may not have time to do the feral cat control work sought.

³⁵ Landcare Research, June 2012.

³⁶ Regulatory intervention (introduction and enforcement of a land occupier rule to undertake control) is not considered appropriate. In 2013, Council undertook an assessment of candidate pest species including ungulates and concluded that given the lack of realistic options to manage these species over large areas, Council should focus on a site-led approach.

review of its Biosecurity Strategy, increased intervention to support community initiatives in sustained ungulate control as part of a non-regulatory response (subject to additional funding and resourcing – see section 6.6 below). However, no change is necessary to the Plan.

6.5 Are we going to continue to rely on self-help possum control?

Disregarding questions around the adequacy of the 10% RTC to achieve indigenous biodiversity outcomes (refer section 6.2.1 above), land occupiers are already struggling to meet the current 10% RTC compliance level set in the Plan (refer sections 3.2 and 4.2 above).

As highlighted in Figure 6, in 2018/2019, possum infestation levels in the Self-help Possum Control Programme were, on average, 6.9%. In 2022/2023, Council monitoring of the Programme showed possum infestations to be 10.3% RTC. This was the second year in a row where land occupiers have failed to keep possum numbers below 10% RTC (in 2021/2022, the RTC was 11.6%).



Figure 6: Mean RTC trends

'DIY,' where the land occupier undertakes or contracts possum control work on their property has been a cornerstone of the Self-help Possum Control Programme to date. So why are land occupiers now struggling to undertake the required possum control? Council officers have noted the following –

- Possum control by farmers is time consuming and farmers are having difficulties fitting in control work with business-as-usual tasks. Possum control is less of a priority and even with the best of intentions, it is being done more haphazardly or missed completely.³⁷
- Possum control is becoming more costly to do. Previously, obtaining a lifetime Controlled Substances License cost \$125.
 Now, it costs \$800.
- Less toxins are readily available to farmers for possum control.³⁸ Other control options such as trapping are considered too time consuming.
- Less contractors are available to do farmers' possum control. Taranaki only has a few small scale (1-2 person) outfits active.

The issue of diminishing returns with the effectiveness of possum control is not confined to Taranaki. In 2023, Council joined with Waikato, Bay of Plenty, Hawke's Bay, Horizons and Southland regional councils and commissioned Place Group Environment Planning to report on the efficiency and effectiveness of their respective programmes.³⁹

The Place Group report (2023) concluded that the efficiency and effectiveness of regional possum control programmes may have reduced overtime. The report highlighted –

- Increasing contractor costs to deliver control programmes and reduced contractor supplier pool to pick from.
- RTC exceedances, particularly where delivery of control work is undertaken by land occupiers.
- High levels of variation in the quality of possum control depending upon service delivery model adopted, i.e. staff, versus contractors, versus land occupiers.

³⁷ Collins K, 2020.

³⁸ For example, the most common bait used by land occupiers is brodifacoum as it can be used without a certified handler's certificate. However, Brodifacoum is currently being reviewed by the Environmental Protection Authority.

³⁹ Place Group Environmental Planning, April 2023.

 Increased pressure to expand the geographic extent of programmes to deliver on *Predator Free 2050* goals.

Other issues identified were of broader significance to the sector such as the declining capability and expertise within the biosecurity industry due to a lack of clear training pathways for animal control staff, and/or limited succession planning within councils to address present and growing demand for possum control work.

To address these issues and risks with current delivery models, the Place Group report presented delivery options ranging from the *status quo* (land occupier control), the use of Council funded contractors, to Council undertaking the control itself (and a mix of the aforementioned).

In relation to Taranaki, the Place Group report recommended that Council go to a full staff model whereby the Self-help Possum Control Programme is delivered in-house by Council staff. This would involve the employment of approximately four extra full-time equivalents (and the re-tasking of some existing resources). 40

With Council undertaking control there would be no need for a general rule and Council would be responsible for undertaking the possum control (with access to Part VI powers under the BSA).

While additional ratepayer funding would be required to support the new programme, a lower RTC target could be set for 3-5% RTC. This would achieve more meaningful biodiversity outcomes that would not be possible (or reasonable) through rules

The author is aware that further work is being done by staff to investigate this option. Table 4 below presents a brief overview of opportunities and constraints from adopting a service delivery model. If Council was to adopt a service delivery model, it would represent a significant change to the Plan.

Table 4: Service delivery opportunities and constraints for the Self-help Possum Control Programme

Opportunities Constraints Consistent & coordinated possum control across the Programme Will require additional "targeted" rates funding Technical expertise to achieve & maintain 3% RTC Might have to control whole area in less than 3 years if we target rate to manage risk of "I'm paying I want" 3% RTC equals better protection of biodiversity values, including Control options will open us up to negative feedback debate protection of sensitive, rare and threatened species 3% RTC equals reduced risk of spread of bovine tuberculosis May be seen as a 'flip flop' from the long-standing compliance programme More equitable programme - that the public benefits of possum control outweigh private benefits Contractor work will be significantly reduced Reduced costs (including time) to farmers. Lets them focus on Farmers no longer feel invested in the programme and the outcomes successful possum control achieves Estimated current land occupier costs per annum are Farmer reluctance to let us on property may increase (will require ±\$9/hectare (which equates to about \$2.2 million per annum Part VI BSA powers) across the Programme) Increased operational flexibility & field capacity - additional Council staff on the ground equals increased opportunities to undertake eradication control, &/or carry out on-farm surveillance to identify new incursions or confirm compliance with other rules Less reliance (& therefore costs) by Council on contractors such as mountain surrounds operations (these costs have doubled in 4

⁴⁰ Set out in **Appendix VI** is a summary of the advantages and disadvantages of each service delivery option. Source: Place Group Environmental Planning Ltd, 2023.

- years), pest plant direct control, & biodiversity works, including administration & monitoring costs
- Increased internal opportunities for staff development & advancement
- Opportunity to look at targeted biosecurity rate (most councils have one).

6.6 If we want to do more, how do we pay for it?

The discussion above identifies a number of recommendations for increasing pest management activities in the region that would be contingent upon additional funding.

In relation to the Plan, there are opportunities to increase the level of possum control on the ring plain and coastal terraces from 10% RTC to 3-5% RTC (dependent upon Council adopting a service delivery model for the Self-help Possum Control Programme) and expanding the Predator-free programme to include feral cats.

Current resourcing for the Plan's eradication objectives has also been identified as a constraint.

In addition to the above, this review has also identified opportunities to expand its service delivery operations in the eastern hill country to better support community-led projects with sustained possum and ungulate control. These do not require a Plan change but still require funding.

Council must also begin to consider what it wishes to do with its Predator-free work post the 2024/2025 financial year. Government contributions for *Towards Predator-free Taranaki* will end at that time. Presently, Council's share of

funding is \$650-700,000 per annum. Council needs to decide how quickly it wants to continue to roll out landscape mustelid control over the region. It also needs to determine its ongoing role in "Zero" eradication programme.

As part of any review, Council will need to consider extra funding. One option includes charging an additional levy on rateable land and using the funds to pay contractors to maintain predator levels.

Notes that other councils (Hawke's Bay and Northland regional councils) have done similar things.

Adopting a targeted biosecurity rate (and associated programmes) represents a **significant change** to the Plan. A full review would therefore be necessary to test the proposition.

6.7 Summary of key changes

This review confirms that significant opportunities exist to improve on biodiversity outcomes and future proof the current Plan. Recommendations going forward are made. The adoption of one or more of the recommendations would represent a significant change to the Plan that would need to be tested through a public process.

Set out in Table 5 is a summary of the opportunities and constraints discussed, and their significance in terms of Plan review.

Table 5: Summary of opportunities and constraints and Plan review implications

Opportunities & constraints		Comments	Plan review implications
1.	More biodiversity focused	Amend Plan (see below) to include pest management objectives & programmes with enhanced biodiversity outcomes	Significant change
2.	3 to 5% RTC possum control	Reduce 10% RTC compliance target to 3 to 5% RTC	Significant change
3.	More possum control in eastern hill country	Better support voluntary possum control by community projects in the eastern hill country	No change to Plan but dependent upon additional funding
4.	Declare feral cats to be a pest	Declare feral cats to be a pest	Significant change
5.	More ungulate in the eastern hill country	Better support voluntary ungulate control by community projects in the eastern hill country	No change to Plan but dependent upon additional funding
6.	Service delivery for possum control	To give effect to (2) above, Council moves from a rules' regime to a service delivery model for possum control in the Self-help Possum Control Programme	Significant change
7.	Targeted biosecurity rate	Adopt a targeted biosecurity rate to fund (1) to (6)	Significant change

7 Conclusion and recommendations

The current Plan was made operative in 2018. Under 100D of the BSA, a full review of the Plan is not statutorily required until 10 years of it becoming operative. However, five years on, the Council has determined to undertake a nonstatutory interim review of the Plan.

The purpose of the interim review is to ensure Plan objectives are being achieved, methods are being implemented, and that nothing has occurred in the intervening years that warrant making significant changes to it.

In brief, this review concludes that the Plan largely continues to be effective and efficient. Twenty pest species are successfully being addressed through rules and/or Part VI powers. In particular —

- To date, all 15 Plan objectives hare <u>largely</u> being met. Notwithstanding that, emerging trends highlight risks to the future effectiveness of the Plan.
- Plan objectives were assessed as 'Achieved' for the pest plant sustained control programmes.
- Plan objectives for the possum and mustelid sustained control programmes are assessed as 'Generally achieved'. Across most metrics their respective objectives are still being achieved. However, land occupier compliance issues need to be acknowledged and addressed.
- Plan objectives relating to eradication pest plants are assessed as 'At risk of not being achieved' due to resourcing constraints and the creation of a 'backlog' of untreated infestations as new infestations are being discovered.
- All 118 methods for implementing Plan objectives are 'being delivered'.
- The Self-help Possum Control Programme is delivering sustained possum control and maintaining low possum numbers over 32% of the region. However, possum numbers

- are at the high end of what is considered acceptable (>10% RTC).
- The roll out of Towards Predator-free
 Taranaki is notable. It is a new programme,
 underpinned by new rules and is delivering
 sustained mustelid (plus possum and rat)
 control over 110,218 ha of Taranaki.
- Council continues to have a strong Inspectorial and enforcement focus. Most people follow the rules. However, monitoring shows that in the last two financial years some land occupiers have failed to undertake effective possum control to the extent that possum numbers across the Self-help Possum Control Programme have exceeded (slightly) the 10% RTC compliance target.
- In terms of the Plan's relevance, this report
 has not identified any change factors that
 require immediate change to the Plan.
 However, increased demands on councils to
 do more in relation to the maintenance and
 protection of indigenous biodiversity are
 noted. However, opportunities to improve
 and build on in the current Plan have been
 identified.

Section 6 of this report discusses some opportunities to do more and/or address operational issues highlighted through this review. These 'opportunities', if adopted would represent significant change to the current Plan and include –

- Declaring feral cats to be a pest.
- Changing the delivery of the Self-help Possum Control Programme from DIY to a service delivery model.
- Changing the 10% RTC target for possums (achieved through rule compliance) to a 5% RTC target (to be achieved through service delivery) to better protect sensitive and rare and threatened species on the ring plain and coastal terraces.

- Updating the Plan to better recognise pest management issues of significance to iwi, including protection of taonga species.
- Increasing resourcing through a biosecurity levy to support the above plus provide additional resourcing to expand exclusion, pathway and eradication activities, and support possum and ungulate control work in the eastern hill country.

In conclusion, further investigative work is recommended to expand and test the concepts proposed (e.g. additional resourcing for delivery of eradication and possum control initiatives, biosecurity targeted rate). It is recommended that this include an early review of its Biosecurity Strategy to ensure that broader strategic and financial considerations are settled prior to commencing a full review of the current Plan under section 100D of the BSA. During that time, we can also expect BSA and resource management reform to bed in.



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Appendix I: Plan review provisions under the BSA

100D Review of plans

Reasons for reviews

- (1) The Minister or council must initiate a review of a plan as a whole if—
 - the plan is due to terminate in less than 12 months and the Minister or council proposes to extend the plan's duration: or
 - (b) the plan is due to terminate in less than 12 months and a person submits a proposal to the Minister or council to extend the plan's duration; or
 - (c) the plan was last reviewed as a whole more than 10 years previously.
- (2) The Minister or council may review the whole or part of a plan if the Minister or council has reason to believe—
 - (a) that the plan or part is failing to achieve its objectives; or
 - (b) that relevant circumstances have changed since the plan or part commenced.
- (3) The Minister or council must review a plan or a relevant part of a plan if—
 - (a) circumstances occur that are circumstances in which the national policy direction requires a review to be conducted; or
 - (b) any other requirement of the national policy direction requires a review to be conducted.

Proposal for review

- (4) A review is initiated by a proposal made by the Minister or council or any other person.
- (5) The proposal—
 - (a) must state whether the proposal is to amend, revoke, revoke and replace, or leave unchanged the plan or part of the plan; and
 - (b) must give reasons for the proposal; and
 - (c) must,—
 - (i) if the proposal is to amend the plan or part of the plan, set out any proposed amendments in full;or
 - (ii) if the proposal is to revoke and replace the plan or part of the plan, set out the replacement plan or part: and
 - (d) must comply with section 61, 70, 81, or 90 to the extent to which the sections are relevant and reading in any necessary modifications: and
 - (e) may propose that a pest or pathway, as appropriate, be added to the plan, whether or not the review is of the whole plan.

Provisions applying to reviews

(6) Reviews are conducted under the following sections to the extent to which they are relevant and reading in any

necessary modifications:

- (a) sections 59 to 67, for a national pest management plan:
- (b) sections 68 to 78, for a regional pest management plan:
- (c) sections 79 to 87, for a national pathway management plan:
- (d) sections 88 to 98, for a regional pathway management plan.

Action after review

- (7) Following the review, the Minister or council may approve—
 - (a) the amendment of the plan or part of the plan; or
 - (b) the revocation and replacement of the plan or part of the plan; or
 - (c) the revocation of the plan or part of the plan; or
 - (d) the leaving unchanged of the plan or part of the plan.
- (8) A plan that reaches its termination date during a review that has begun continues in force and its future is determined by the action that the Minister or council approves under subsection (7).

Consequence of not complying with section

(9) A plan does not cease to be in force only because it is not reviewed as required by this section.

100G Minor changes to plans

National pest management plan or national pathway management plan

- (1) The Minister may recommend to the Governor-General the amendment of a national pest management plan or a national pathway management plan by Order in Council without a review under section 100D, if the Minister is satisfied that the amendment—
 - (a) does not have a significant effect on any person's rights and obligations; and
 - (b) is not inconsistent with the national policy direction.
- (2) The Governor-General may make the order.
- (3) An order under this section is secondary legislation (see Part 3 of the Legislation Act 2019 for publication requirements).

Regional pest management plan or regional pathway management plan

- (4) A regional pest management plan or a regional pathway management plan may be amended from time to time by a council by resolution without a review under section 100D, if the council is satisfied that the amendment—
 - (a) does not have a significant effect on any person's rights and obligations; and
 - (b) is not inconsistent with the national policy direction.

Appendix II: Pest organisms declared to be pests in Taranaki

Table 6: Plant organisms classified as pests

Common name	Scientific name	Programme	GNR
Climbing spindleberry	Celastrus orbiculatus	Eradication	
Giant reed	Arundo donax	Eradication	
Madeira (Mignonette) vine	Anredera cordifolia	Eradication	
Moth plant	Araujia hortorum / A. sericifera	Eradication	
Senegal tea	Gymnocoronis spilanthoides	Eradication	
Giant buttercup	Ranunculus acris	Sustained Control	٧
Giant gunnera	Gunnera manicata & G. tinctoria	Sustained Control	٧
Gorse	Ulex europeaus	Sustained Control	٧
Nodding, Plumeless and Variegated thistles	Carduus nutans, C. acanthoides, Silybum marianum	Sustained Control	٧
Old man's beard	Clematis vitalba	Sustained Control	٧
Wild broom	Cytisus scoparius	Sustained Control	٧
Wild ginger (Kahili and Yellow)	Hedychium gardnerianum, Hedychium flavescens	Sustained Control	٧
Yellow ragwort	Jacobaea vulgaris	Sustained Control	٧

Table 7: Animal organisms classified as pests

Common name	Scientific name	Programme	GNR
Mustelids – ferret, stoat, weasel	Mustela furo, Mustela ermine, Mustela nivalis	Sustained Control	٧
Possum	Trichosurus vulpecula	Sustained Control	٧

Appendix III: Biosecurity Strategy – vision and priorities



Appendix IV: Analysis of iwi management plans

Taranaki

Papatūānuku

11.2.2 2. Papaptūānuku will be lush, healthy and sustaining for all. Her native forest cover will be thriving and free of pests; p.22.

Taranaki Mounaa

11.8.2 2. Taranaki Mounga will be given comprehensive protection; risks of damage from invasive weeds and pests will be removed in order for native flora and fauna to flourish in abundance; p.35.

11.8.2 3. The korowai of native habitat will proliferate and flow down the sides of the mounga towards the sea; p.35

11.8.2 4. All water that flows from the mounga will be given active protection from the detrimental impacts of human activity, wider environmental degradation and invasive species to ensure waterbodies are maintained in a pristine state; p.35

POLICY 11.2.3.3

Pest control to prioritise invasive pest species having a serious negative impact on the whenua, reducing to levels where endemic ecosystems become resilient and re-established in our rohe;

All existing forest remnants are protected from browsing animals, other pests and built development with active management and plans for enhancement and extension of these remnants where possible;

ISSUE 11.2.1.9 Poorly designed subdivision and development can lead to unsustainable and inefficient land use, destruction of wāhi tapu and other important sites, loss of access to areas, an increase in pests, and more pressure on water resources through abstraction and direct and indirect discharges; p.22

POLICY 11.2.3.11

Ensuring that the development does not result in increased levels of pests and predation in the area, including the consideration for excluding cats and other domestic pets with the potential for harm; p.23

Ensuring that if earth is brought into a site that it is free of weeds and other pests; p.23

POLICY Subdivision 19

Require restrictive covenants or conditions on new titles which prohibit use of pest plant species p. 85

Issue 11.5.1.6 The inadvertent and deliberate introduction of freshwater pests, such as didymo, trout, oxygen weed etc. represent serious harm to waterbodies and the ngãi tipu me ngãi kīrehe within them; p.29

Issue 2. Native plant and animal species are in decline due to the removal of native bush, invasive plant and animal pests, land use changes and modification of landscape and freshwater systems; p.31

Ngati Mutanga

Pest Management

To support pest management for the purposes of restoring indigenous biodiversity, but ensure that pest control operations avoid non-target adverse effects on the environment and our cultural values.

Ensure we are kept updated and informed on current and newly introduced methods of pest control and ensure the most effective and appropriate methods are used under any given circumstance. p.34

1080 (Sodium Flouroacetate)

To ensure that 1080 is only used when it is the most appropriate form of pest control available. p.36

Pests

To support pest management and ensure that pest control operations avoid adverse effects on the environment and our cultural values.

To take a more active role in pest control within the Ngāti Mutunga rohe

Encourage and support private land owners to carry out sustainable and effective pest control over their land

Promote education about the value and importance of pest control. p.78

POLICY Forestry 9

Require forest managers to manage plant and animal pests in the forests. P.91

Riparian zones- Policy 5

Oppose planting of willow or other pest weed species in riparian areas. P.66

Te Atiawa

Weed and pest management

Ob.TTTT4.1

Eradicate introduced weeds and pests that are causing adverse effects to protect and enhance our native biodiversity whilst avoiding adverse effects on the environment and species. p.78

Pest control with toxins

Ob.TTTT 5.1

Support General Objectives which provide for Te Tai o Tāne Tokorangi, Te Tai Awhi–Nuku, Te Tai o Maru and Te Tai o Tangaroa. p.79

POLICY Mahinga Kai 5

Ensure that plant pest and animal/bird control programmes avoid adverse impacts on mahinga kai species or to areas of cultural significance. P.76

Ngāruahine

Tāne issues

The current approach to controlling invasive pest animal and plant species is based on an eradication/retribution ethos. Any use of toxic substances is of great concern to Ngāruahine particularly where terrestrial and fresh water mahinga kai resources may be harmed or contaminated. P.48

POLICY 1.1

Land users and consent authorities are encouraged to engage with TKoNT to understand the impacts on the mauri of Papatūānuku for the following:

- a. Waste management, contaminants and contaminated land;
- b. Pest Management;
- c. The use of hazardous substances. P. 32

Ngāti Maniapoto

Biodiversity issues 19.2.1.1

The decline, degradation and damage of indigenous habitats and species including native fisheries, frogs, freshwater mussels, tuna and the loss of native vegetation due to inappropriate land use activities and the introduction of pest plants and animals are a concern to Maniapoto. For example, the draining of swamps and wetlands, the clearing of forests and indigenous vegetation for pasture, horticulture, pine plantation and urban development has impacted on the quantity and quality of biodiversity within Maniapoto. It is therefore important to Maniapoto to protect and enhance the remaining indigenous biodiversity and ecosystem areas P.89

Appendix V: Implementation highlights 2018 to 2023

Annual Plan Activities 2018/2019 (First financial year for the operative Pest Plan)

Undertook direct control on 168 (199) eradication pest plant infestations.

Continued control of Old Man's Beard in the Waingongoro catchment, treating 17 (12) kilometres of riverbank.

Made three (2) releases of control agents to control Woolly nightshade, Tradescantia and Broom. Contributed to the Landcare biological control research programme

Undertook 428 (579) inspections with results estimating possum populations maintained to acceptable levels: 6.7% (6.9%) residual trap catch rate across the self-help possum control programme.

Undertook 1,309 (2,212) property inspections for pest plants, including a targeted programme focusing on Giant Gunnera in the Oaonui catchment.

Issued 195 (227) Notices of Direction for sustained control pest programmes, 19 (16) for possums and 176 (211) for plants.

Undertook small scale control of unwanted plant organisms on 13 (28) occasions targeting Bone seed.

Responded to 149 (124) requests for advice and, where appropriate, undertaking control action regarding Pest Management Plan for Taranaki species. Received 366 (420) notifications providing advice and information on other pests.

Undertook a publicity and education programme on pest plants.

Annual Plan 2019/2020

Undertook direct control on 106 (168) eradication pest plant infestations.

Continued control of Old Man's Beard in the Waingongoro catchment, treating 700 meters (17 km) of riverbank.

Made 4 (3) releases of control agents to control Woolly nightshade, Tradescantia and Broom. Contributed to the Landcare biological control research programme.

Undertook 747 (428) inspections with results estimating possum populations maintained to acceptable levels: 6.8% (6.7%) residual trap catch rate across the self-help possum control programme.

Undertook 1,246 (1,309) property inspections for pest plants.

Issued 135 (195) Notices of Direction for sustained control pest programmes, 39 (19) for possums and 96 (176) for plants.

Undertook small scale control of unwanted plant organisms on 2 (13) occasions targeting Bone seed.

Responded to 127 (149) requests for advice and, where appropriate, undertaking control action regarding Pest Management Plan for Taranaki species. Received 240 (366) notifications providing advice and information on other pests.

Undertook a publicity and education programme on pest plants.

Annual Plan 2020/2021

Undertook a partial review of the Pest Management Plan to include mustelids.

Undertook direct control on 121 (106) eradication pest plant infestations.

Continued control of Old Man's Beard in the Waingongoro catchment, treating one kilometre (700m) of riverbank.

Made 6 (4) releases of control agents to control Ragwort, tradescantia, thistles and a new species targeting Japanese honeysuckle. Contributed to the Landcare biological control research programme

Undertook 786 (747) inspections with results estimating possum populations maintained to acceptable levels: 8% (6.8%) residual trap catch rate across the self-help possum control programme.

Undertook 1,498 (1,246) property inspections for pest plants.

Issued 157 (135) Notices of Direction for sustained control pest programmes, 24 (39) for possums and 133 (96) for plants.

Undertook small scale control of unwanted plant organisms on 14 (2) occasions targeting Boneseed

Responded to 173 (127) requests for advice and, where appropriate, undertaking control action regarding Pest Management Plan for Taranaki species.

Received 362 (240) notifications providing advice and information on other pests.

Undertook a publicity and education programme on pest plants

Annual Plan 2021/2022

Undertook direct control on 233 (121) eradication pest plant infestations.

Continued control of Old Man's Beard in the Waingongoro catchment, re-treating two kilometres of riverbank.

Made 8 (6) releases of biological control agents to control Old Man's Beard, Tradescantia and a new species targeting Japanese honeysuckle. Contributed to the Landcare Research biological control programme.

Undertook 479 (786) inspections with results estimating possum populations have for the first time climbed above acceptable levels: 11.6% (8%) residual trap catch rate across the self-help possum control programme.

Undertook 660 (1,498) property inspections for pest plants.

Issued 82 (157) Notices of Direction for sustained control pest programmes, 55 (24) for possums and 27 (133) for plants.

Undertook small scale control of unwanted plant organisms on 16 (14) occasions targeting Boneseed and for 1 Houttuynia infestation

Responded to 353 (535) requests for advice and, where appropriate, undertaking control action regarding pest issues.

Increased publicity and education programmes on pests through a new pest bulletin

Annual Plan 2022/2023

Undertook direct control on 417 (233) eradication pest plant infestations.

 $Continued\ control\ of\ Old\ Man's\ Beard\ in\ the\ Waingongoro\ catchment,\ re-treating\ 21.5\ km\ (2)\ of\ riverbank.$

Undertook 278 (479) inspections with results estimating possum populations have remained above acceptable levels for a second year: 10.3% (11.6%) residual trap catch rate across the self-help possum control programme.

Undertook 3350 (660) property inspections for pest plants.

Issued 55 (82) Notices of Direction for sustained control pest programmes, 26 (55) for possums and 29 (27) for plants.

Undertook small scale control of unwanted plant organisms including 19 (16) Boneseed, 3 (1) Chameleon Plant, 4 (0) Purple Loosestrife, 1 (0) Royal Fern, 1 (0) Alligator Weed infestations. A species new to Taranaki, Alligator weed, was detected following a public awareness campaign. An intensive control operation was undertaken and is showing early success, ongoing monitoring and control will be required for at least 4- 5 year

Responded to 425 (488) requests for advice and, where appropriate, undertaking control action regarding pest issues. These enquiries consisted of 287 (355) Biosecurity, 46 (32) Biodiversity, 92 (101) Predator Free enquiries.

Increased publicity and education programmes on pests through a new pest bulletin.

Appendix VI: Summary of possum control service delivery options

Table 8 sets out a summary of advantages and disadvantages set out in the Place Group Environmental Planning Group report 2023. It excludes mixed service delivery options that were also considered (but which did not score high enough to be a preferred option).

Table 8: Summary of possum control service delivery options

Delivery model	Advantages	Disadvantages
Full contractor model Whole programme delivered by contractors	 Experienced people who already have the tools & knowledge to do the work & are used to having to meet high standards of government agencies such as OSPRI, Council, MOH etc Contractors have a long history of working in the region, they know the landscape & they hold a lot of relationships. Sometimes this can be the difference between gaining access or not Where there is competition with other pest control businesses, this drives efficiency & quality of work. This enables better outcomes of control Already set up with vehicles, tools, staff, experience & don't require a large injection of \$\$ to start doing large landscape control Likely more innovative depending on programme outcomes Potentially more agile than councils as less process to move through Likely able to scale-up better in terms of staff required to deliver programme (but also dependent on same employee pool as Council) Overheads included in contract price Contractors use to working non-standard working hours to fit work programme & landowner needs (e.g. work best weather patterns regardless of day of week, work nights etc) Contractors only get paid when working, insulating projects from additional labour costs or salaries when work is delayed Contractors are engaged for a specific project purpose, so are not perceived to be wearing 'multiple hats' by landowners. 	 Need to make a profit Good practice, H&S, policy & procedures unlikely to match that of the Council. Some contractors have been known to move through the work as fast as possible to increase profit margins Knowledge of how the possum monitoring protocol works is a risk as some contractors skip areas they know likely won't be monitored due to the nature of the country or size of the bush Don't have same flexibility to respond to emergencies & incursions as Council Council cannot manage risk around cost increases. However this risk can potentially be mitigated by engaging contractors on longer-term contracts. Council can't schedule work - reliant on availability of contractor No Council control over succession planning to bring new skills into the biosecurity industry - does not benefit NZ inc Risks where contractor monitors own work or opposition's work Powers under BSA need to be authorised by Council - contractors don't have functions under BSA, e.g. cannot issue notice of direction, restricted place notices. Council don't hold relationships with iwi & landowners/occupiers Ability of councils with smaller rating bases to fund a contractor model, and balancing this with competing priorities and rates increases are becoming unpopular Rebuilding the contractor pool can require staff input or higher costs with contractors coming in from other regional bases.

Delivery model	Advantages	Disadvantages
PREFERRED OPTION Full staff model Whole programme delivered by Council staff	 Do not have to make a profit, driven by quality outcomes High standard of training, health and safety, policy, procedures LGOIMA ensures good process is followed at all times to mitigate risk, & is looked at favourably by MOH when applying for approvals for controlled substances Potential efficiencies - staff have complementary skills. Can work across multiple programmes, e.g. biosecurity & biodiversity Can manage risk around costs Reliability of delivery & reliability of data Build in-house capability and career prospects for staff -better for Biosecurity Inc succession planning Council holds relationships with landowners/occupiers making compliance & enforcement easier Easier to maintain relationships with iwi Certainty of supply - if a job is coming up can schedule it in Flexibility to respond to emergencies & incursions Can utilise powers under BSA Branding on council vehicles - visibility. 	 Council staff are perceived to serve multiple functions, including compliance & enforcement. This may make staff-based work very difficult or impossible on some land where other Council/landowner matters are ongoing. Initial set-up is costly for equipment & vehicles Training expense especially for 'niche' work such as aerial 1080 Budgets unlikely to cover FTEs required (dependent on rating capacity) Potentially taking over a bigger portion of contractor work could jeopardise long standing relationships with contractors No competition Potentially higher overheads Council may not be able to attract the 'best' people in the industry into the staff roles, as these people could earn more in the private sector & may prefer the flexibility of not being Council staff Potential lower productivity per FTE if staff work 'normal' council working hours & holidays Employee contract terms may not ideally suit the needs of the type of contract work being done – i.e. salaried roles may not lead to efficient outcomes
STATUS QUO Landowner/occupier model Responsibility on occupier to undertake control or contract out to meet their obligations	Council holds relationships with landowners/occupiers.	1. Many landowners/occupiers delivering control on small areas in uncoordinated manner, means control is piecemeal 2. Greater potential for RTC exceedance 3. Does not build capacity or capability for NZ Inc/support succession planning 4. Some landowners/occupiers 'free ride' off neighbours control work 5. Control work becomes another thing on a farmers list, & often not prioritised or undertaken at the wrong time. 6. Can't capitalise on cross-programme efficiencies or add value 7. No innovation 8. Compliance, enforcement & subsidising bait or initial control potentially makes this option costly.



Interim review of the Regional Pest
Management Plan for Taranaki
Steve Ellis -Environment Services Manager



- Biosecurity Strategy
 is a high level
 "What we want to
 do"
- RPMP is the rule book per species
 - "Must control Ginger on property"





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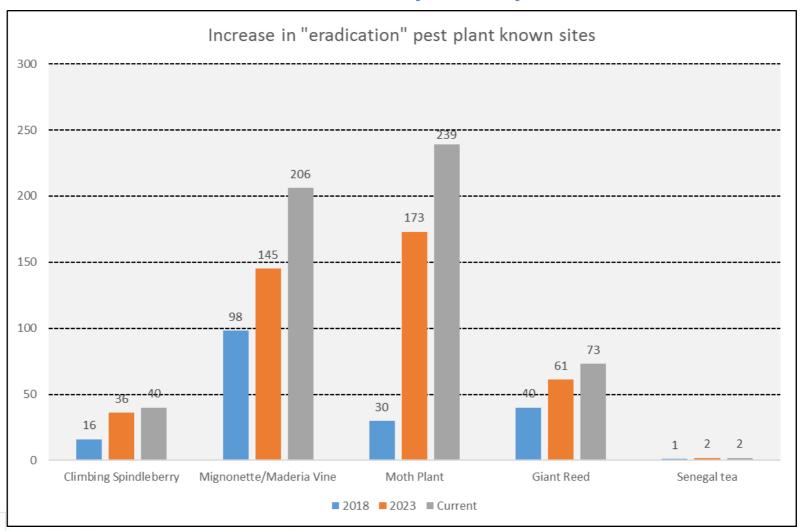


Non Statutory Interim Review - Findings

- Largely programmes working
- Increase in known infestations of "eradication" pest plants putting pressure on resources
- Possum numbers rising
- Farmers not prioritising mustelid trap maintenance
- While there is no immediate need to review Council could decide to



RPMP "eradication" pest plants





Known Moth plant 2018





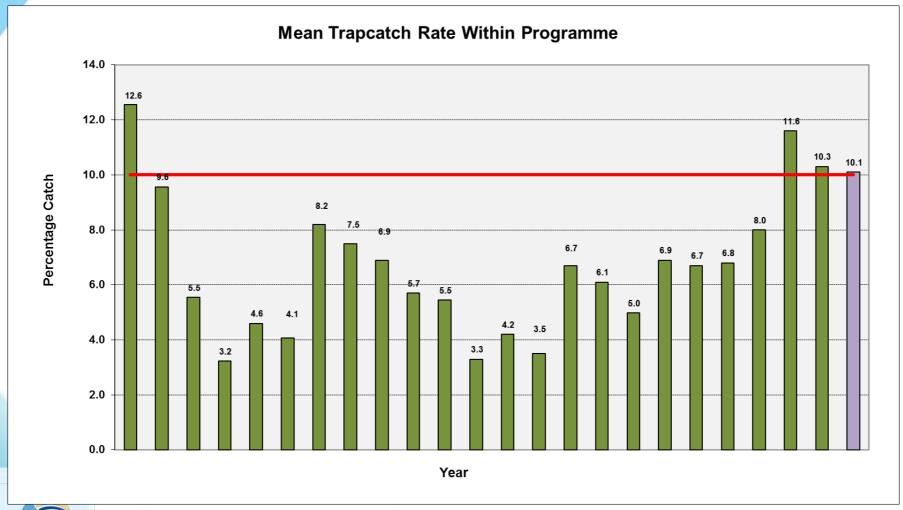
Known Moth plant – current







Possum numbers over time

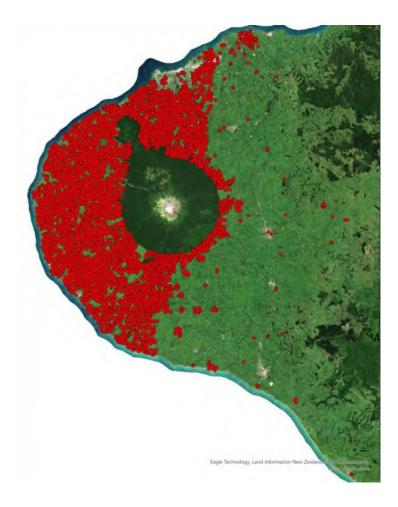




Note; Current year TBC, a few lines yet to be completed

Increased enforcement needed for predator trap maintenance







Opportunities and constraints

- Do we need to do more for biodiversity?
- Do we want increased possum control in the Selfhelp Programme?
 - Are we going to continue to rely on land occupier obligations for possum control?
- Do we want to do more possum control in the eastern hill country?
- Do we want feral cat control?
- Do we want ungulate control?
- If we want more, how do we pay for it?



Opportunities and constraints

- Do we need to do more for biodiversity
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- Do we want feral cat control
- Do we want ungulate control?
- If we want more, how do we pay for it?



Item - Recommendations

That Taranaki Regional Council:

- <u>receives</u> this memorandum and attached report entitled Regional Pest Management Plan for Taranaki – Interim Review 2023
- <u>notes</u> that this report gives effect to a Council commitment in the 2022/2023 Annual Plan to undertake an interim review of the Plan
- <u>notes</u> that the Plan continues to be efficient, effective and relevant and that no immediate change is required to the Plan
- <u>notes</u> that opportunities to build on the efficiency and effectiveness of the Plan as part of an earlier review of the Taranaki Regional council Biosecurity Strategy will be investigated



Early Strategy review opportunities

- Get the "what we want to do" thinking done to inform the rule book
- Inclusion of issues significant to iwi
 - six iwi now have management plans
- Increase pest programmes

PathwaysFeral cats

Ungulates
 Extending into the hill country

Any number of new pest plants could be added

Alligator weed
 Bone seed

Purple loosestrifeSea spurge

Rules around pet pests could be considered

Red eared slider turtles lorikeets

Cockatoos



Next steps

- Crack on with LTP projects
- Discuss with the community what they want to do about pests
- Draft Pest Management Strategy
- Design programmes and rules
- Draft RPMP changes







Date: 11 June 2024

Subject: Freshwater Implementation Update June 2024

Author: L Hawkins, Policy Manager

Approved by: A D McLay, Director - Resource Management

Document: 3278064

Purpose

1. The purpose of this memorandum is to provide a Freshwater Implementation project update.

Executive summary

- Set out in this memorandum is an update on the progress of implementing the freshwater package
 from central government. The memorandum focusses on the key tasks undertaken since the previous
 Committee meeting, and identifies risks associated with the project and achievement of the project
 timeframes.
- 3. The attached report focusses on the key streams of work associated with the freshwater package. This being policy development, implementation of the Freshwater Farm Plan (FWFP) regulations and the communications and engagement timeline.

Recommendation

That Taranaki Regional Council:

a) <u>receives</u> the June 2024 update on the Freshwater Implementation Programme.

Background

4. This memorandum updates on progress in implementing the Freshwater Package. An implementation programme was previously presented to, and approved by the Committee. This report provides an overview on the progress of the work programme, specifically focusing on the previous 6 weeks and those ahead. It provides an opportunity for discussions relating to progress and risks identified.

Discussion

- 5. The attached report (attachment 1) provides a high level overview of the progress made since the last Committee meeting in April 2024, and identifies those tasks to be undertaken in the coming 6 weeks. It also identifies risks associated with the programme, and a copy of the high level engagement strategy.
- 6. Key discussion points are included in this covering memorandum to draw attention to key areas of work.

Government Announcements

- 7. On the 23 May the Government introduced the Resource Management (Freshwater and Other Matters) Amendment Bill (the Bill). The Bill proposes changes to the Resource Management Act (RMA) which include targeted changes for freshwater consenting, farming, coal mining and biodiversity. The Bill is the first of three phased amendments to the RMA proposed by the Government.
- 8. In summary, the Bill covers:
 - a. NPSFM 2020 hierarchy of obligations excluded from consideration in consent applications
 - b. Alignment of the consenting pathway for coal mining and other mineral extraction activities
 - c. Delaying the obligations for councils to identify and map new SNAs
 - d. Stock exclusion and intensive winter grazing relaxations
 - e. Speeding up the process to prepare or amend national direction.
- 9. At the time of preparing this memorandum, The Bill was being prepared for its first reading, and the process of the Select Committee not yet finalised, including any future consultation period. A detailed overview of the Bill and its implications will be brought to the Committee at a future meeting.

Upcoming consultation

- 10. Preparing for the upcoming consultation has remained a key focus for staff over the past 6 weeks. With the consultation period commencing on the 10 June, the focus will largely remain on this until the consultation period ends on 2 August. Staff are mindful that some of the consultation period will fall across calving season for our agriculture community and as such the community sessions have been planned with this in mind, and are as early as possible in the consultation period.
- 11. Set out below are the dates and times for in person community sessions which have been promoted around the region through social media, radio and print media adverts, and notified to relevant consent holders. The dates have also been provided to industry bodies to support any promotion of the events that they are able to do.

Date	Location	Time
17 June	Ōkato Hempton Hall	10am – 1pm
	72 Carthew Street, Ōkato 4335	
17 June	Öpunake Sinclair Electrical and Refrigeration Events	3pm-6.30pm
	Centre	
	156 Tasman Street, Õpunake 4616	
18 June	Hāwera TSB Hub East Lounge	10am-1pm
	Camberwell Road, Hāwera 4610	
18 June	Kaponga War Memorial Hall	3pm-6.30pm
	57 Victoria Street, Kaponga	
20 June	Urenui Community Centre	11am-2.30pm
	13 Takiroa Street, Urenui	
20 June	Uruti Community Hall	4pm-6:30pm
	1672 Mokau Road, Uruti	
21 June	Patea Hunter Shaw Building	10am-1pm
	29 Victoria Street, Patea	
21 June	Waitotara Hotel	3pm-6:30pm
	1 Kaipo Street, Waitotara, New Zealand	
24 June	Waitara North Taranaki Sport and Recreation Centre.	10am-1pm

	17 Princess Street, Waitara			
24 June	Bell Block Fred Tucker Community Centre 130 Parklands Avenue	3pm-6pm		
25 June	Inglewood TET Stadium 10am-1pm 1 Elliot Street			
25 June	Tarata Community Hall 3pm-6:30pm 1757 Tarata Rd, RD7, Inglewood			
27 June	Stratford Centennial Rest Rooms 10am-1pm 1A Fenton street, Stratford			
27 June	Te Wera Camp, 3pm-6:30pm 3560 Ohura Road, Te Wera			
1 July	New Plymouth Merrilands Domain Hall 259 Mangorei Road, Merrilands, New Plymouth	'		
1 July	New Plymouth Bryan Bellringer Pavilian 5pm-8pm Pukekura Park, Liardet St			

- 12. As mentioned at the previous meeting, the sessions will be 'drop-in' format where staff will be available for the specified time in each location. Interested persons can drop in at a time that is convenient to them to discuss draft plan provisions with staff. There will be relevant information stations at each community meeting and people will be able to self select their interest at each session. Participants will be able to provide feedback on the day, or take the questionnaire away and fill in ahead of the consultation period closing. Councillors are encouraged to attend the community sessions to listen to and support the community in engaging with the consultation. Invites to a briefing session on 4 June were extended to all Councillors to build the understanding of the format of the community events and the key issues. A full briefing pack has also been made available to Councillors.
- 13. Councils website hosts all relevant background information for the consultation, including factsheets prepared on the following topics:
 - a. E. coli
 - b. Sediment
 - c. Nutrients
 - d. Water Allocation and Takes
 - e. Farm Practice
 - f. Earthworks and Land Disturbance
 - g. Discharges stormwater and wastewater
 - h. Dairy Effluent
- 14. Within each of these factsheets are key questions for the community to answer. The community may pick and choose to respond to the topic/s that are of most interest to them. There is a survey questionnaire that covers all questions for people who wish to engage online.

15. Special Interest Group meetings have also been set for the following dates and group focus as below:

Date	Special Interest Group	
15 July	Government	
16 July	Advocacy Groups	
18 July	Industry and Commerce	
19 July	Primary Industries	

Working with iwi

- 16. Work continues with the Ngā iwi o Tarankai Pou Taiao on key elements of work, including the drafting of a tangata whenua chapter to be incorporated within the Regional Plan, and scoping the integrated management and overarching objectives and policy framework. Upcoming meetings are scheduled with Pou Taiao across the consultation period to seek feedback on the content of the consultation, as well as continue to progress policy drafting.
- 17. Through discussions with Pou Taiao, the following iwi have identified the opportunity to hold Marae based conversations with whanau and hāpu Taranaki, Ngāruahine, Ngā Rauru, Ngati Tama and Ngati Mutanga. Dates and format of the sessions are still being refined, but it is expected these sessions will be held later in July.

Financial considerations—LTP/Annual Plan

18. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

19. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

20. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum. As indicated in the body of the report, conversations relating to policy development are ongoing with iwi.

Community considerations

21. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

22. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3278064: Freshwater Implementation project Report



Freshwater Implementation Project Report to Policy & Planning Committee June 2024				
	Progress in the last six weeks	Key tasks in the coming six weeks	Risks	
National Policy Statement for Freshwater Management	 Finalise nutrients target state memo to inform policy development Preparation of consultation material for target states as well as potential management options to test with communities Standing up a hui series with iwi pou taiao to continue discussions on: target states for big four attributes (flows, e.coli, sediment and nutrients) management options being investigated for consultation options for hapū and whānau level engagement during next consultation phase. Participate in regional section conversations with regard to resource management system reform. 	Executing consultation period, with a particular focus on in-person consultation events, including marae hosted events. Participate in regional sector conversations with regard to resource management system reform. Particular focus on: The Resource Management (Freshwater and Other Matters) Amendment Bill S.70 and S.107 RMA case law implications Progress further investigations to support policy development, as information is obtained from the community consultation that will refine direction.	Medium risk – Partnership with iwi. Risk that the timeframes, complexity of issues and the need to be working in an agile manner to develop the policy framework will impact on the partnership approach being fostered. Amendments to the Pou Taiao Agreement including the setting up of a steering committee to mitigate this risk. Opportunity to consider amendment to programme to providing more time and opportunity to work through policy drafting. Continue to present progress to the Wai Steering Committee. Medium risk – participation in the community engagement is low. Mitigated through continued promotion of process, community meetings switched to being held at various locations, targeted engagement with industry groups to lessen the load on individuals. High risk –change to direction of the NPSFM with the new government. We can mitigate against this risk by maintaining momentum on policy development, keeping abreast of policy announcements from the government, and taking pause when necessary to confirm approach as policy guidance from the government develops.	
Freshwater Farm Plans	Participate in regional sector conversations to respond to government considerations for FWFP updates. Continue work on developing the framework for regional training. Review approach and timing for preparation of the CCCV and engagement with iwi, in light of pending government direction.	Status quo – as we await further direction from the Government on likely changes to the Regulations etc.	Low risk – potential change to direction of FWFP regulations with the new government. The government has signalled the continuation of the FWFP process and Councils should expect an order in council, as such this is a low risk. The continuation of the programme will mitigate against any pressure to respond to an OIC when released.	

Engagement and Communication Strategy (Policy Development)

Set out below is a high level summary of the engagement approach and timing for key components supporting the policy development. Also noted is a high level timeline for key communications and engagement activity. Note this engagement plan does not including Council working with their tangata whenua partners, this process is subject to an alternative approach led with the Pou Taiao and Council's Iwi communications advisor.

Phase	Stage	What	Who	Timing*
Phase 1	Seek to understand Focus: gathering info from audiences about what's important to them	This phase has covered seeking input on a variety of high level freshwater matters including visions for Freshwater in Taranaki, identification of values for freshwater management and feedback on the proposed FMU boundaries. Input has been sought through a variety of mediums including online surveys, social pinpoint, face to face meetings and drop-in sessions (ie Stratford A&P show).	Community and special interest groups.	Apr 2021 to Mar 2023
Phase 2	Test options Focus: building and discussion on options that meet the region's wants and needs	There are two key steps in this process: 1. Testing the building blocks of the National Objectives Framework. A discussion document for each FMU is being prepared and will cover visions, values, baselines and environmental outcomes. 2. Testing TASs and proposed management approaches. 3. Testing limits and targets. This phase will also likely include region wide policy framework discussions.	 Community – via online consultation opportunity. Special interest groups including industry bodies, catchment groups, government agencies, district councils, environmental NGOs – via workshop discussions. Community and special interest groups. A series of face to face meetings around the region and opportunity for online feedback. Community and special interest groups. A series of face to face meetings around the region and opportunity for online feedback. 	Aug 2023 to November 2024
Phase 3	Present preferred solution Focus: presentation of best options (draft plan)	A draft plan will be complied and through requirements of the RMA an opportunity for written feedback provided.	Clause 3 – listed in the RMA, and special interest groups.	Early 2025
Phase 4	Notification: Public submissions Focus: formal communication relating to Plan notification	In accordance with the approved adapted programme from Council, the Freshwater Plan and Freshwater components of the RPS will be notified by Mid 2025, pending the consideration of any further direction and detail provided by the Government on their freshwater updates. Once notified all interested parties will have the opportunity formally submit written submissions on the notified plan.	All interested parties.	Notification Mid 2025. Submission period mid – late 2025.



Date: 11 June 2024

Subject: Freshwater Target Attribute State Overview – Nutrients in Rivers

Author: T McElroy, Science and Technology Manager

Approved by: AJ Matthews, Director - Environment Quality

Document: 3278520

Purpose

The purpose of this memorandum is to provide the Committee with an overview of the investigations
and findings to identify draft Target Attribute States (TAS) for nutrient attributes in Taranaki rivers. The
memorandum also introduces preliminary nutrient criteria that are being developed to support the
achievement of broader environmental outcomes. This work is being carried out to inform the
freshwater plan development process, and importantly the upcoming consultation process.

2. This memorandum builds on an item that was presented to the Committee in April, regarding target setting for *E. coli* and sediment, as well as water allocation and minimum flows.

Executive summary

- 3. A significant body of work has recently been completed to assist Council in the Freshwater Plan development process. This work has been led by the Science and Technology team, with the delivery of a series of technical memos which set target attribute states (TAS) as part of the National Objective Framework (NOF), set out in the National Policy Statement for Freshwater Management 2020 (NPS-FM).
- 4. Setting target states is a mandatory part of the NOF and is a critical stage in developing Councils' proposed Land and Freshwater Plan. There are a number of attributes which are included in the NPS-FM which require targets to be set. However, Council has focused initially on setting TAS for the following attributes suspended fine sediment, nutrients (dissolved reactive phosphorus, nitrate and ammonia), Escherichia coli (E. coli) and, although not technically a NOF attribute, water allocation.
- 5. For nutrients, there are additional requirements to identify relevant nutrient criteria necessary to help to achieve broader environmental outcomes. This requirement acknowledges that the national bottom lines for nitrate (toxicity) and ammonia (toxicity) thresholds are not necessarily protective of adverse ecological responses that can occur at much lower concentrations (e.g. algal blooms).
- 6. The undertaking of this work feeds into the development of the proposed Land and Freshwater Plan, and is also an important part of the upcoming consultation in June with the community.

Recommendations

That Taranaki Regional Council:

- a) receives this memorandum Target Attribute State Overview Nutrients in Rivers
- b) notes the attached presentation and the detail which will be presented during the Committee meeting.

Background

- 7. As part of the NOF requirements there are a series of compulsory attributes which are considered to be indicators of water quality health. The NPS-FM requires regional councils to set target states for these attributes to identify the state required to fulfill the objectives, outcomes, values and visions which have been set through the policy framework.
- 8. The focus of the consultation undertaken in October 2023 was to explore community aspirations for long terms visions for each Freshwater Management Unit (FMU), and to seek input into the environmental outcomes that are desired for each value that had been deemed important for those FMUs. These outcomes, along with available mitigations and management options, and timeframes for realising any improvements in freshwater have guided the TAS setting process.
- 9. The NOF sets out numeric bands relevant to each individual attribute, which represent a graduated scale of impact on ecosystem health (e.g. applicable to the suspended fine sediment attribute), human contact (e.g. applicable to the *E. coli* attributes), or other identified freshwater values. Typically, "band A" represents a minimal level of impact and is close to reference conditions, whereas "bands D or E" represent a high level of impact, or a highly degraded condition. For many attributes, national bottom lines are set as the minimum standard that all councils must achieve.
- 10. Council are first required to undertake baseline assessments of each attribute to identify a baseline state. This work was undertaken in October 2023 to inform community discussions. Where this baseline sits below the national bottom line, the TAS must be set at or above the national bottom line. Equally if the baseline is above the national bottom line the TAS must be set at or above the baseline, the only exception to this is where the baseline is already within band A. TAS for attributes associated with the human contact freshwater value must be set above baseline state where the baseline is not already within band A.
- 11. Timeframes must also be considered when setting TAS, linking through to when it is considered reasonable to achieve the TAS. Should the achievement of TAS be set to a timeframe longer than 10 years, Council must set interim target states at intervals of no longer than 10 years, as stepping stones.
- 12. Target attribute states provide the framework for Council to identify limits on resource use that will achieve thes targets, and for these limits to be included as rules in the regional freshwater plan.

 Council have not yet undertaken the detail of the limit setting work, this process will be undertaken in future stages following the consultation process in June and July 2024.

Discussion

- 13. In setting target attribute states, consideration has been given to the identified baseline as well as the current state and trends (noting that this may differ from the baseline if there has been a change in attribute state since the baseline state was identified). Actioned and available mitigations and management options have also been considered, along with likely timeframes for realising different TAS in freshwater receiving environments.
- 14. Modelling undertaken to inform each of the attributes, has considered the impact of existing management options in achieving the necessary load reductions to meet the TAS. Across all the attributes this has presented a challenging position. In many cases, continuation of existing management approaches will not alone enable minimum standards to be met for each of the

- attributes. Additional management approaches will need to be considered, as will the effects of climate change on the efficacy of existing practices. Further detail around current and future management approaches required to achieve target states will be made available as part of the consultation information package.
- 15. The investigations demonstrate the challenge the region is facing to achieve the improvements being sought by the environmental outcomes; and the time it will likely take to measure these outcomes in rivers, lakes and estuaries. In many cases, lifting the baseline or current state by one band is likely to be as far as can reasonably be practicable to achieve. In many instances the short term achievement is unlikely to see a shift in attribute bands, but rather will focus on a halt in the declining trends, before improvements are to be seen. This has been reflected in the draft TAS's set.
- 16. There are limitations to the work that has been undertaken. As mentioned above, the modeling has focused on understanding the benefits in completing existing management approaches, and it has not yet been possible to model additional management approaches for all attributes. However, many of these additional management approaches reflect good land use practice and therefore it is reasonable to expect that if implemented, cumulatively these actions will move the dial in the right direction to achieve the relevant TAS overtime. Additional modelling work will need to be undertaken, both prior to and during the life of the proposed Land and Freshwater Plan, to supplement this existing work overtime and to inform future policy discussions.
- 17. Other limitations include the level of uncertainty and bias associated with information that has been used to inform this process. Water quality is highly variable through time, and in many cases, we base our assessment of water quality state and trends on monthly monitoring data. This is standard practice nationally, and is currently the best information available. However, these data represent a snapshot in time of water quality for any given site, and as such, the value of the data grows as more data are collected across different seasons and environmental conditions.
- 18. Further to this, measured data is only available where monitoring sites are currently established. There is bias associated with the current monitoring network, with the hill country and coastal terrace catchments generally under represented, and greater representation of mid and lower catchment 'impact' sites, relative to upper catchment 'reference sites'. This has been taken into account through the target setting process, and addressing the representativeness of the monitoring network will be undertaken with new investment through Council's Long-term Plan 2024-2034.
- 19. Spatial modelling has been employed in this process to estimate water quality in unmonitored locations to address this issue in the short term. Again, this is standard practice nationally, and it represents the best available information. However, there is uncertainty associated with these estimates that must be acknowledged, and this is taken into account when setting TAS.
- 20. The attached presentation sets out the draft TAS for the three nutrient attributes applicable to rivers: nitrate (toxicity), ammonia (toxicity) and dissolved reactive phosphorous; along with the assumptions, challenges and potential timeframes (including interim targets) for achieving these target states.
- 21. It is a requirement under the NPS-FM to also establish nutrient criteria which will support the achievement of broader environmental outcomes with regards to ecosystem health. This requirement acknowledges that setting targets for nitrate and ammonia based on toxicity thresholds will not necessarily be protective of freshwater ecosystems, as trophic effects (e.g. algal blooms) can be triggered at much lower concentrations. A preliminary set of nutrient criteria has been developed based on community aspirations for ecosystem health environmental outcomes. Specifically, these preliminary criteria have been designed to reduce the likelihood of excessive periphyton growth from occurring in Taranaki rivers and streams. These preliminary nutrient criteria are discussed in more detail in the presentation attached.
- 22. These draft TAS's will be presented to the community in June, and feedback on where they have been set and the management approaches identified to achieve these will be sought. This consultation

process will assist staff in refining policy options and limit setting, which will be tested in future consultation periods.

Financial considerations—LTP/Annual Plan

23. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

24. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

- 25. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.
- 26. Additional work is being undertaken with iwi Pou Taiao to present the findings of the TAS ahead of the formal community consultation process. Ongoing discussions with iwi and hapū on the TAS and the corresponding policy approach will be undertaken across the coming months, aligning with broader engagement programme.

Community considerations

27. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum. The content presented to the Committee will be used to inform the upcoming community consultation programme.

Legal considerations

28. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3278201: Freshwater Target Attribute States: Overview of Nutrients



Overview

- Key concepts and principles (brief re-cap)
- Nutrient targets and criteria; what's the difference?
- Baseline state (brief re-cap)
- Introduction to nutrient criteria and preliminary framework
- Mitigation scenario modelling; how far can we get?
- Draft nutrient targets
- Summary and next steps



NOF attributes

- 22 prescribed NOF attributes
- We've begun the target setting process by focusing on 'the big four plus flow':
 - Nitrogen and phosphorous
 - Sediment
 - E. coli
 - plus water allocation and minimum flows
- Managing these issues goes some of the way towards addressing the remaining attributes



Draft target setting principles

- 1. Target attribute states must have regard to the foreseeable impacts of **climate change**.
- 2. All target attribute states must either **maintain or improve** the attribute state from baseline:
 - a. to **meet or exceed national bottom lines** (except in the case of naturally occurring processes); and
 - b. to either:
 - i. maintain the baseline state where the baseline is considered to already achieve the relevant environmental outcomes(s)
 - **ii. improve** upon the baseline state where this is not considered to achieve the relevant environmental outcome(s).
- 3. Must identify the **actions/approaches/mitigations** that would be required to achieve improvements.
- 4. Using best available information, ensure that an identified target attribute state is **achievable** within the timeframe set in the long-term vision.
- 5. Where an attribute state is unlikely to meet the vision and environmental outcomes within 10 years, support the target attribute state with **interim targets** (no more than 10 year timeframes).



Long term approach to TAS

- Example:
 - TAS to move from a D band to a C band by 2055

Long term Target Attribute States

Interim TAS

2025 - 2035

Management approaches, technology advancements, limit setting to meet interim changes

2035-2045

Management approaches, technology advancements, limit setting to meet interim changes

2045 - 2055

Management approaches, technology advancements, limit setting to meet interim changes



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Best available information and uncertainty

- There is uncertainty associated with both measured and modelled data
 - Sampling frequency
 - Monitoring network bias
 - Climate change trajectories
 - Modelling assumptions
- Same challenge for all regional councils
- Quantify where possible
- Policy decisions must take this into account



Nutrient targets and criteria

We need to set both targets and nutrient criteria

- Site-based targets;
 - Nitrate (toxicity)
 - Ammonia (toxicity)
 - Dissolved reactive phosphorous
- Nutrient criteria that are protective of other attributes / sensitive receiving environments



Nitrate (toxicity)

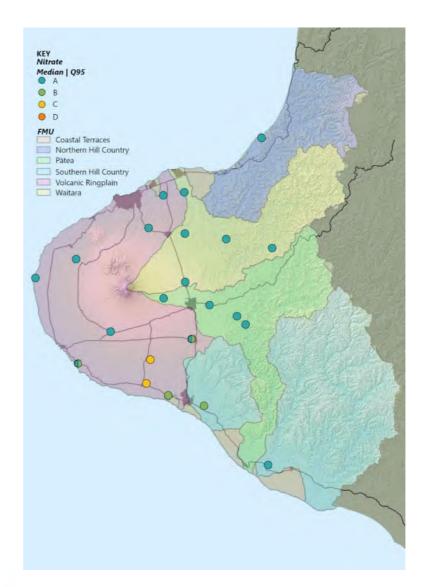
Baseline state

A Band: 16 sites

B Band: 4 sites

C Band: 2 site

D Band: 0 sites





NBL

Ammonia (toxicity)

NBL

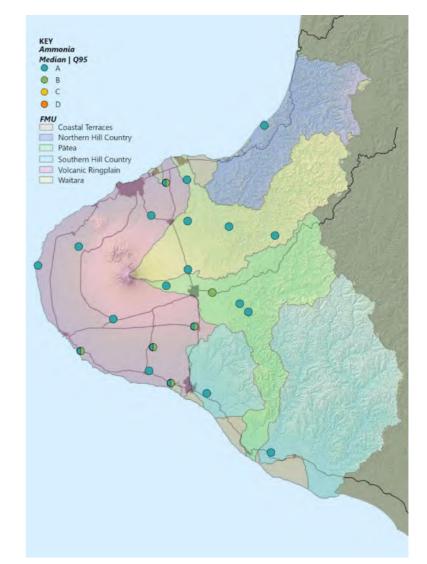
Baseline state

A Band: 16 sites

B Band: 6 sites

C Band: 0 site

D Band: 0 sites





Dissolved reactive phosphorous

Baseline state

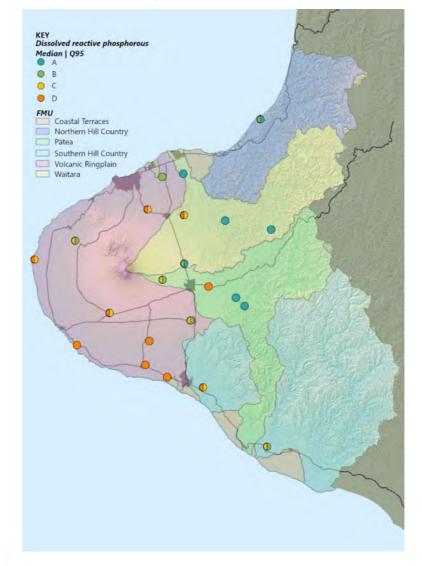
A Band: 5 sites

B Band: 3 sites

C Band: 4 site

D Band: 10 sites

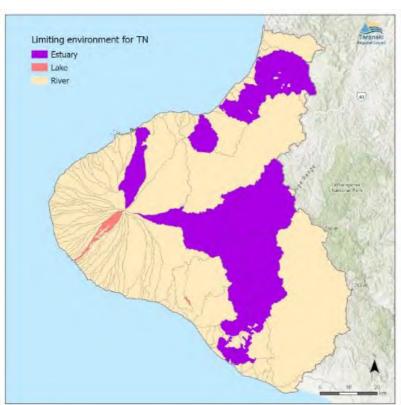
No NBL

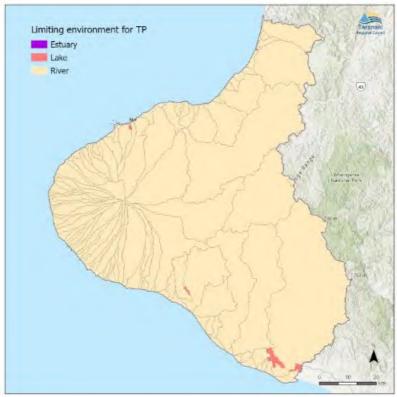




Limiting environments

A recent national study provided an indication of where rivers, lakes or estuaries are likely to be the most susceptible (limiting) environment in each region.







Snelder T, Smith H, Plew D, Fraser C. (2023) Nitrogen, phosphorus, sediment and Escherichia coli in New Zealand's aquatic receiving environments: Comparison of current state to national bottom lines. LWP Client Report 2023-06, November 2023.

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Periphyton (biomass)

Baseline state

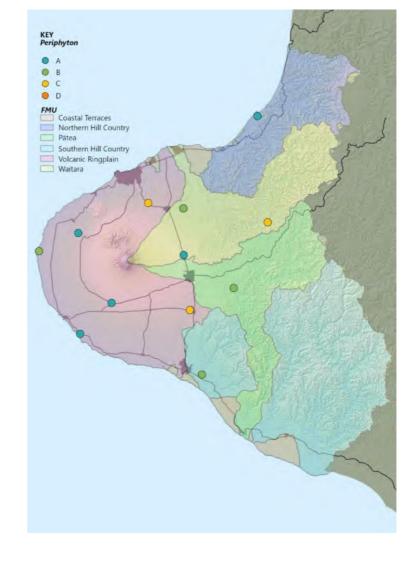
A Band: 5 sites

B Band: 4 sites

C Band: 3 site

D Band: 0 sites

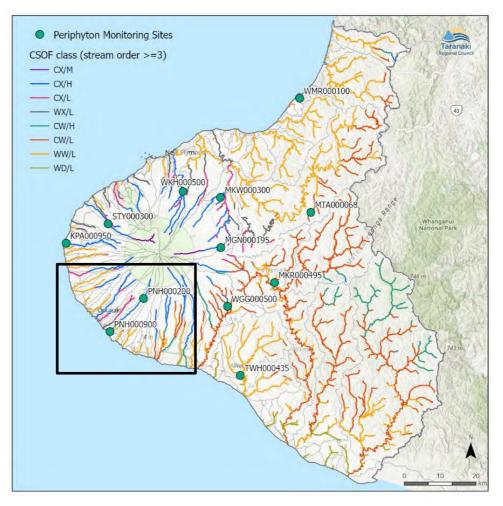
NBL





National nutrient criteria have been developed based on a river's susceptibility to excessive periphyton growth;

- Cold/warm
- Wet/dry
- Mountain/lowland



National nutrient criteria:



Snelder, T and Kilroy, C. (2023) Revised Nutrient Criteria for Periphyton Biomass Objectives. Updating criteria referred to in Ministry for Environment 2022 guidance. LWP Client Report 2023–08.

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Different classifications between and within catchments

- Mountain v spring-fed
- Elevation within catchment / proximity to coast





Preliminary approach

- 1. Identify desired outcome (e.g. band B; periphyton)
- 2. Characterise each catchment (susceptibility)

Catchment specific nutrient criteria

(maximum concentrations of DIN and DRP at catchment outlets to achieve band B)



Scale of reduction required to achieve criteria

Difference between:

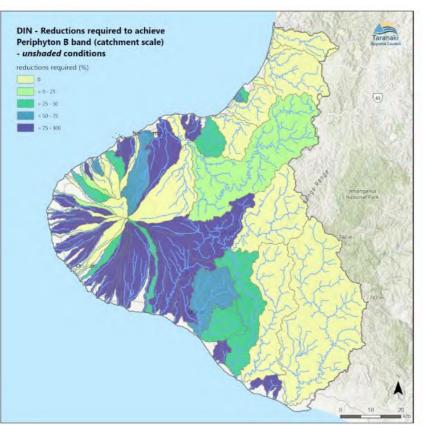
stimated DIN and DRP at catchment outlet

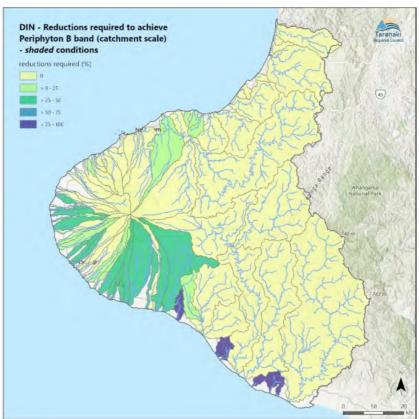
and

Catchment specific nutrient criteria



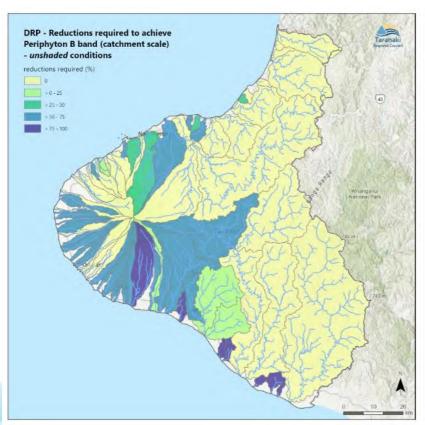
Preliminary assessment (dissolved inorganic nitrogen)

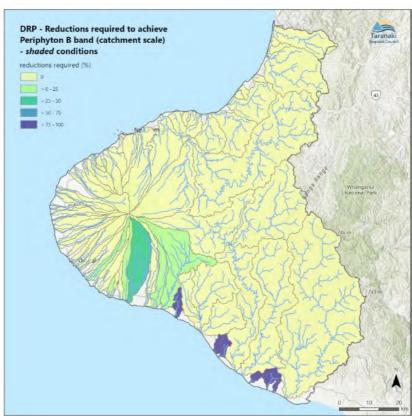






Preliminary assessment (dissolved reactive phosphorous)







Preliminary assessment (n = 73 catchments / major sub-catchments)

Periphyton biomass Band B (25% UPR)	Shading	No reduction required	1 – 25%	26 – 50%	51 – 75%	75 – 100%
DIN	unshaded	20	3	8	5	37
	shaded	40	11	16	0	6
DRP	unshaded	29	5	4	28	7
	shaded	61	5	1	0	6

DIN and DRP model uncertainty (95% confidence intervals)

Periphyton biomass Band B (25% UPR)	Shading	No reduction required (best estimate)	No reduction required (97.5% certainty)	Some reduction required (best estimate)	Some reduction required (97.5% certainty)
DIN	unshaded	20	4	53	34
	shaded	40	15	33	6
DRP	unshaded	29	5	44	6
	shaded	61	17	12	6

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Summary:

- Band B preliminary target for periphyton set to reflect desired environmental outcomes of community
- Significant reductions are required in a large number of catchments to achieve band B throughout the region
- Challenge is generally greater with DIN than DRP
- Scale of required reduction much less with effective shading
- Must take into account uncertainty associated with model estimates



- General framework in place, but further refinement needed to ensure periphyton targets are ambitious and reasonable, and to account for:
 - Shading
 - Substrate
 - Other limiting environments (estuaries, lakes)
- Criteria may be refined but this is unlikely to change the required direction of travel



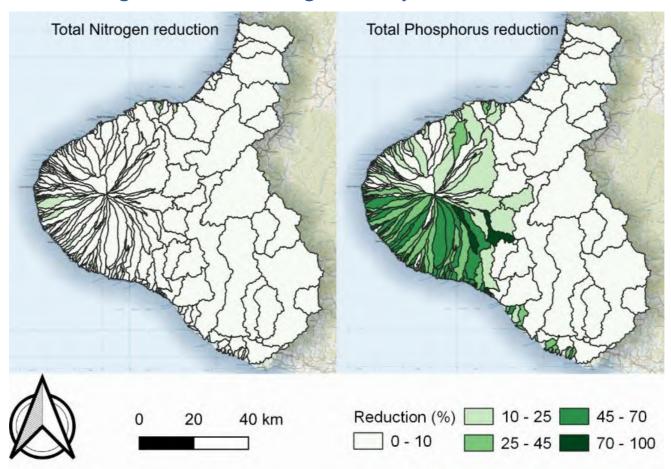
How far can we get? Mitigation scenario modelling

- Current management approaches:
 - Eliminating all direct discharge of dairy shed effluent into waterways
 - Completion of the Riparian Management Programme
- Future management options
 - Established mitigations (broadly accepted as good management practises)
 - Developing mitigations (recently developed mitigation technologies and management practises with limited validation)



Mitigation scenario modelling; current management approaches

Eliminating all direct discharge of dairy shed effluent into waterways



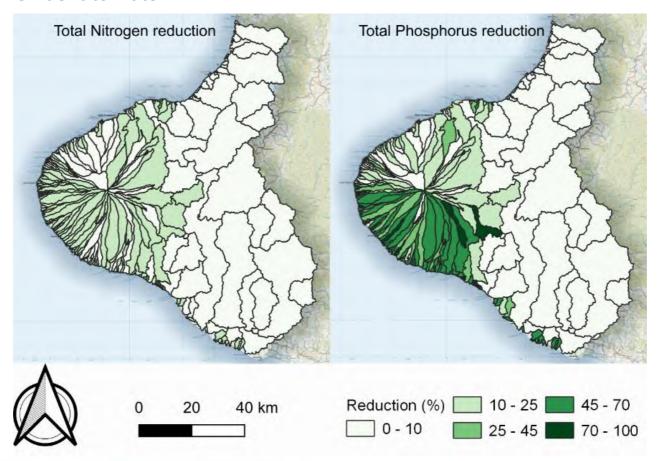


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Cox T, Snelder T, & Kerr T. (2024) Catchment mitigation simulations. Technical memorandum prepared for the Taranaki Regional Council.

Mitigation scenario modelling; current management approaches

 Completion of the Riparian Management Programme, and removal of dairy effluent to water





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Cox T, Snelder T, & Kerr T. (2024) Catchment mitigation simulations. Technical memorandum prepared for the Taranaki Regional Council.

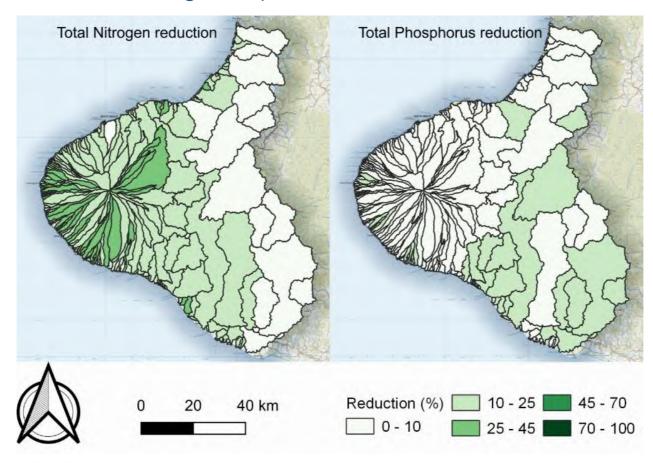
Mitigation scenario modelling; 'established' and 'developing' mitigations

'Established' mitigations (Monaghan et al. 2021)	'Developing' mitigations (McDowell et al. 2021)		
 Stream fencing for stock exclusion Reduced surplus soil P fertility Use of low solubility forms of fertiliser P Judicious scheduling of N and P fertiliser applications to avoid risk months Reducing excessive inputs of fertiliser N Land application of farm dairy effluent (FDE) Enlarged areas receiving FDE Targeted fertiliser returns to effluent treated areas Deferred and/or low rate effluent irrigation Wintering in a barn or a standoff Reduced flood irrigation by-wash Reduced over-watering Retirement of marginal land 	 Retention dams, bunds and sediment traps Strategic grazing of pasture within critical source areas (CSAs) Strategic grazing of crops within CSAs Tile drain amendments In-stream sorbents Alum applied to pasture of crops in CSAs Controlled release fertiliser Variable rate fertiliser Variable rate irrigation and fertigation On-off grazing in autumn/winter Edge of field attenuation Controlled drainage 		



Mitigation scenario modelling; 'established' and 'developing' mitigations

'Established' mitigation options



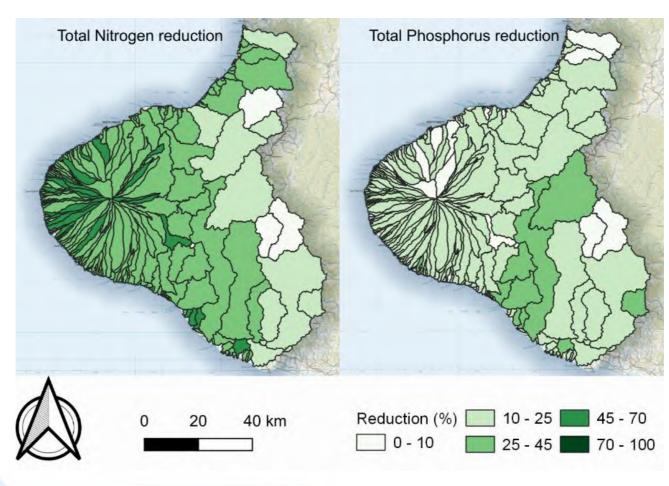


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Cox T, Snelder T, & Kerr T. (2024) Catchment mitigation simulations. Technical memorandum prepared for the Taranaki Regional Council.

Mitigation scenario modelling; 'established' and 'developing' mitigations

• 'Established' and 'developing' mitigation options



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Cox T, Snelder T, & Kerr T. (2024) Catchment mitigation simulations. Technical memorandum prepared for the Taranaki Regional Council.

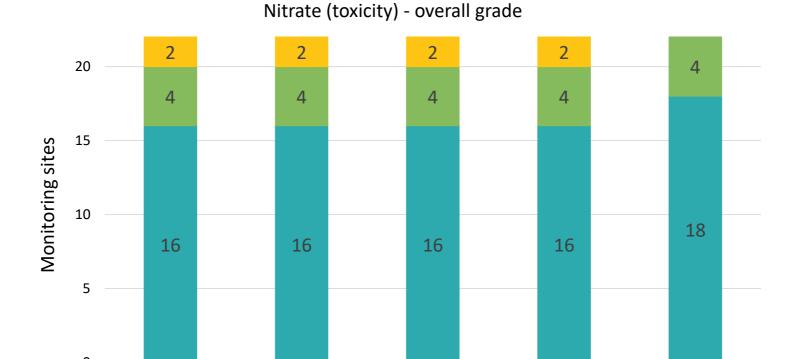
Draft target attribute states

Mitigation scenario modelling used to inform draft targets at 22 monitoring sites for the following three attributes

- Nitrate (toxicity)
- Ammonia (toxicity)
- Dissolved reactive phosphorous



Draft target attribute states; nitrate (toxicity)





Current

Baseline

A B C D

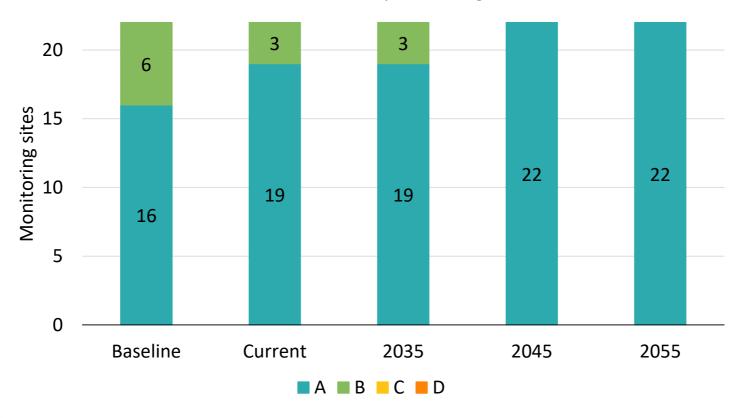
2035

2045

2055

Draft target attribute states; ammonia (toxicity)

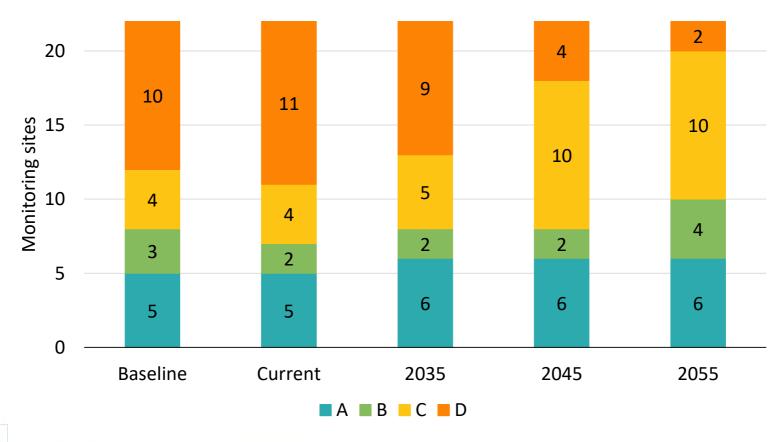






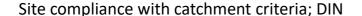
Draft target attribute states; DRP

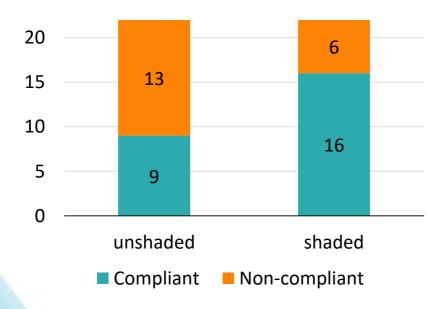
Dissolved reactive phosphorous - overall grade



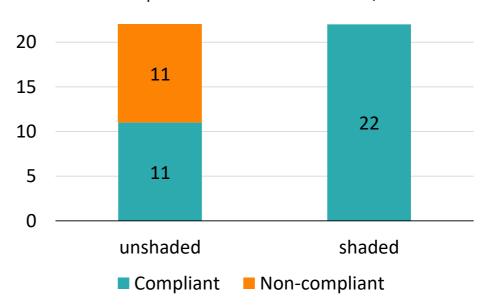


Monitoring site compliance with preliminary nutrient criteria for periphyton





Site compliance with catchment criteria; DRP





Summary

- Draft targets proposed at 22 monitoring sites
 - Nitrate (toxicity)
 - Ammonia (toxicity)
 - DRP
- Preliminary nutrient criteria established to help achieve periphyton targets; further refinement currently underway
- Reductions in instream nutrient concentrations are possible, but will require wider set of BMP mitigation options than current approach
- Some targets may be unattainable with available mitigation strategies alone
- Scoping potential case study catchments to explore mitigations and actions (what might be possible)



Thank you for your attention!







Date: 11 June 2024

Subject: Source Water Risk Management Areas for Municipal Drinking Water Supplies

Author: V McKay, Manager – Environmental Assurance

Approved by: A J Matthews, Director - Environment Quality

Document: 3275523

Purpose

1. To present to the Committee source water risk management areas (SWRMA) for municipal drinking water supplies in Taranaki.

2. Taranaki Regional Council has commissioned Pattle Delamore Partners Ltd to undertake this work, in partnership with the district councils.

Executive summary

- Contaminants, such as microorganisms, pose a risk to human health when they enter drinking water supplies. The provision of safe drinking water requires proactive risk management at every stage of the supply process.
- 4. Since 2017, following the outbreak of campylobacter in the Havelock North drinking-water supply, the Council has been working in collaboration with our district councils to improve the management of drinking-water in our region. To ensure we are meeting our legislative requirements, the Council recently commissioned Pattle Delamore Partners Ltd (PDP) to delineate source water risk management areas (SWRMA) for municipal drinking water supplies providing water to more than 500 people.
- 5. Protection of source water is important, not only because improving water quality is consistent with New Zealand's freshwater management framework, but because it is not always possible to remove contaminants through treatment processes. A key finding of the enquiry into the Havelock North contamination incident was the need for a multi-barrier approach to reduce risk at every step of the process – from source to tap. Source water protection is also important for giving effect to Te Mana o te Wai, as it addresses first and foremost, the health of the water bodies from which drinking water is extracted.
- 6. Defining each SWRMA involves delineating three areas, within which risks to the drinking water supply intake from contaminant sources are identified and can then be appropriately managed. The size and shape of the risk management areas takes into account the characteristics of migration pathways through the subsurface environment, over land and via surface water.
- 7. Source water risk management areas have been delineated for the 11 main municipal drinking water supplies in Taranaki. The next step is to identify any potential sources of contamination, such as land use activities or discharges that are consented within the SWRMA, particularly within the intake and intermediate protection zones. This will ensure that: (1) consent holders are aware of the potential risk

that their activities pose to any downstream intake; (2) we continue to work with the district councils to manage any identified risks; and (3) the protection of drinking water sources is accommodated within the Council's proposed Land and Freshwater Plan.

Recommendations

That Taranaki Regional Council:

- a) receives this memorandum Source Water Risk Management Areas for Municipal Drinking Water Supplies and the accompanying report Delineation of Source Water Risk Management Areas for selected municipal water supplies in the Taranaki Region
- b) notes the recommendations and next steps.

Background

- Drinking water security has been a significant focus for New Zealand following an incident in Havelock North in August 2016, where drinking water contaminated with campylobacter resulted in four deaths and between 6,260 and 8,320 people contracting gastroenteritis (Gilpin et al., 2020).
- 9. Untreated or inadequately treated drinking-water presents a significant risk to human health. In New Zealand, drinking-waterborne gastrointestinal disease has been estimated to affect around 18,000 to 34,000 people per year (MoH, 2019). In the ten years prior to 2019, approximately 3 to 10% of enteric disease outbreaks in New Zealand were recorded as waterborne (MoH, 2019), i.e. via a drinking water source or through direct contact with contaminated recreational waters.
- 10. The numbers and rates of waterborne illness are known to be underestimated because not all people who become ill are accounted for in national statistics. A New Zealand study estimated that only one out of every 222 community cases of acute gastroenteritis illness is notified (MoH, 2019). There are a number of reasons for this: some people are infected but asymptomatic; some people that are ill do not visit a doctor; a lack (or refusal) of testing; or a lack of reporting if an illness is non-notifiable (e.g. norovirus).
- 11. The Havelock North incident prompted a Government enquiry that looked into: how the Havelock North water supply system became contaminated; how this was subsequently addressed; how local and central government agencies responded to the public health outbreak that occurred as a result of the contamination; and how the risk of outbreaks of this nature could be prevented from recurring.
- 12. The findings of the enquiry led to significant changes in requirements for the management of drinking water in New Zealand. This included changes to the roles and responsibilities of various agencies, and the establishment of a dedicated water services regulator, Taumata Arowai. The roles and responsibilities of the various agencies, including regional councils, are outlined in greater detail later in this memorandum.

Drinking water legislation

13. There are a number of legislative documents that apply to the management of drinking water in New Zealand including, but not limited to: the Water Services Act 2021; Water Services (Drinking Water Standards for New Zealand) Regulations 2022; National Standards for Sources of Human Drinking Water (NES-DW). The Resource Management Act 1991 and National Policy Statement for Freshwater Management 2020 (NPS-FM) also set out requirements for the management of freshwater more broadly.

Water Services Act 2021

14. The Water Services Act 2021 sets out a regulatory framework and requirements for drinking water suppliers to provide safe drinking water to consumers. Water suppliers must have a drinking water

- safety plan, and consistently comply with legislative requirements (such as drinking water standards). They must also provide a source water risk management framework that, together with the Resource Management Act 1991, regulations made under that Act, and the NPS-FM, enables risks to source water to be properly identified, managed, and monitored.
- 15. This Act seeks to provide transparency to communities about the performance of drinking water, wastewater, and stormwater networks and network operators. It aims to:
 - build and maintain capability among drinking water suppliers and across the wider water services sector
 - ensure that each supply is able to support the ordinary drinking water and sanitary needs of consumers
 - establish a framework for the continuous and progressive improvement of the quality of water services in New Zealand.

Water Services (Drinking Water Standards for New Zealand) Regulations 2022

16. These standards set limits for the concentration of a range of determinands, such as *Escherichia coli*, heavy metals and chemicals in drinking water. The limits are referred to as maximum acceptable values (MAVs) which must not be exceeded at any time. Under the Water Services Act 2021, all drinking water suppliers must ensure that the drinking water they supply complies with the standards, regardless of the nature of the source water used or the number of people served by the supply.

National Standards for Sources of Human Drinking Water (NES-DW)

- 17. The National Environmental Standards for Sources of Human Drinking Water (NES-DW) came into effect in 2008 and are currently being reviewed by the Ministry for the Environment. The standards require regional councils to consider the effects of activities on drinking water sources in their decision making.
- 18. These standards are relevant to regional councils as they require us to:
 - decline discharge or water permits that are likely to result in community drinking water becoming unsafe for human consumption following existing treatment
 - be satisfied that permitted activities in regional plans will not result in community drinking water supplies being unsafe for human consumption following existing treatment
 - place conditions on relevant resource consents requiring notification of drinking water suppliers if significant unintended events occur (e.g. spills) that may adversely affect sources of human drinking water.
- 19. The NES-DW sets out different requirements depending on the number of people that a registered water supply provides for, and the number of days per year water is supplied. The most stringent requirements relate to registered drinking-water supplies that provides no fewer than 501 people with drinking water for not less than 60 days each calendar year. The NES-DW also sets out requirements for registered drinking-water supplies that provides no fewer than 25 people with drinking water for not less than 60 days each calendar year.
- 20. The NES-DW requires proactive risk management at every stage of the supply process. This 'multi-barrier' approach ensures protections are in place from the catchment where water is taken through to delivery to individual customers ('source to tap'). The 'first barrier' is ensuring adequate protection of source water our rivers, lakes and groundwaters from contamination.
- 21. It is noted that work was initially undertaken by the Council to define generic drinking water protection zones, following the release of the original NES-DW. The recent development of SWRMAs for groundwater and surface water ensures these zones/areas align with current best-practice.

Other documents and legislative changes

- 22. In 2018 the Ministry for the Environment (MfE) published the Technical Guidelines for Drinking Water Source Protection Zones (SPZ), based on international best practice for delineating and implementing source protection zones for drinking water sources. Updated guidelines for delineating source water risk management areas (SWRMA) were released in September 2023. Delineation of SWRMA for Taranaki municipal drinking water supplies has been undertaken in line with the most recent guidance.
- 23. During 2022 the Government consulted on proposed amendments to the NES-DW. The Ministry for the Environment is continuing to progress work on proposed amendments to the NES-DW. These proposals include requiring the mapping of source water risk management areas, as well as providing direction on specific activity controls in these different risk areas, in order to improve the clarity of the NES-DW and enable better implementation of the rules. It is our understanding that further work is continuing during 2024.

Roles and responsibilities

- 24. There are a number of different organisations with responsibilities for managing and monitoring potable drinking-water in New Zealand, including Taumata Arowai the water services regulator, regional councils, district councils and other water suppliers, as well as Manatū Hauora / Ministry of Health who remains responsible for drinking-water policy.
- 25. The need for better collaboration between agencies involved with drinking-water management was a key finding of the Havelock North Inquiry. Since 2017, the Council has been working in collaboration with the relevant agencies to improve drinking-water management in the region.

Regional Councils

- 26. Regional councils have responsibilities pertaining to water quality under both the Resource Management Act (RMA) and regulations set out in the NES-DW. With respect to water quality under the RMA, regional councils are responsible for the use of land for the purposes of maintaining and enhancing freshwater; and the discharge of contaminants into or onto land, air or water, and discharges of water into water. Drinking-water suppliers require a resource consent from the regional council to take water and as part of the determination of that consent, the regional council must have regard to the relevant provisions of the NES-DW.
- 27. Under the WSA 2021, regional councils are required to publish and provide Taumata Arowai with information on source water quality and quantity in their region annually, including any changes that may occur. As the regional council, we are also required to assess the effectiveness of regulatory and non-regulatory interventions to manage risks or hazards to source water in the region at least once every three years and make this information available to the public on our website.
- 28. The Regional Council is also required to consider the impacts of activities on drinking water supplies under the NPS-FM. This includes ensuring freshwater meets the health needs of people (including drinking water) as the second priority in the hierarchy of obligations that provide for Te Mana o te Wai.

District Councils and other water suppliers

- 29. The planning and policy functions of district councils (in relation to drinking water) are narrower than those of regional councils however, they are responsible for creating and implementing district plans, which must not be inconsistent with regional plans. District councils also have responsibilities as consent holders for water take consents and must comply with the conditions of those consents.
- 30. As drinking-water suppliers, district councils are required to manage and monitor drinking-water supplies to ensure the supply complies with the Drinking-water Standards for New Zealand (DWSNZ), take reasonable steps to protect both the source of this supply from contamination and the supply system from pollution, and prepare and implement a Water Safety Plan.

31. Under the current legislation, all suppliers, except domestic self-suppliers, not registered with the Ministry of Health by November 2022, must register with Taumata Arowai by November 2025, and produce a Source Water Risk Management Plan by November 2028.

Taumata Arowai

- 32. Since November 2021, Taumata Arowai has been the water services regulator for Aotearoa New Zealand. Its role is to ensure communities have access to safe and reliable drinking water every day; Taumata Arowai also has an oversight role in relation to the environmental performance public wastewater and stormwater networks.
- 33. Taumata Arowai provides a range of guidance information packs for water supplies and information for the public on their local drinking water supply. Information can be found at https://www.taumataarowai.govt.nz/.

Discussion

- 34. To ensure both local authorities are able to meet their requirements regarding the protection of drinking water quality, the Council (in partnership with district councils) recently commissioned Pattle Delamore Partners Ltd (PDP) to delineate source water risk management areas (SWRMAs) around community drinking water supplies in Taranaki providing water to 500 or more people.
- 35. The delineation of risk management areas will enable local authorities and water service providers to identify potential sources of contamination within each SWRMA, and better assess the potential effects of permitted and consented activities on drinking water sources, for example:
 - Land-use activities, potential sources of contamination, and other water users that could affect the quality or quantity of the source of a drinking water supply
 - Water quality monitoring of the source of a drinking water supply conducted by a regional council
 - Known risks or hazards that could affect the source of a drinking water supply.
- 36. Regional councils have the additional role of assessing the effectiveness of interventions to manage risks and hazards to source water in their regions. This must be done at least once every three years and the resulting information must be made available to the public through regional council websites. We are also required to publish information annually about the quality and quantity of source water in their regions.

Source water risk management areas

- 37. The WSA 2021 defines a 'source' as the water body from which water is abstracted for use in a drinking water supply. Examples of sources include rivers, streams, lakes, aquifers and rainwater. As part of drinking water safety planning, suppliers must prepare and implement a source water risk management plan. These plans outline the hazards and risks associated with the source water and how these will be managed. The source water risk management plan becomes part of the supplier's drinking water safety plan.
- 38. Defining a SWRMA involves delineating an area within which risks to a drinking water supply intake from contaminant sources are identified and appropriately managed. The size and shape of the source protection zone takes into account the characteristics of migration pathways that occur over land and through surface water and the subsurface environment.
- 39. The source-pathway-receptor concept applies to SWRMA delineation. The receptors are the drinking water supply intakes. A range of potential sources of contamination will exist in different catchments, such as (but not limited to) micro-organisms, solvents, dissolved metals and, emerging contaminants. SWRMA delineation involves considering potential pathways over land, through surface water and the subsurface environment that would allow contaminants to reach the water supply intakes.

- 40. For groundwater sources, risk management areas include the following:
 - **SWRMA 1**: The immediate area around the bore, the aim is to prevent and manage the risk of contaminants entering the bore directly or via the bore casing.
 - **SWRMA 2**: The area around, and upgradient of, a groundwater source where the aim is to limit the potential for microbial pathogens to reach the source where they are in an infective state.
 - **SWRMA 3**: The entire groundwater catchment to a source where the aim is to capture cumulative effects and/or persistent contaminants that may not dilute or attenuate significantly before reaching a point source.
- 41. For surface water sources, the definition of the SWRMA is based on the MfE (2023) guidelines, summarised below:

Intake Protection Zones (Surface water SWRMA 1)

- Rivers the river and its bed 1,000 m upstream and 100 m downstream of the intake, extending 5 meters into land from the edge of the river. Including all tributaries in that distance
- Lakes the lake and its bed within a 500 m radius of the intake, extending 5 m into land from the edge of the bed of the lake. Including all tributaries in the distance.

Intermediate Protection Zones (Surface water SWRMA 2)

- Rivers the river and its bed within 8 hours travel time upstream and 100 m downstream of the intake, extending 100 m into land from the edge of the river. Including all tributaries in that distance
- Lakes the entire lake area, extending 100 m landward from the edge of the bed of the lake, and 100 m either side of all tributaries where water travels to the lake within an 8-hour period.

Entire Catchment Zones (Surface water SWRMA 3)

- Surface water catchment boundary (from 100m downstream of the intake in rivers).
- 42. As of 26 May 2024, 46 water supplies in the Taranaki region have been registered with Taumata Arowai. In addition to water supplies operated by the district councils, registered supplies include a number of schools, education centres and water carriers.
- 43. Of those registered supplies, eleven supplies are registered as serving more than 500 people, all of which are owned and operated by the district councils. Source water risk management areas have now been delineated for all of these supplies, encompassing 13 groundwater bores and 17 surface water takes. These are set out in Table 1 below.

Table 1 Municipal drinking water supplies and distribution zones for council owned/operated supplies in Taranaki serving more than 500 people.

Water Supply	Owner / Operator	Distribution Zone	Population		Source (number of sources)
Pātea	STDC	Pātea		310	Groundwater (4)
Waverley STDC		Waverley	878		Groundwater (3)
		Waverley Beach	36 + campground		Groundwater (1)
Ōakura	NPDC	Ōakura	2008		Groundwater (2) Surface water (1)
Okato	NPDC	Okato	802		Surface water (1)
		Hawera	10,108		
Hawera	STDC	Normanby	1,126	11,761	Groundwater (2) Surface water (1)
		Ohawe Beach	268		Surface Water (1)

Water Supply	Owner / Operator	Distribution Zone	Population		Source (number of sources)	
		Okaiawa	259			
Waimate		Waimate West Rural	1,342		Groundwater (1)	
West	STDC	Kaponga	321	2,635	Surface water (3)	
		Manaia	972			
Eltham	STDC	Eltham	2,0)64	Surface water (1)	
Inaha	STDC	Inaha	Inaha 561		Surface water (3)	
		New Plymouth	49,573			
New	NDDC	Bell Block	7,289	66.563	Configuration (A)	
Plymouth	NPDC	Urenui/Tikorangi	1,527	66,562	Surface water (4)	
		Waitara	8,173			
Opunake	STDC	Opunake	1,4	146	Surface water (1)	
Stratford	SDC	Stratford	6,7	773	Surface water (2)	

44. A map showing the location of the main municipal water supply takes in Taranaki is provided in Figure 1. Figures 2 and 3 provide examples of groundwater and surface water risk management areas delineated for Oakura and Stratford, respectively.

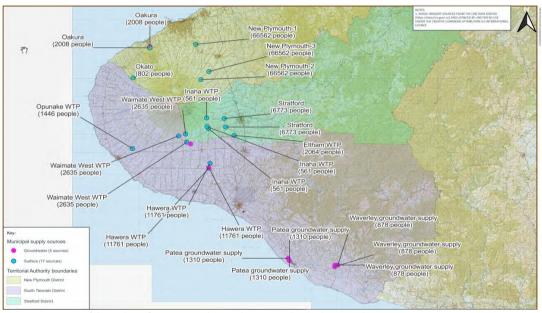


Figure 1: Location of the main surface water and groundwater supplies in the Taranaki region.

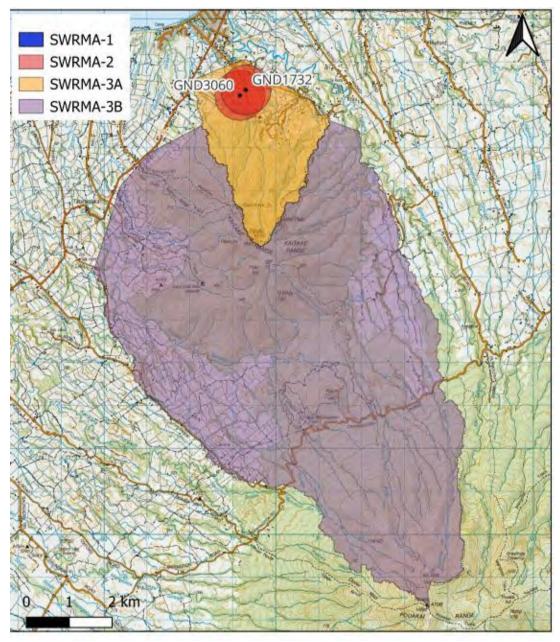


Figure 2: Oakura groundwater supply SWRMA



Figure 3: Stratford water supply SWRMP

45. All SWRMAs have been provided as a GIS file, which will be hosted on Local Maps https://maps.trc.govt.nz/LocalMapsGallery/. A summary sheet for each source showing the source zone and comments on any obvious issues identified within each zone has also been provided to each water supplier.

Recommendations and next steps

- 46. Source water risk management areas have been delineated for the 11 main municipal drinking water supplies in Taranaki. As outlined in the report conclusions and recommendations, a further stage of work involves identifying consented activities within each SWRMA, particularly within the intake and intermediate protection zones.
- 47. This work is now underway and will help inform consent holders of the potential risk that their activities pose to the downstream intakes. This includes consideration of land use activities, discharges, and contaminated sites such as landfills and HAIL (Hazardous Activities and Industries List) sites within each SWRMA. We will continue to work with the district councils to identify / mitigate any risks to drinking water sources. This information will also assist the Council in meeting any reporting requirements in relation to source water quality.
- 48. Additional scrutiny of existing and proposed consented activities, along with permitted activities, within those areas will also help to ensure that risks are proactively identified and mitigated/managed in an appropriate way through the Council's future policies and plans. Further work will be undertaken with the Council's consents and policy teams to ensure the necessary steps are put in place, and that these new requirements are considered in the development of Council's proposed Land and Freshwater Plan.

Financial considerations—LTP/Annual Plan

49. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

50. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991, Water Services Act 2021, Water Services Regulator Act 2020, Health Act 1956 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

- 51. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.
- 52. It is recognized that iwi/hapū will own/operate a number of their own drinking water supplies throughout the region. The Council will also be able to provide environmental data and information to iwi/hapū as they work toward meeting their requirements for drinking water source protection.

Community considerations

- 53. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.
- 54. This work was undertaken in partnership with the region's district councils, with in-kind support provided by council officers through data provision and technical review. The Council will also be able to provide environmental data and information to other water suppliers as they work toward meeting their requirements for drinking water source protection.

Legal considerations

55. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

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Ministry of Health. 2019. Ministry of Health Drinking Water Quality Guidelines for New Zealand.

Appendices/Attachments

Document 3275567: <u>Delineation of Source Water Risk Management Areas for selected municipal water supplies in the Taranaki Region.</u>

Delineation of Source Water Risk Management Areas for selected municipal water supplies within the Taranaki Region

: Prepared for

Taranaki Regional Council

: April 2024



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TITLE

TARANAKI REGIONAL COUNCIL - DELINEATION OF SOURCE WATER RISK MANAGEMEN

Quality Control Sheet

Delineation of Source Water Risk Management Areas for selected municipal

water supplies within the Taranaki Region

CLIENT Taranaki Regional Council

ISSUE DATE April 2024

JOB REFERENCE CO4628500

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Limitations:

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TARANAKI REGIONAL COUNCIL - DELINEATION OF SOURCE WATER RISK MANAGEMENT AREAS FOR SELECTED MUNICIPAL WATER SUPPLIES WITHIN THE TARANAKI REGION

Table of Contents

SECTION		P A G
1.0	Introduction	1
2.0	Hydrogeological setting	1
3.0	Delineation of Groundwater SWRMA	2
3.1	Introduction	2
3.2	Pātea	3
3.3	Waverley and Waverley Beach	4
3.4	Ōākura	5
3.5	Hawera	5
3.6	Waimate-West	6
4.0	Delineation of Surface Water SWRMA	6
4.1	Introduction	6
4.2	Intake protection zone	7
4.3	Intermediate protection zone	7
4.4	Whole catchment protection zone	8
5.0	Conclusions and recommendations	9
6.0	Reference List	9

Table of Tables

Table 1: Pātea SWRMA	4
Table 2: Waverley and Waverley Beach	4
Table 3: Õākura	5
Table 4: Hawera	5
Table 5: Waimate-West	6

Appendices

Appendix A: Groundwater SWRMA plots

Appendix B: Surface water SWRMA plots

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PATTLE DELAMORE PARTNERS LTD



1.0 Introduction

Pattle Delamore Partners (PDP) has been engaged by Taranaki Regional Council (TRC) to assist with developing source water risk management areas (SMRMA) for groundwater and surface water supplies in the Taranaki region identified in the report dated 8 December 2023, which serve more than 500 people. A map showing the location of the supplies for which SWRMA were delineated is provided in Figure 1.

Delineation of SWRMA has been undertaken based on the MfE guidelines (2023), which state that the SWRMA should consist of three zones around a potable water source: SWRMA-1, SWRMA-2 and SWRMA-3. Details and methods of delineation are presented in the following sections of this report.

2.0 Hydrogeological setting

The hydrogeological setting in the Taranaki region can be divided into (a) aquifers hosted within the marine sedimentary rocks of the Taranaki basin deposited in the Miocene-Pliocene, and (b) aquifers hosted within Quaternary volcanics of the Taranaki Volcano which unconformably overlie the Miocene-Pliocene sediments. Towards the coast, and particularly in the south, Quaternary sediments predominantly of beach origin overlie the marine sequences.

Groundwater is predominantly recharged by rainfall infiltration, and groundwater flows radially from Mt Taranaki. Towards the east of Mt Taranaki, a divide occurs where the easterly component of flow from Mt Taranaki meets the westerly component of groundwater flow originating from further inland and the Whanganui National Park. At this divide, groundwater is either deflected north or south towards the coast.

The bores at Waimate-West, Hawera and Ōākura are located within Quaternary deposits produced by the Taranaki Volcano (including those of the former Pouakai and Kaitake volcanoes). Lavas and their associated breccias dominate proximal to the eruption centre, and with distance grade to interbedded ash, tuff, pyroclastic flow, debris flow and lahar deposits, which are often reworked by rivers. The deposits are irregular and contain both coarse (blocks and boulders) and fine grained (mud and ash) material, resulting in anisotropic hydrogeologic conditions.

As such, the aquifers within the Taranaki volcanics are complex with systems of unconfined, perched, and semi-confined aquifers. The Waimate-West and Hawera supply bores are screened within distal deposits produced by the younger Taranaki Volcano, whereas the Ōākura supply bores are screened within andesites of the Kaitake Volcano and debris flow deposits from the Pouakai Volcano. Recharge into the aquifers hosted in the Taranaki Volcanics is predominantly via rainfall infiltration.



In contrast, the supply bores for Waverley and Pātea are screened within the early-mid Pliocene marine sediments of the Whenuakura formation, which is the uppermost exposed formation of the Taranaki basin sequences at the sites. The Whenuakura formation consists of interbedded marine mudstones (papa), fine loose sands, sandstone, shellbeds and occasional hard concretionary bands. It has a regional geological dip of 2–4 degrees to the southwest and outcrops approximately 8–30 km inland from the coast. It is the principal aquifer bearing formation along the coast south of Taranaki and hosts several semi-confined aquifers within the more permeable sand layers. Towards the coast it is unconformably overlain by Pleistocene to recent sediments, predominantly of beach and marine origin.

Aquifers in the Whenuakura formation are recharged by direct rainfall infiltration into the Whenuakura formation where it is in outcrop or via overlying sediments, and surface water loss to groundwater from rivers and streams that cross the Whenuakura formation and overlying sediments.

3.0 Delineation of Groundwater SWRMA

3.1 Introduction

For groundwater sources, the SWRMA include the following:

- SWRMA 1: The immediate area around the bore, where the aim is to prevent and manage the risk of contaminants entering the bore directly, or via the bore casing. The default radius of 5 m radius around the bore head was applied here.
- SWRMA 2: The area around, and upgradient of, a groundwater source where the aim is to limit the potential for microbial pathogens to reach the source where they are in an infective state. This area covers the ground surface above where groundwater travels to the intake within a 1-year timeframe and extends to a maximum distance of 2.5 km. There are a number of different methods by which this area can be calculated, involving more or less data and which are applicable to bores in different hydrogeological settings. The public supply bores in the Taranaki area are generally more than 100 m deep and target confined or semiconfined strata. As a result, the risk of direct contamination due to surface influences is limited. In addition, the depth of the bores, together with the generally low permeability of the strata in the area described above means that horizontal groundwater gradients at depth are likely to be relatively flat.

Therefore, the SWRMA zone was calculated using the calculated fixed radius method of Toews and Gusyev (2013) as outlined in the MfE guidelines (2023):



$$r = \sqrt{\frac{Qt}{\pi nb}}$$

Where the radius (r) is calculated from the pumping rate (Q), the aquifer effective porosity (n) and the aquifer thickness (b), over the specified time interval (t) of 1-year. The screened interval was used at the aquifer thickness, and where there were multiple screened sections for a singular bore the smallest screened interval was used as this yields the highest radius. A maximum screened interval of 25 m was applied for the cases where the screened interval was larger than this, to account for layering and heterogeneities within the screened interval. As there was no effective porosity information available for the aquifers, a conservative approach was applied and a low effective porosity of 0.05 was used for the calculations.

SWRMA-2 radii of 350-600 m were generally calculated. The radii were considered appropriate following information provided of a contamination incident in the Pātea wells, attributed to poor bore head security at a neighbouring bore located around 350 m away.

SWRMA 3: The entire groundwater catchment to a source where the aim is to capture cumulative effects and/or persistent contaminants that may not dilute or attenuate significantly before reaching a source point. Here, the SWRMA 3 was defined by the entire catchment area for rainfall infiltration into the specific aquifer, and the entire catchment area for any river which may lose groundwater into the aquifer system. Where the catchment area is large, SWRMA-3 was divided into a higher risk zone (SWRMA-3A), which typically represents the area of likely recharge to groundwater (via rainfall infiltration or seepage from rivers), and a lower risk zone (SWRMA-3B), which typically represents the broader surface water catchment to streams and rivers that may seep to groundwater.

Summaries of the results of the SWRMA's for groundwater sources are presented in following sections. Maps of the SWRMA's and full details relating to each site are provided in Appendix A.

3.2 Pātea

The Pātea groundwater supply takes water from 4 bores, screened at depths between 61 and 154 m bgl within the early-mid Pliocene Whenuakura formation of interbedded marine mudstones, sandstones and sands. The supply services a population of 1310 people with a maximum combined rate of 24.7 L/s.



Table 1: Pā	Table 1: Pātea SWRMA							
Bore ID	Radius of SWRMA-1	Radius of SWRMA-2	SWRMA-3					
GND0073	5 m	575 m	Defined as the entire catchment area for					
GND0075	5 m	516 m	both rainfall infiltration into the					
GND2197	5 m	445 m	Whenuakura formation or the overlying sediments, and the entire catchment as					
GND2361	5 m	575 m	for the Pātea River. SWRMA-3 has been separated into a higher-risk zone (SMRMA-3A) and a lower-risk zone (SMRMA-3B), defined by the western extent of the Whenuakura formation.					

Notes.

Data was provided either directly by TRC or sourced from Pātea Source water risk management plan, October2023, published by South Taranaki District Council

3.3 Waverley and Waverley Beach

The Waverley groundwater supply takes water from 3 bores (GND0244, GND0059 and GND2242), screened at depths of ca. 110–170 m bgl within the early-mid Pliocene Whenuakura formation of interbedded marine mudstones, sandstones and sands. The supply services a base population of 878 people with a maximum combined rate of 14.2 L/s. The Waverley Beach groundwater supply takes water from 1 bore (GND1061, depth 91 m), also assumed to be screened within the Whenuakura formation, which services a community of around 50 dwellings and a campground, with a maximum rate of 1.5 L/s.

Table 2: Waverley and Waverley Beach						
Bore ID	Radius of SWRMA-1	Radius of SWRMA-2	SWRMA-3			
GND2242	5 m	436 m	Defined as the entire catchment area for both			
GND0059	5 m	436 m	rainfall infiltration into the Whenuakura			
GND0244	5 m	597 m	formation or the overlying sediments, and the entire catchment area for the Whenuakura and			
GND1061	5 m	245 m	Waitotara Rivers. SWRMA-3 has been separated into a higher-risk zone (SMRMA-3A) and a lower-risk zone (SMRMA-3B), defined by the western extent of the Whenuakura formation.			

Notes

Data was either provided by TRC or sourced from Waverley drinking water source water risk assessment, December 2021, published by South Taranaki District Council, or Wairoa (Waverley) Beach Domain drinking water source water risk assessment, November 2022, published by South Taranaki District Council.

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3.4 Ōākura

The Ōākura groundwater supply takes water from 2 bores (GND3060, GND1732), screened at depths of ca. 125–185 m bgl. A base population of 2008 people are supplied by the bores, which have a maximum combined consented rate of 43 L/s. The bores are screened within Quaternary volcanic deposits of either the volcanic debris avalanche deposits of the Maitahi Formation or within the andesite lava flow sequences of the older Kaitake volcanic complex.

Bore ID	Radius of SWRMA-1	Radius of SWRMA-2	SWRMA-3
GND3060	5 m	587 m	Defined as the entire area upgradient of the
GND1732	5 m	587 m	site up to the peaks of Mt Pouakai. SWRMA-3 has been separated into a higher-risk zone (SWRMA-3A) defined by the northern flanks of the Kaitake Range, and a lower-risk zone (SWRMA-3B) defined as the entire potential catchment.

Notes

Data was either provided by Taranaki Regional Council or sourced from New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2020-2021. Technical Report 2021-18. Taranaki Regional Council.

3.5 Hawera

The Hawera groundwater supply take water from 2 bores (GND2005, GND2021), screened at depths of ca. 140–452 m bgl within Quaternary volcanic deposits and reworked volcanic material from Taranaki Volcano. The supply is abstracted for municipal, rural, industrial, and recreational purposes with a maximum combined consented rate of 50 L/s as a combined total or up to 4,320 m³/day.

Table 4: Hawera						
Bore ID	Radius of SWRMA-1	Radius of SWRMA-2	SWRMA-3			
GND2021	5 m	879 m	SWRMA-3 is defined as the entire area			
GND2005	5 m	879 m	upgradient of the site up to the peak of Mt Taranaki and the catchment for the Kapui			
			Stream.			

Notes.

Data was either provided by Taranaki Regional Council or sourced from New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2021-2022. Technical Report 2022-34. Taranaki Regional Council.

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3.6 Waimate-West

The Waimate-West groundwater supply takes water from 1 bore (GND2511) screened at depths of 85–131 m bgl within Quaternary volcanic deposits and reworked volcanic material from Taranaki Volcano. The supply is abstracted for the purpose of topping up supply from surface water during periods of peak demand and stream low-flow restrictions. A maximum volume of 432 m³/day is consented for the bore.

Bore ID	Radius of SWRMA-1	Radius of SWRMA-2	SWRMA-3
GND2511	5 m	200 m	Defined as the entire area upgradient of the site up to the peak of Mt Taranaki.

4.0 Delineation of Surface Water SWRMA

Annual Report 2021-2022. Technical Report 2022-34. Taranaki Regional Council.

4.1 Introduction

For surface water sources, the definition of the SWRMA is based on the MfE (2023) guidelines, summarised below:

- Intake Protection Zone (Surface Water SWRMA 1) will cover the following area:
 - Rivers the river and its bed 1,000 metres upstream and 100 metres downstream of the intake, extending 5 metres into land from the edge of the bed of the river, including all tributaries within that distance.
 - Lakes the lake and its bed within a 500 metre radius of the intake, extending 5 metres into land from the edge of the bed of the lake, including all tributaries within that distance.
- Intermediate Protection Zone (Surface Water SWRMA 2) will cover the following area:
 - Rivers the river and its bed within 8 hours travel time upstream and 100 m downstream of the intake, and 100 m landward of the edge of the bed of the river, including all tributaries within that distance.
 - Lakes the entire lake area, extending 100 m landward from the edge of the bed of the lake, and 100 m either side of all tributaries where water travels to the lake within an 8-hour period.



- Entire Catchment Zone (Surface Water SWRMA 3) will cover the following area:
 - Surface water catchment boundary (from 100 m downstream of the intake in rivers).

Further details on the process used to delineate each of the zones are provided below. Note that catchment boundaries and stream lines were defined based on the 2021 LiDAR dataset available for the Taranaki region.

Individual notes for each surface water supply are not listed here and in general, no specific issues were encountered that were unique to a particular supply. However, the New Plymouth supply from Lake Managamahoe is slightly unusual in that there is both a river intake (from the Waiwhakaiho River) as well as a direct intake from the lake. The two intakes are linked via a tunnel which runs from the river intake into the lake. Although the main intake for the New Plymouth supply is from the lake, this system requires that a Source Water Risk Management Area to be defined for the intake on the Waiwhakaiho River, in addition to the SWRMA for the lake.

Maps of each of the sources and associated SWRMA are provided in Appendix 2.

4.2 Intake protection zone

The SWRMA intake protection zones (Zone 1) were manually defined, based on a combination of both LiDAR elevation data and aerial photography to define the river beds. Where the river beds are obscured by vegetation or tree cover, this required an element of expert judgement as to the width of the stream bed and in general a conservative approach was used utilising the change in slope from LiDAR data.

For the New Plymouth supply from Lake Mangamahoe, SWRMA 1 covers virtually the entire lake because there are three intake points on the lake. Given the recreational area around the lake, it is worth highlighting this point with NPDC.

4.3 Intermediate protection zone

SWRMA intermediate zones were defined via a combination of methods.

The velocity of the streams and rivers from which water is taken is generally not defined with certainty. The majority of the surface water takes are located on either flat or moderately sloped areas, although their catchments typically extend towards the summit of Mt Taranaki where the slope of the rivers and streams is steep. Therefore, a default velocity of 2 m/s was used to define the 8 hour travel time. A 2 m/s velocity equates to a 57 km travel distance over 8 hours and in all cases, the intermediate zones extend to the edge of the surface water catchment.



- Where the river or streambed was visible through aerial imagery, the edge of the stream bed was manually delineated to match that data. However, in other cases, where the stream was obscured by trees, the stream bed was assumed to represent a 1 m wide line and the 100 m buffer around the stream was set based on the line. This approach may mean that the extent of the zone 2 areas is slightly underestimated in some areas. However, this effect is not expected to be significant.
- The location of streams was generally based on LiDAR data. However, the location of the points where streams begin to flow was based on a combination of LiDAR data as well as the Land Information New Zealand (LINZ) streams data. The LiDAR stream network was defined based on a flow accumulation threshold of 200,000 m² (20 hectares) which generally matched with the LINZ stream data. However, where the LINZ data extended further upslope, the LiDAR based stream network was extended to match the LINZ data (provided the LINZ data correctly reflected topography).
- The locations of small streams determined through this process were also manually checked and compared to aerial imagery. Where the aerial imagery indicated that a 'stream' simply represented potential flow path, but where no visible stream was present, the stream was removed from the network.
- The intermediate zones were also clipped to the edge of the catchment boundaries and in some areas, the width of the intermediate zone is therefore less than 100 m.

4.4 Whole catchment protection zone

The surface water SWRMA 3 (whole catchment) were defined based on LiDAR data and represent the catchment to 100 m downstream of each individual source.

In general, there is limited information regarding gaining and losing reaches of river, or surface water – groundwater interaction more generally. As discussed above in Section 2, groundwater flow radially from Mt Taranaki and groundwater flow directions are expected to generally align with surface water flow directions in that area. Therefore, we have not allowed for groundwater flow across a surface water catchment in the SWRMA for surface water sites, because most surface water catchments for the supplies extend towards the summit of Mt Taranaki.

Unlike some other areas of New Zealand, for example areas of the Canterbury Plains or the Heretaunga Plains in Hawkes Bay, extensive surface water and groundwater interaction is not a major feature of the surface water environment in Taranaki. Therefore, only considering surface water flow is not expected to increase the risk for surface water risk management areas.



5.0 Conclusions and recommendations

Source water risk management areas have been defined for community drinking water supplies to more than 500 people within the Taranaki region. Given the widely distributed nature of the source, and the potentially large source areas for some of the groundwater supplies, these areas cover a large area of the region, albeit with a particular focus around Mt Taranaki.

The scope of this work did not include identification of potential risks within the SWRMA, however much of the land use within the catchments is farming, which can pose a general risk to surface water supplies. Nonetheless, it is also notable that large parts of the catchments are within the national park land surrounding Mt Taranaki which provides a degree of protection to the sources by limiting the types of land use that can occur within the SWRMA.

A further stage of work may involve identifying discharges that are consented within the SWRMA, particularly within the intake and intermediate protection zones. Ensuring that these consent holders are aware of the potential risk that their activities pose to the downstream intakes will be important, as will additional scrutiny of consent applications within those areas. In addition, information on the location of contaminated sites including landfills and HAIL sites within each SWRMA should be collected and consideration given to the risks those activities may pose to the supplies.

6.0 Reference List

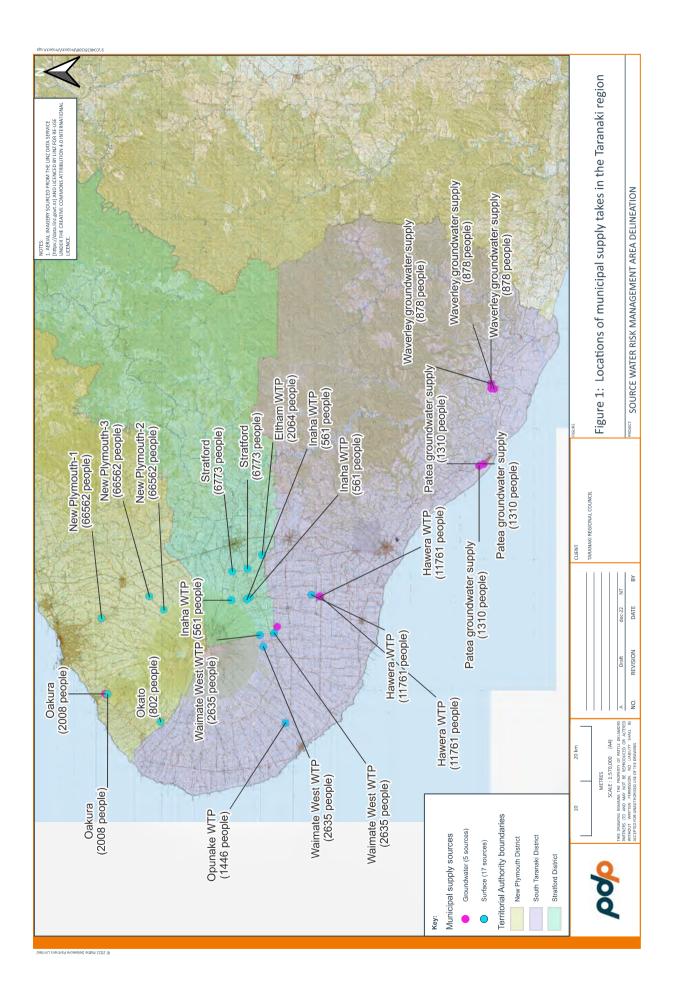
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Hawera Community Drinking Water Supply: Source Water Risk Management Areas

The Hawera groundwater supply takes water from 2 bores (GND2005, GND2021), screened at depths of ca. 140-452 m bgl for purposes of municipal, rural, industrial, and recreational supply. The bores have a maximum combined consented rate of 50 L/s, or 4320 m³/day, which can be abstracted from either a single bore, or both bores concurrently.

The bores are screened within Quaternary volcanic deposits and reworked volcanic material from Taranaki Volcano. Specifically, the geology at the site is mapped as volcanic debris avalanche deposits of the Ngaere formation comprising blocks and boulders of andesite bound in a clay-rich matrix. The Ngaere formation is likely underlain by similar debris flow deposits of the Opunake and Stratford formations (Townsend at al., 2008). Groundwater flows radially from Mt Taranaki and the regional hydraulic gradient bends from NW-SE to N-S in the area of the Hawera bores (Allis et al, 1997). Anisotropic hydrogeological conditions create complex systems of unconfined, perched and semi-confined aquifers within the deposits. The Hawera bores are noted as screened within a confined aguifer and as some of the highest yielding bores within the volcanic deposits of Taranaki (TRC 2021-86). Recharge to the aquifer is mainly by local rainfall infiltration upgradient of the site although some loss to groundwater from rivers may also

The Source Water Risk Management Areas (SWRMA) have been defined as per MfE (2023) Delineating source water risk management areas.

Source Water Risk Management Area-1

This is a zone directly surrounding the source water intake, where there is an immediate risk of contamination. There is little time for attenuation, or to respond to any contamination, before it enters the water supply. For groundwater sources, the aim is to manage the risk of contaminants entering the supply in or around the well casing. SMRMA-1 has a default distance of 5 m radius around wellhead.

Source Water Risk Management Area-2

This is a larger area where activities need to be appropriately managed to mitigate the risk of contamination or supply. For groundwater sources, the size is based on the land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. Here, it was calculated using the calculated fixed radius method of Toews and Gusyev (2013). For the bores at Hawera, this equates to a radius of 879 m. Results are presented in the table below:

	Screened interval(s)	Abstraction rates	Aquifer thickness∞	Effective porosity	Radius of SWRMA-2
Skeet Road: GND2021	417.9–430.9 m bgl 437.4–451.3 m bgl	50 L/s	13 m∞	0.05	879 m
Kapuni: GND2005	142–450 m bgl	50 L/s	13 m*	0.05	879 m

Data was either provided by Taranaki Regional Council or sourced from New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2021-2022, Technical Report 2022-34, Taranaki Regional Council,

Y The combined volume of water abstracted shall not exceed 4,320 m3/day, at a rate no greater than 50 L/s at an individual bore.

* Used the screened interval of GND2021 as the screened interval for this bore (>300 m) likely intersects several confined aquifers.

Source Water Risk Management Area-3

This is a larger area defined as the entire source water catchment for the wells. For the Hawera wells, SWRMA-3 encompasses the entire area upgradient of the site up to the peak of Mt Taranaki, and was characterised using the vectors published by Allis et al (1997), and the catchment for the Kapui Stream.

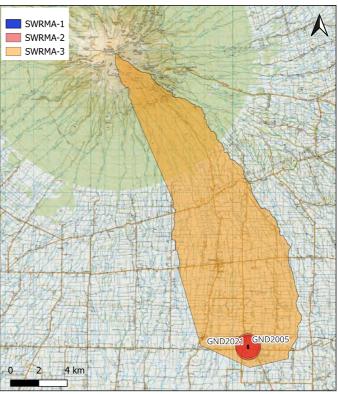
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Öākura Community Drinking Water Supply: Source Water Risk Management Areas

The Ōākura groundwater supply takes water from 2 bores (GND3060, GND1732), screened at depths of ca. 125–185 m bgl. A base population of 2008 people are supplied by the bores, which have a maximum combined consented rate of 43 L/s.

The bores are screened within Quaternary volcanic deposits and reworked volcanic material. It is unclear whether the bores are screened within the debris avalanche deposits of the Maitahi Formation formed from the collapse of Mt Pouakai or within the andesite lava flow sequences of the older Kaitake volcanic complex. Given the depth (125-185 m bgl) and proximity of the bores (300 m) to the former Kaitake volcanic complex, it is most likely that the bores are screened within this formation. Higher yielding confined aquifers have been reported in the volcanic deposits in the Kaitake Ranges than in the surrounding volcanics and debris avalanche deposits (TRC 2021-86).

Groundwater flows radially from the peaks of Mt Taranaki and Mt Pouakai, and the regional hydraulic gradient in the Ōākura area is from southeast to northwest. Due to its higher provenance, the Kaitake Range may receive higher rainfall than the surrounding area, hence forming a groundwater divide from which groundwater will also flow radially. However, isohyets published by Taranaki Regional Council show a general increase in rainfall inland from the coast towards Mt Taranaki with no local increase in rainfall in the Kaitake Range (although there do not appear to be any rainfall gauges located in the Kaitake Range). Therefore, the bores may receive groundwater from as far as the north-west slopes of Mt Pouakai, especially as the bores are deep (>150 m bgl), and confined within the higher-yielding Kaitake Range volcanics.

The Source Water Risk Management Areas (SWRMA) have been defined as per MfE (2023) Delineating source water risk management areas.

Source Water Risk Management Area-1

This is a zone directly surrounding the source water intake, where there is an immediate risk of contamination. There is little time for attenuation, or to respond to any contamination, before it enters the water supply. For groundwater sources, the aim is to manage the risk of contaminants entering the supply in or around the well casing. SMRMA-1 has a default distance of 5 m radius around wellhead.

Source Water Risk Management Area-2

This is a larger area where activities need to be appropriately managed to mitigate the risk of contamination or supply. For groundwater sources, the size is based on the land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. Here it was calculated using the calculated fixed radius method of Toews and Gusyev (2013). For the bores at Öākura, this equates to a radius of 587 m and results are presented in the table below:

	Screened interval	Abstraction rates	Aquifer thickness∞	Effective porosity	Radius of SWRMA-2
Ōākura: GND3060	126–173 m bgl	43 L/s	47 m	0.05	587 m
Ōākura: GND1732	135-185 m bgl	43 L/s	50 m	0.05	587 m

Data was either provided by Taranaki Regional Council or sourced from New Plymouth District Council Water Supplies Monitoring

Programme Annual Report 2020-2021. Technical Report 2021-18. Taranaki Regional Council. ¹ The total combined extraction rate was applied given the proximity of the bores.

∞ A maximum aquifer thickness of 25 m was applied to account for layering and heterogeneities within the screened interval (conservative).

Source Water Risk Management Area-3

SWRMA-3 a larger area defined as the entire source water catchment for the wells. For the Ōākura wells, this encompasses the entire area upgradient of the site up to the peaks of Mt Pouakai. In recognition that there are uncertainties in the extent of the catchment area, SWRMA-3 has been separated into a higher-risk zone (SWRMA-3A) and a lower-risk zone (SWRMA-3B). SWRMA-3A is defined by the northern flanks of the Kaitake Range and SWRMA-3B is defined as the entire potential catchment.

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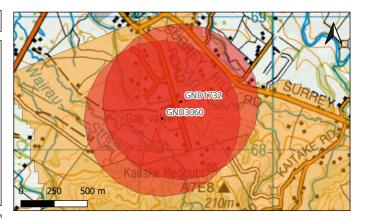
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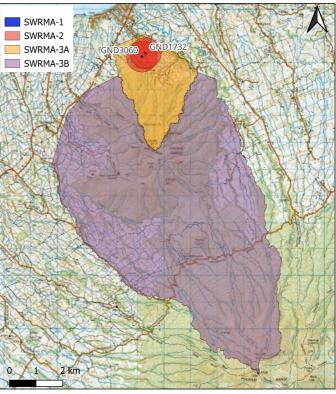
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Pātea Community Drinking Water Supply: Source Water Risk Management Areas

The Pātea groundwater supply takes water from 4 bores, screened at depths between 61 and 154 m bgl. The supply is consented for 1310 people with a maximum combined rate of 24.7 L/s. Bores GND0073, GND0075 and GND2361 are located adjacent to one another on Egmont Street, whilst GND2197 is located approximately 750 m to the north on Taranaki Road.

The bores are screened within the early-mid Pliocene marine sediments of the Whenuakura formation, which consist of interbedded marine mudstones (papa), fine loose sands, sandstone, shellbeds and occasional hard concretionary bands. The Whenuakura formation has a regional geological dip of 2 to 4 degrees to the southwest, and outcrops approximately 4–15 km to the NE, and at the site is overlain by 10–20 m of Holocene and Quaternary beach deposits. The regional hydraulic gradient is from northeast to southwest.

Aquifers within the Whenuakura formation are hosted within higher-permeability sand-dominated layers and can broadly be separated into an Upper Aquifer (~10–90 m bgl), and a Lower Aquifer (~100–150 m bgl). Mud-dominated layers which act as leaky aquitards overlie the Upper Aquifer and separate the Upper and Lower Aquifers. GND0073 abstracts from the Upper Aquifer whilst GND0075, GND2197 and GND2361 abstract from the Lower Aquifer. The aquifers are recharged from both direct rainfall infiltration into the Whenuakura formation or overlying sediments, and surface water loss to groundwater from the Patea River (Taylor and Evans, 1999).

The Source Water Risk Management Areas have been defined as per MfE (2023) Delineating source water risk management areas.

Source Water Risk Management Area-1

This is a zone directly surrounding the source water intake, where there is an immediate risk of contamination. There is little time for attenuation, or to respond to any contamination, before it enters the water supply. For groundwater sources, the aim is to manage the risk of contaminants entering the supply in or around the well casing. SMRMA-1 has a default distance of 5 m radius around wellhead.

Source Water Risk Management Area-2

SWRMA-2 is an area where activities need to be appropriately managed to mitigate the risk of contamination or supply. For groundwater sources, the size is based on the land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. For the bores here it was calculated using the calculated fixed radius method of Toews and Gusyev (2013). The results for each individual bore range from 445 to 575 m radius and are presented in the table below. Notably the decommissioned Brannigan bore is located within the SWRMA-2 for bores GND2361, GND0073 and GND0075. Former instances of recorded aquifer and drinking water contamination have been attributed to poor construction of this bore (STDC, pers comm).

	Screened interval(s)	Abstraction rate ^y	Aquifer thickness∞	Effective porosity	Radius of SWRMA-2
Pātea Bore 1: GND0073	61.5-76.5 m bgl	24.7 L/s	15 m	0.05	575 m
Pātea Bore 2: GND0075	121.3–139.9# m bgl	24.7 L/s	18.6 m	0.05	516 m
Pātea Bore 4: GND2197	96.5-141.5 m bgl	24.7 L/s	25 m	0.05	445 m
Pātea Bore 5: GND2361	115.5–130.5 m bgl 136–154 m bgl	24.7 L/s	15 m	0.05	575 m

Unless specified, data was sourced from Pātea Source water risk management plan, October 2023, published by South Taranaki District Council Y Total maximum combined extraction rate applied given the proximity of the bores.

∞ Screen interval used where ≤25 m. Where the bore has multiple screened intervals, the smallest screened interval was used. A maximum aquifer thickness of 25 m was applied to account for layering and heterogeneities within the screened interval (conservative). # provided by TRC

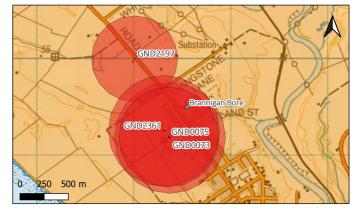
Source Water Risk Management Area-3

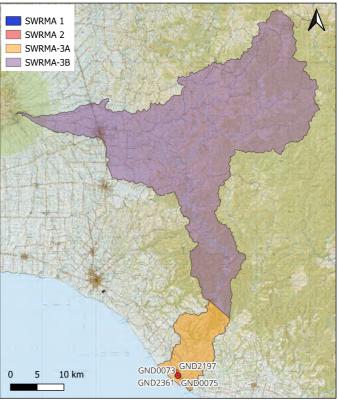
SWRMA-3 is defined as the entire source water catchment for the wells. For the Pātea wells, this encompasses the entire catchment area for both rainfall infiltration into the Whenuakura formation or the overlying sediments, and the entire catchment area for the Pātea River. In recognition that the catchment area for the Pātea River is extensive (>1000 km²), SWRMA-3 has been separated into a higher-risk zone and a lower-risk zone, defined by the western extent of the Whenuakura formation. Groundwater infiltration to the north of this (i.e. into the underlying formations) is unlikely to be a significant source of water for the aguifers within the Whenuakura formation.

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Taylor, C.B., and Evans, C.M. (1999). Isotopic indicators for groundwater hydrology in Taranaki, New Zealand. Journal of Hydrology (NZ) 38(3). pp 237–270.

Toews, M., Gusyev, M. (2013). GIS tools to delineate groundwater capture zones. GNS Science Report 2012/06. Wellington: GNS Science

Pātea Source water risk management plan, October 2023, published by South Taranaki District Council.





Waimate-West Community Drinking Water Supply: Source Water Risk Management Areas

The Waimate-West groundwater supply takes water from bore GND2511, screened at depths of 85–131 m bgl for the purpose of topping up supply from surface water during periods of peak demand and stream low flow restrictions. A maximum volume of 432 m³/day is consented for the bore.

The geology at the site is mapped as the Quaternary debris flow deposit of the Warea Formation, formed from a minor collapse of Mt Taranaki (Townsend at al., 2008). This deposit is likely underlain by further volcanic debris avalanche deposits of the Ngaere, Opunake, and Stratford formations, which are interbedded with tephra and lahar deposits (Townsend at al., 2008; Alloway et al., 2005).

Groundwater flows radially from Mt Taranaki and the regional hydraulic gradient bends southwards towards the coast in the area of bore GND2511 (Allis et al, 1997). Anisotropic hydrogeological conditions create complex systems of unconfined, perched and semi-confined aquifers within the deposits. Recharge to the aquifer is mainly by local rainfall infiltration upgradient of the site although some loss to groundwater from rivers may also occur.

The Source Water Risk Management Areas (SWRMA) have been defined as per MfE (2023) Delineating source water risk management areas.

Source Water Risk Management Area-1

This is a zone directly surrounding the source water intake, where there is an immediate risk of contamination. There is little time for attenuation, or to respond to any contamination, before it enters the water supply. For groundwater sources, the aim is to manage the risk of contaminants entering the supply in or around the well casing. SMRMA-1 has a default distance of 5 m radius around wellhead.

Source Water Risk Management Area-2

This is a larger area where activities need to be appropriately managed to mitigate the risk of contamination or supply. For groundwater sources, the size is based on the land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. Here, it was calculated using the calculated fixed radius method of Toews and Gusyev (2013). For the bore GND2511 at Waimate-West, using 25 m as the aquifer thickness, an effective porosity of 0.05 and the abstraction rate of 432 m³/day, this equates to a radius of 200 m. 25 m was applied as the aquifer thickness as a conservative approach to account for layering and heterogeneities within the screened interval (46 m).

Source Water Risk Management Area-3

This is a larger area which is defined as the entire source water catchment for the wells. For the Waimate-West well, SWRMA-3 is defined as the entire area upgradient of the site up to the peak of Mt Taranaki and was characterised using the vectors published by Allis et al (1997).

Reference List:

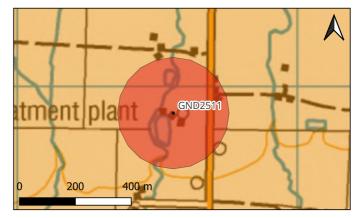
Allis, RG., Zhan, X., Evans, C., & Kroopnick, P. (1997) Groundwater flow beneath Mt Taranaki, New Zealand, and implications for oil and gas migration. New Zealand Journal of Geology and Geophysics, 40:2, 137-149.

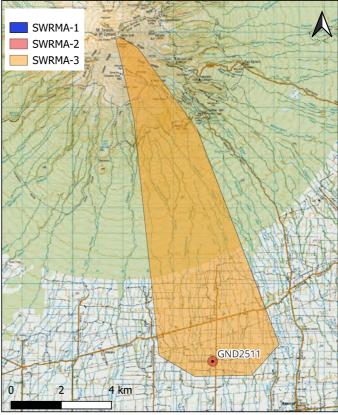
Alloway, B., McComb, P., Neall, V., Vucetich, C., Gibb, J., Sherburn, S.,& Stirling, M. (2005) Stratigraphy, age, and correlation of voluminous debris-avalanche events from an ancestral Egmont Volcano: Implications for coastal plain construction and regional hazard assessment, Journal of the Royal Society of New Zealand, 35:1-2, 229-267.

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Toews, M., Gusyev, M. (2013). GIS tools to delineate groundwater capture zones. GNS Science Report 2012/06. Wellington: GNS Science. Townsend, D., Vonk, A., Kamp, P.J.J. (2008) Geology of the Taranaki Area. Institute of Geological and Nuclear Sciences 1:250 000 geological map 4. 1 sheet + 77p. Lower Hutt, New Zealand. GNS Science.





Waverley and Waverley Beach Community Drinking Water Supply: Source Water Risk Management Areas

The Waverley groundwater supply takes water from 3 bores (GND0244, GND0059 and GND2242), screened at depths of ca. 110–170 m bgl. The supply services a base population of 878 people with a maximum combined rate of 14.2 L/s. The Waverley Beach groundwater supply takes water from 1 bore (GND1061, depth 91 m), which services a community of around 50 dwellings and a campground, with a maximum rate of 1.5 L/s.

The Waverley bores are screened within the early-mid Pliocene marine sediments of the Whenuakura formation, which consist of interbedded marine mudstones (papa), fine loose sands, sandstone, shellbeds and occasional hard concretionary bands. The Whenuakura formation has a regional geological dip of 2-4 degrees to the southwest and outcrops approximately 8-30 km inland from the coast. At the Waverley township the Whenuakura formation is overlain by approximately 35 m of Holocene and Quaternary beach deposits. The regional hydraulic gradient is from northeast to southwest, parallel to the dip of the Whenuakura formation. Aquifers within the Whenuakura formation are hosted within higher-permeability sand-dominated layers which are semi-confined by interbedded mud-dominated layers. The aquifers are recharged from both direct rainfall infiltration into the Whenuakura formation or overlying sediments, and surface water loss to groundwater from the Whenuakura and Waitotara Rivers. It is assumed that the Waverley Beach Bore is also screened within the Whenuakura formation.

The Source Water Risk Management Areas (SWRMA) have been defined as per MfE (2023) Delineating source water risk management areas.

Source Water Risk Management Area-1

This is a zone directly surrounding the source water intake, where there is an immediate risk of contamination. There is little time for attenuation, or to respond to any contamination, before it enters the water supply. For groundwater sources, the aim is to manage the risk of contaminants entering the supply in or around the well casing. SMRMA-1 has a default distance of 5 m radius around wellhead.

Source Water Risk Management Area-2

This is a larger area where activities need to be appropriately managed to mitigate the risk of contamination or supply. For groundwater sources, the size is based on the land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. For the bores here it was calculated using the calculated fixed radius method of Toews and Gusyev (2013). The results for each individual bore range from 245 to 597 m radius and are presented in the table below:

П							
l		Screened interval	Abstraction rate	Aquifer thickness∞	Effective porosity	Radius of SWRMA-2	
Wa	Waverley Swinbourne Street: GND2242	129.2–168.2 m bgl	14.2 L/s	25 m	0.05	436 m	
	Waverley Chester Street: GND0059	111.3-125.9 m bgl	14.2 L/s	15 m	0.05	436 m	
	Waverley Fookes Street: GND0244	121–127.1 m bgl	14.2 L/s	8 m	0.05	597 m	
	Waverley Beach: GND1061	None provided. Bore depth 91 m.	14.2 L/s	5 m (conservative estimation)	0.05	245 m	

Data was either provided by Taranaki Regional Council or sourced from Waverley drinking water source water risk assessment, December 2021, published by South Taranaki District Council, or Wairoa (Waverley) Beach Domain drinking water source water risk assessment, November 2022, published by South Taranaki District Council.

- Y The total combined extraction rate for the Waverley bores was applied given the proximity of the bores
- co Screened interval
- * Screened interval large compared to neighbouring bores. Screened interval for the Chester Street Bore was applied to account for layering and heterogeneities within the aguifer (conservative).

Source Water Risk Management Area-3

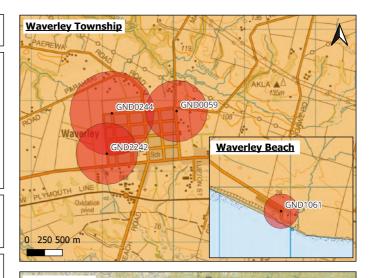
SWRMA-3 defined as the entire source water catchment for the wells. For the Waverley and Waverley Beach wells, this encompasses the entire catchment area for both rainfall infiltration into the Whenuakura formation or the overlying sediments, and the entire catchment area for the Whenuakura and Waitotara Rivers. In recognition that the catchment area for the Whenuakura and Waitotara Rivers is extensive (>1000 km²), SWRMA-3 has been separated into a higher-risk zone (SWRMA-3A) and a lower-risk zone (SWRMA-3B), defined by the northern extent of the Whenuakura formation. Groundwater infiltration to the north of this (i.e. into the underlying formations) is unlikely to be a significant source of water for the aguifers within the Whenuakura formation.

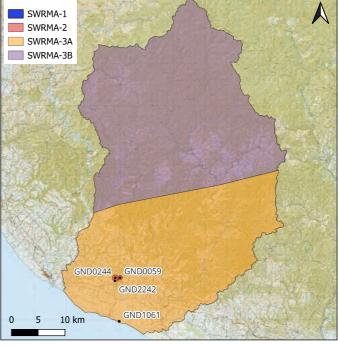
Reference List:

MfE (2023). Delineating source water risk management areas. Wellington: Ministry for the Environment

Toews, M., Gusyev, M. (2013). GIS tools to delineate groundwater capture zones. GNS Science Report 2012/06. Wellington: GNS Science. Waverley drinking water source water risk assessment, December 2021, published by South Taranaki District Council.

Wairoa (Waverley) Beach Domain drinking water source water risk assessment, November 2022, published by South Taranaki District Council







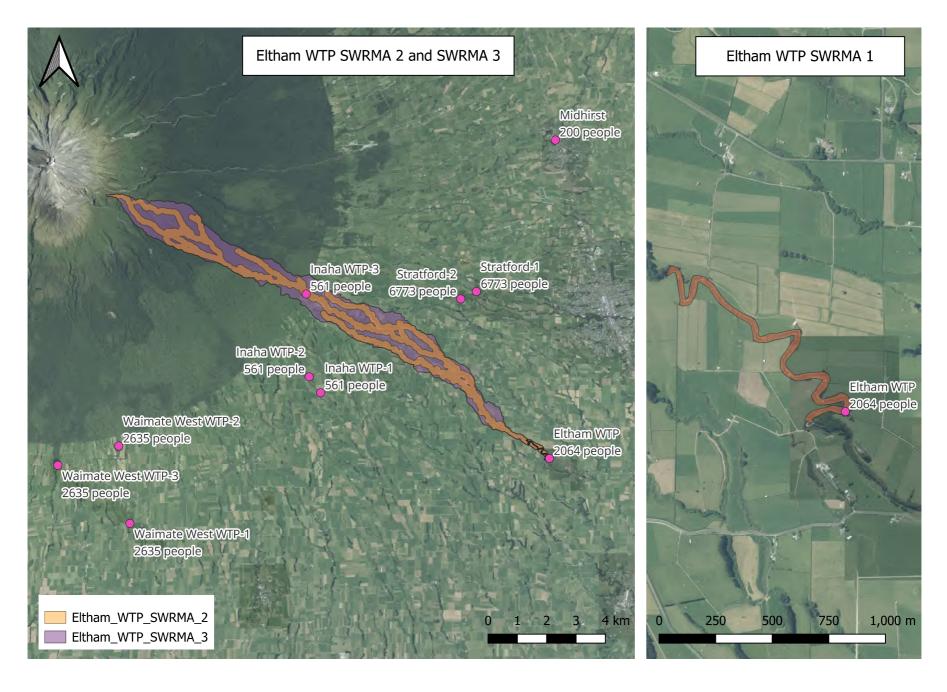
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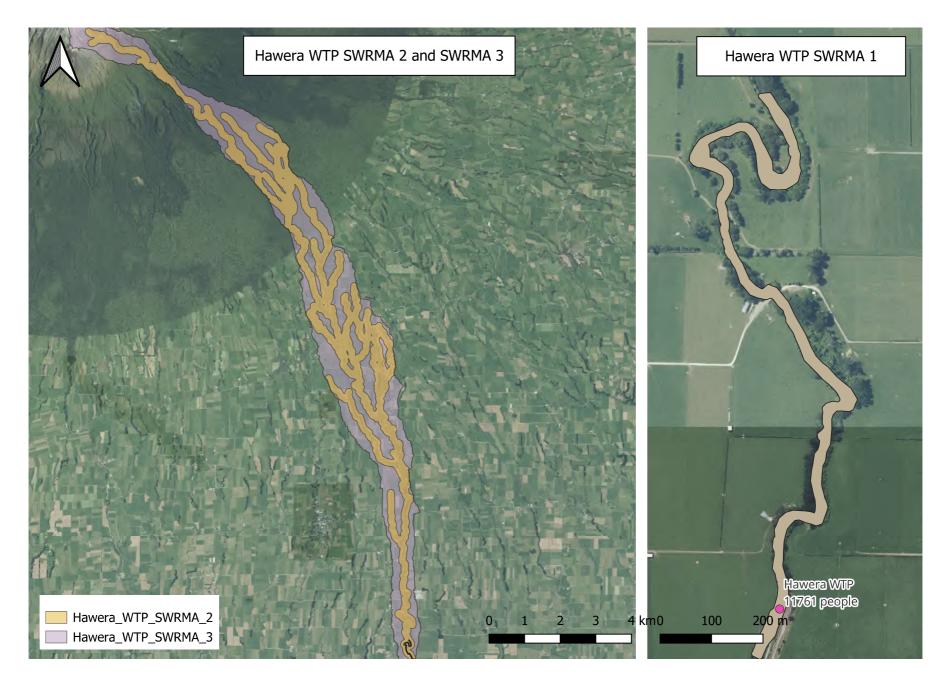
TARANAKI REGIONAL COUNCIL - DELINEATION OF SOURCE WATER RISK MANAGEMENT AREAS FOR SELECTED MUNICIPAL WATER SUPPLIES WITHIN THE TARANAKI REGION

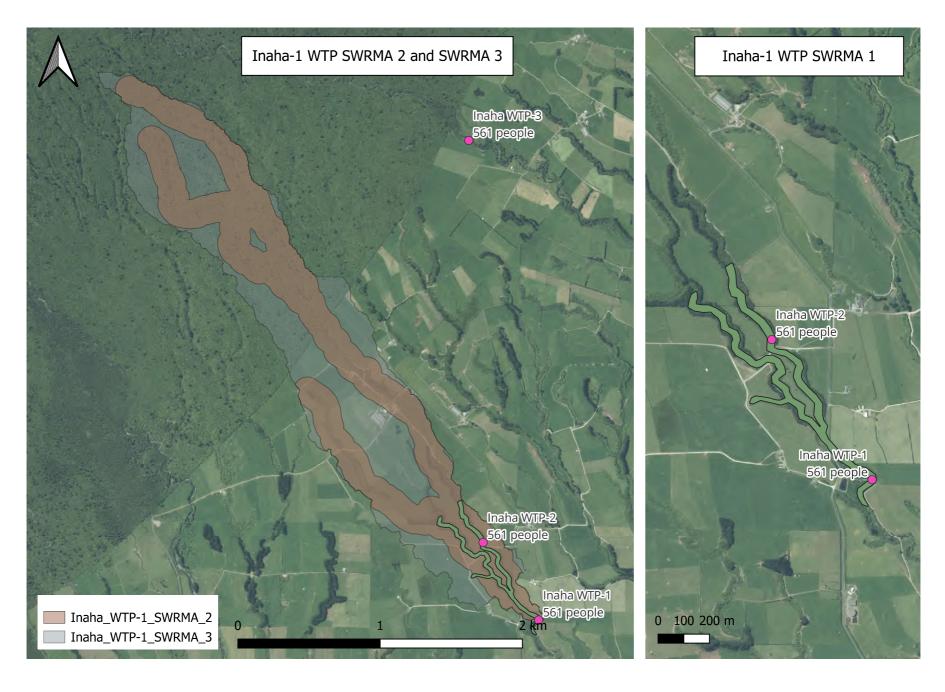
Appendix B: Surface water SWRMA plots

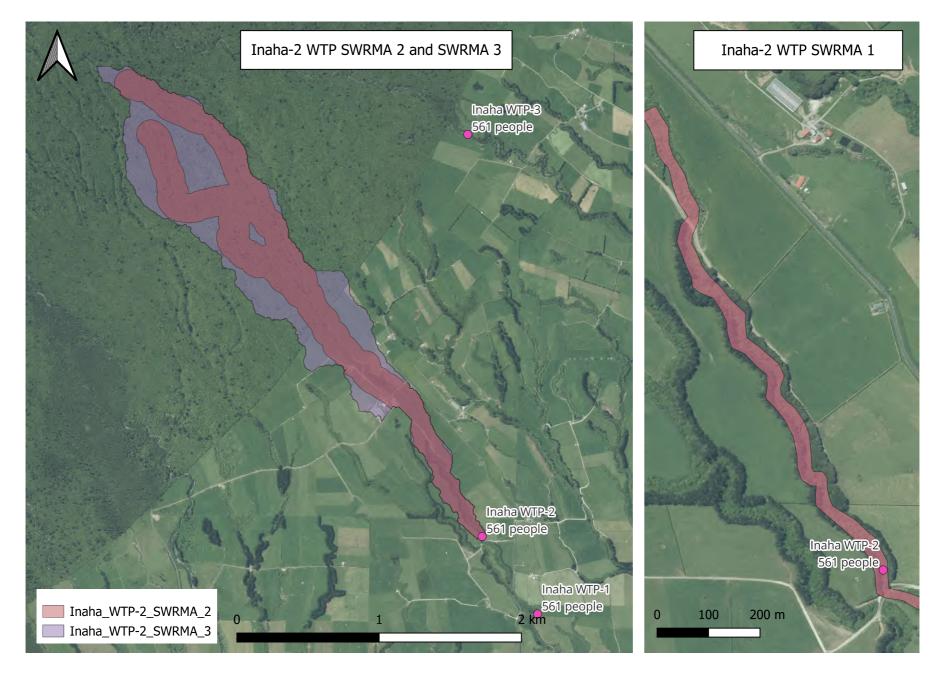
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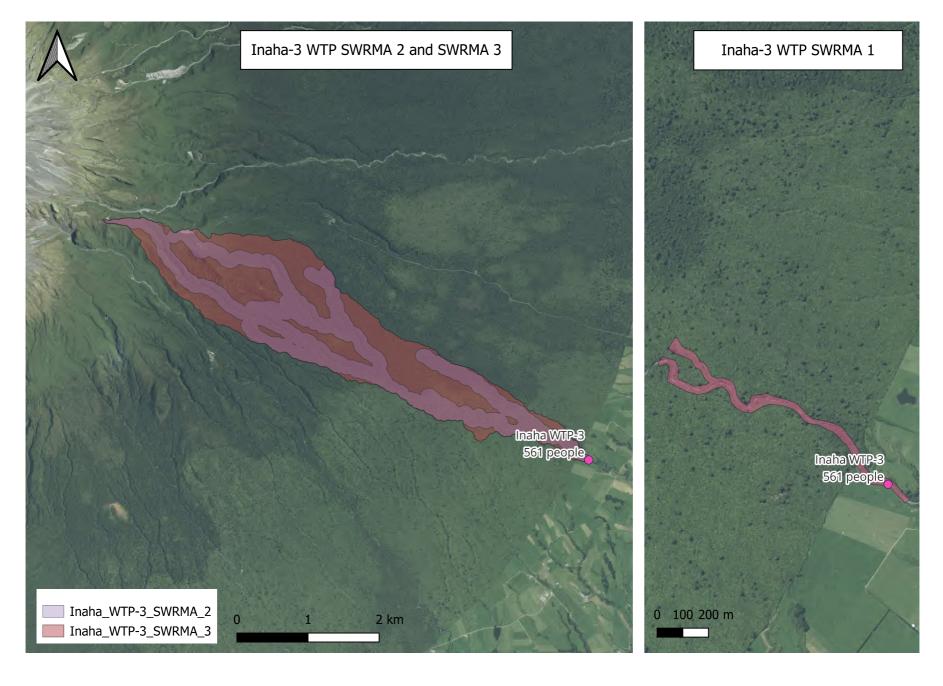
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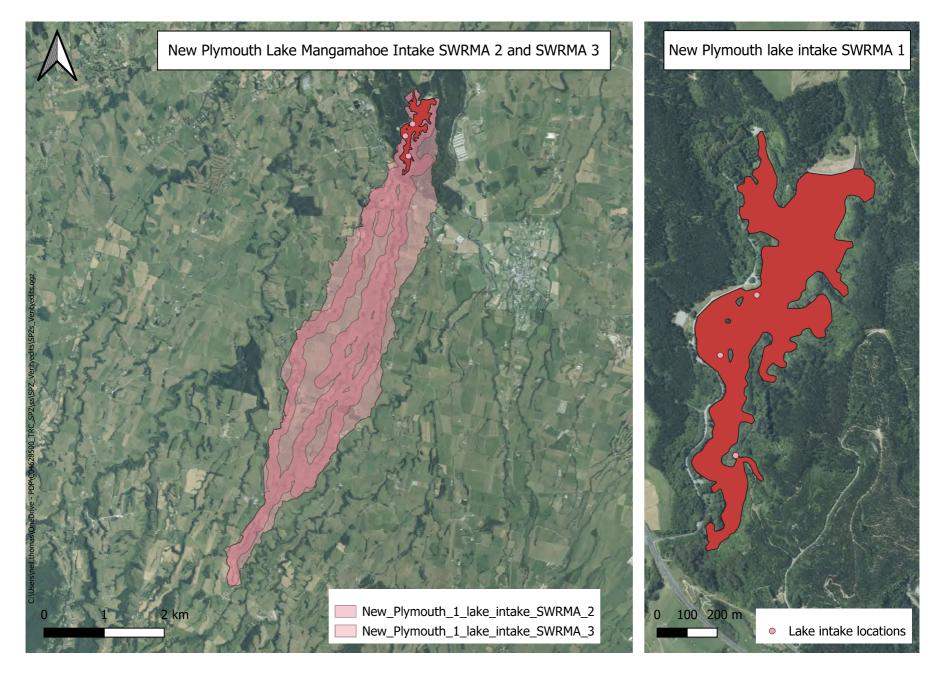


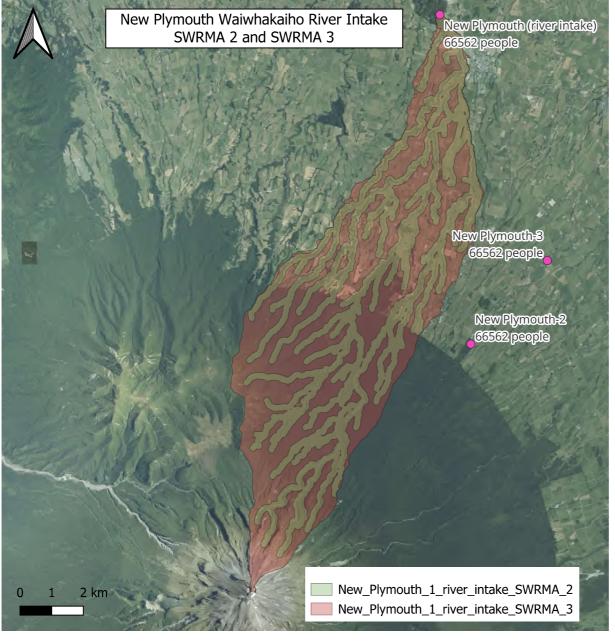




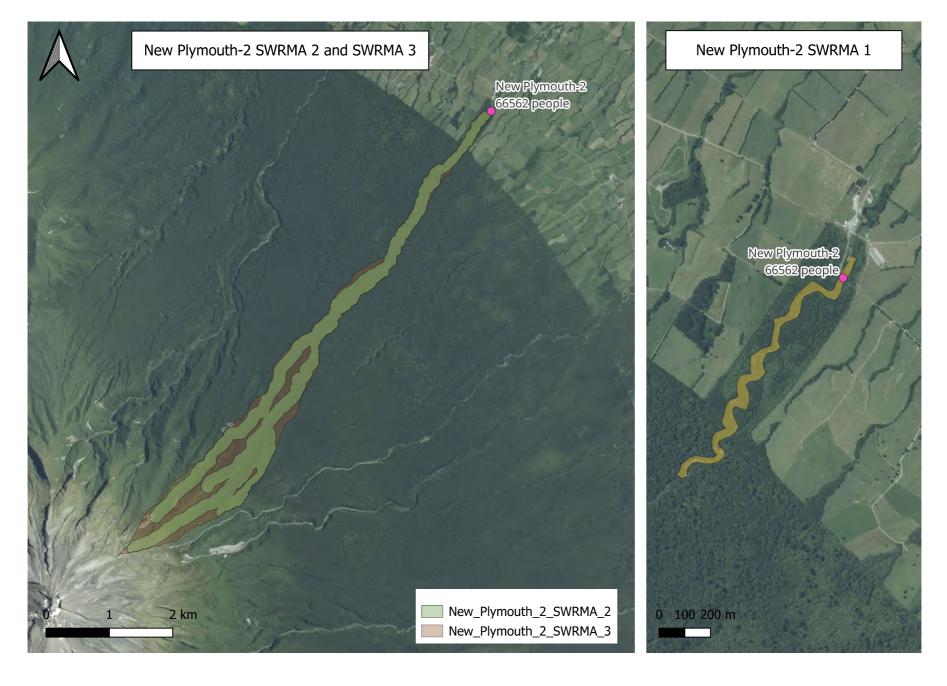


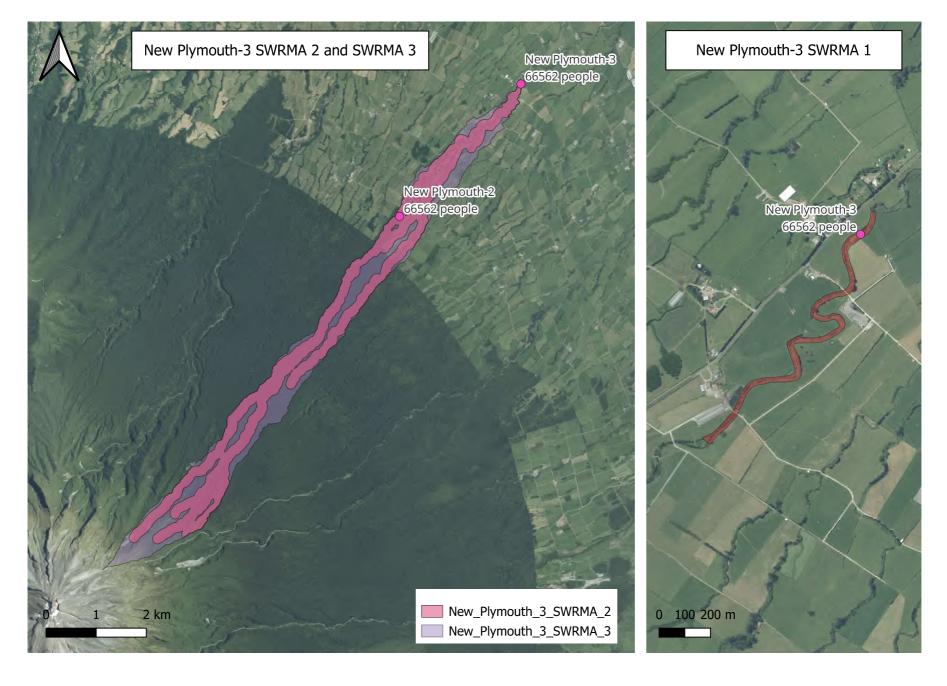


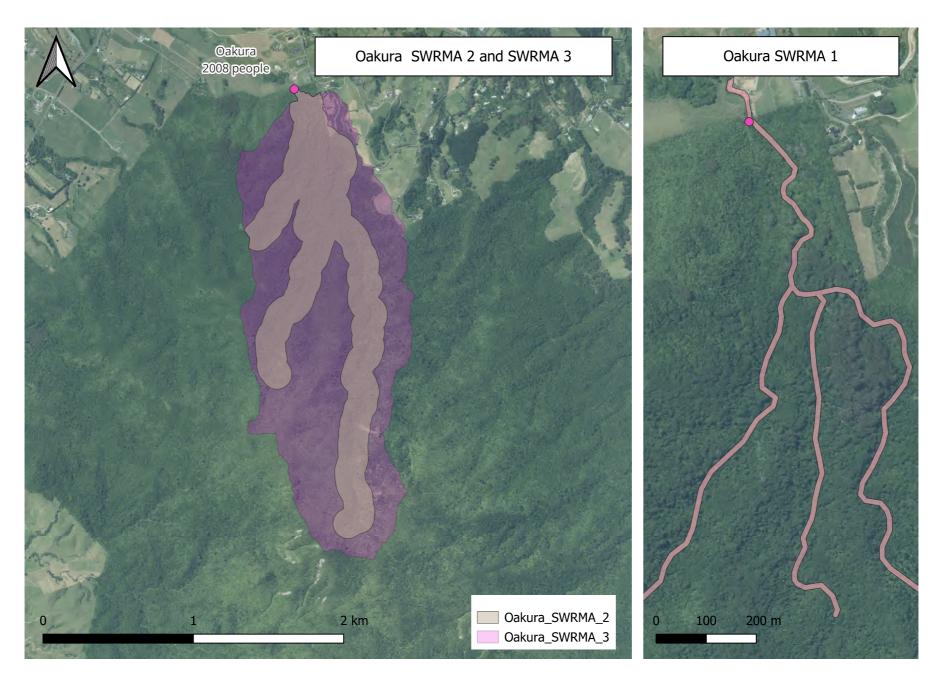


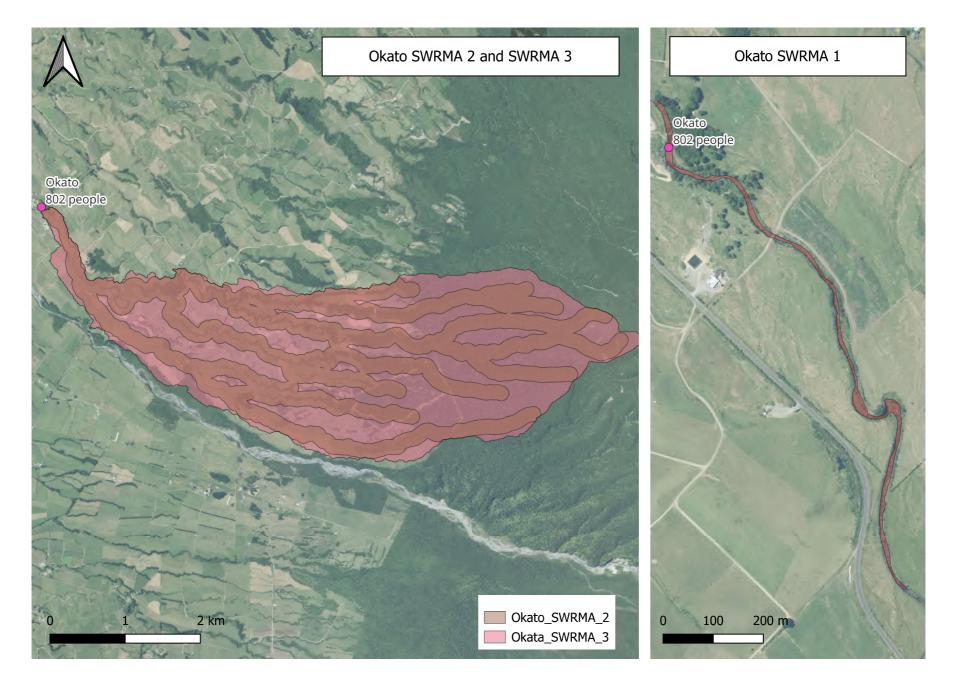


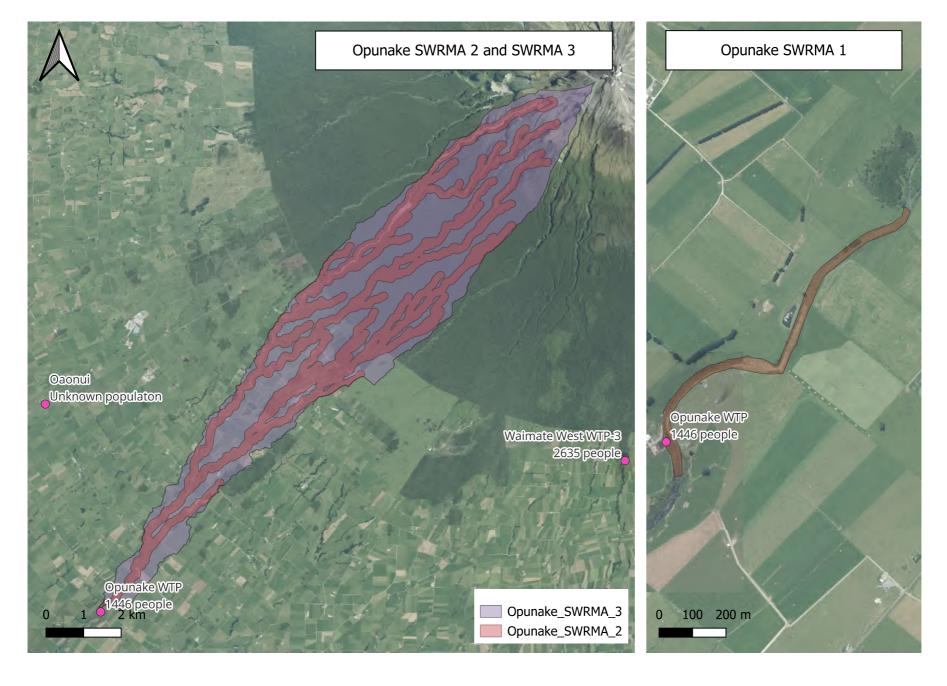


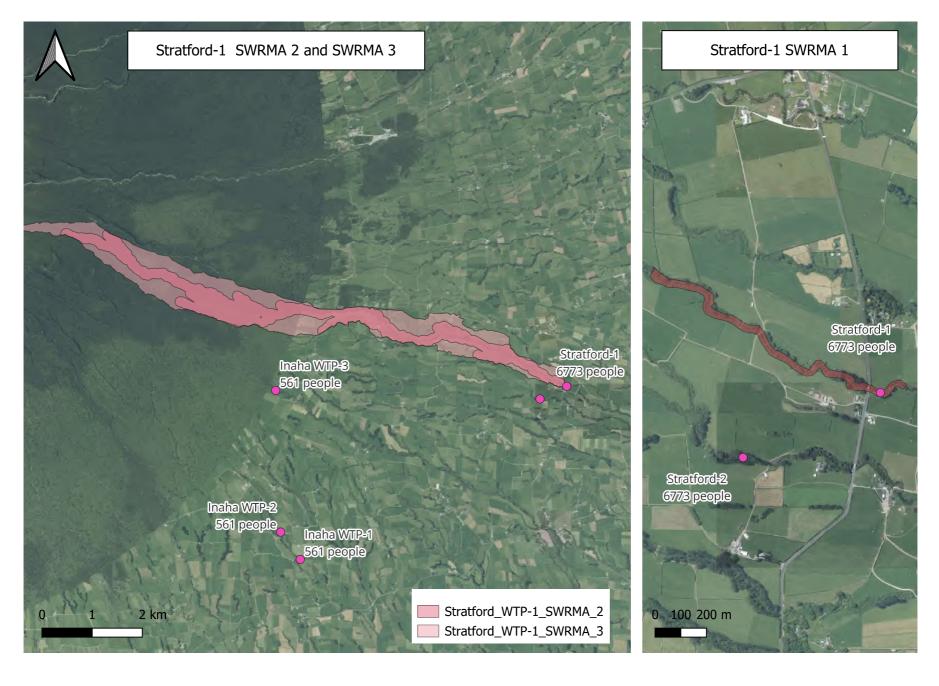


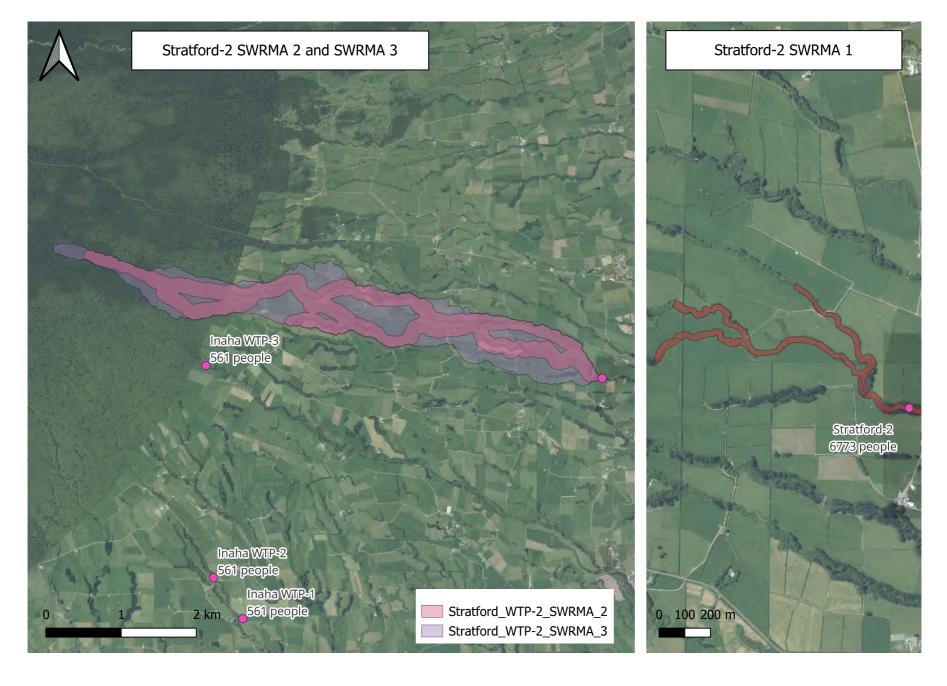


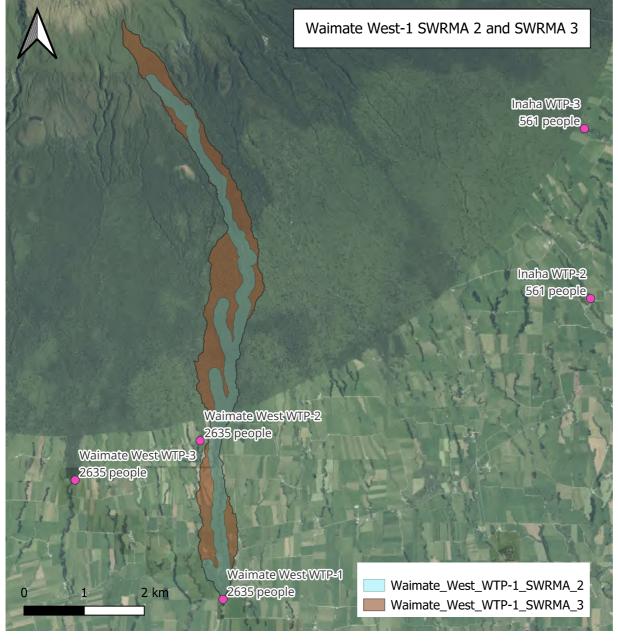




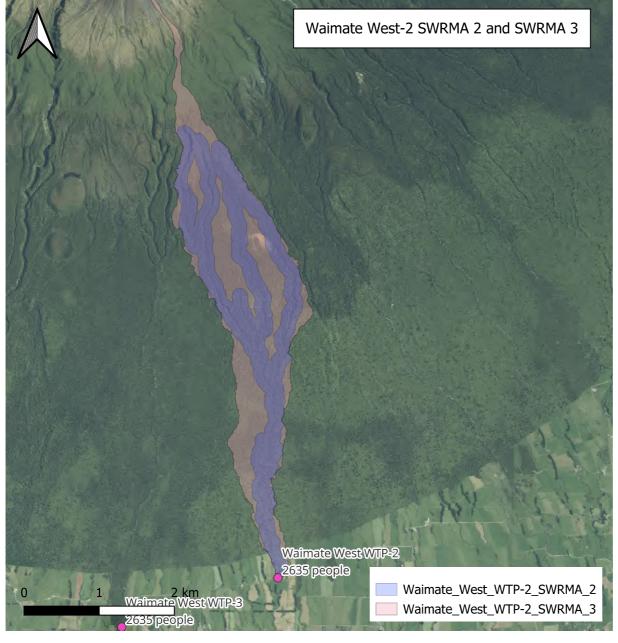




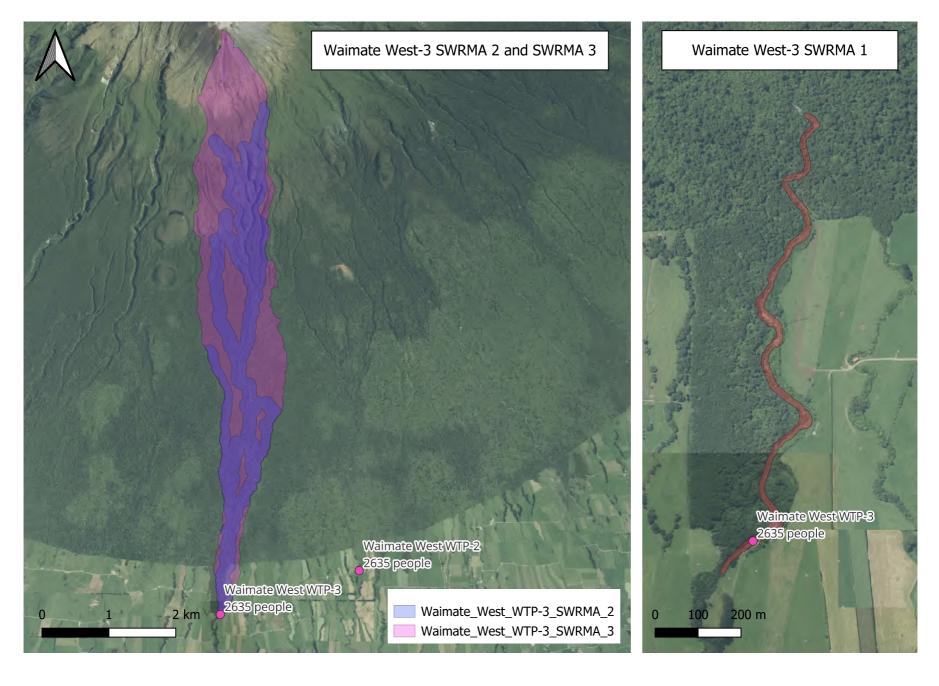














Date: 11 June 2024

Subject: Submission on the Local Government (Water Services Preliminary

Arrangements) Bill

Author: F Kiddle, Strategy Lead

Approved by: A D McLay, Director - Resource Management

Document: 3280559

Purpose

To seek approval of a submission on the Local Government (Water Services Preliminary Arrangements)
Bill as it relates to the proposed amendments to the Water Services Act 2021 to preclude giving regard
to the hierarchy of obligations within Te Mana o te Wai when making wastewater environmental
performance standards.

Executive summary

- 2. The Government's proposal to prevent giving regard to the hierarchy of obligations within Te Mana o te Wai when making wastewater environmental performance standards mirrors the proposal to do the same for resource consents.
- The proposed change is based on concerns that Te Mana o te Wai does not suitably provide for
 economic matters, and it could cause significant economic disruption in achieving improved freshwater
 quality and quantity.
- 4. This is not the predominate interpretation of Te Mana o te Wai, which instead sees it as one where providing for economic well-being is still a priority, albeit with more weighting towards providing for human and environmental health. The Ministry for the Environment has been unable to find any evidence that the hierarchy of obligations is causing consents to be declined due to a devaluing of economic matters.
- 5. Further, the proposed changes risk unintended consequences that could in-fact reduce the space to consider economic matters when giving regard to Te Mana o te Wai.

Recommendations

That Taranaki Regional Council:

- a. <u>receives</u> the memorandum Submission on the Local Government (Water Services Preliminary Arrangements) Bill
- b. <u>endorses</u> the submission in Attachment One Submission on the Local Government (Water Services Preliminary Arrangements) Bill

- c. <u>notes</u> that at the time of writing this memorandum, the Council was still waiting feedback from some external stakeholders; any notable feedback that requires amendments to the submission will be presented orally to the Policy & Planning Committee for consideration
- d. <u>determines</u> that this decision be recognised not significant in terms of section 76 of the Local Government Act 2002
- e. <u>determines</u> that it has complied with the decision-making provisions of the Local Government Act 2002 to the extent necessary in relation to this decision; and in accordance with section 79 of the Act, determines that it does not require further information, further assessment of options or further analysis of costs and benefits, or advantages and disadvantages prior to making a decision on this matter

Background

- 6. As part of the Local Government (Water Services Preliminary Arrangements) Bill, the Government is proposing to amend the Water Services Act 2021 to preclude giving regard to the hierarchy of obligations within Te Mana o te Wai when Taumata Arowai are developing wastewater environmental performance standards. Submissions on the bill close on 13 June 2024. Note that regional councils are required to reflect the standards developed by Taumata Arowai in resource consents.
- 7. The proposed change to the Water Services Act mirrors the Government's proposal regarding precluding the consideration of the hierarchy of obligations in resource consents. This is being advanced, amongst other matters, through the *Resource Management (Freshwater and Other Matters) Amendment Bill*. Submissions on this bill close on 30 June. A draft submission on this bill will be circulated to the Policy & Planning Committee out of session for consideration.

Issues

8. The making of this decision addresses the approach for improving freshwater quality and quantity.

Discussion

- 9. As outlined in the submission, there are concerns that the hierarchy of obligations within Te Mana o te Wai does not sufficiently cater to economic matters. This has led to concerns that implementing the National Policy Statement for Freshwater Management (NPS-FM) would lead to significant economic disruption in achieving improved freshwater quality and quantity.
- 10. These concerns also apply to the development of wastewater environmental performance standards, as under the Water Services Act Taumata Arowai is required to give effect Te Mana o te Wai. The risk being that if they are unable to give suitable regard to economic matters, the performance standards could lead to unreasonable costs on water providers. Similar to implementing the NPS-FM, there is a need for a phased approach to lifting environmental performance.
- 11. However, the predominate interpretation of Te Mana o te Wai is one where providing for economic well-being is still a priority, albeit with more weighting towards providing for human and environmental health. The hierarchy of obligations is but one component of the wider concept of Te Mana o te Wai. The wider concept also includes a high-level description and six principles. When reading them all together, the 2024 Freshwater Hearings Panel on the Otago Regional Policy Statement found that Te Mana o te Wai "envisages that waters may be in a degraded state, and if so they should be restored and protected in a state closer to the natural setting. *However, that is not an absolute requirement* [emphasis added]".
- 12. Reinforcing this view is that in its *Supplementary Analysis Report* on the *Resource Management* (*Freshwater and Other Matters*) *Bill*, the Ministry for the Environment found no evidence that the hierarchy of obligations is causing consents to be declined due to a devaluing of economic matters.

- 13. Finally, there is a risk that prohibiting consideration of the hierarchy of obligations has unintended consequences. Te Mana o te Wai is a concept that was developed as a cohesive whole. The three parts of its definition (high-level definition, six principles and the hierarchy of obligations) interact together to balance the overall interpretation. Prohibiting consideration of one aspect of Te Mana o te Wai upsets this balance. At best, the proposed amendment introduces more ambiguity likely to only be settled after costly legal proceedings. At worst, it risks turning a perceived problem (i.e. that Te Mana o te Wai does not provide for economic matters) into a real one.
- 14. It may do this because, while it is third in the hierarchy of obligations, providing for economic well-being is still an obligation and a priority. The proposed amendment forces Taumata Arowai to only give regard the high-level definition and six principles of Te Mana o te Wai. While these do include a degree of economic focus, it is not as strong as that provided for by the hierarchy of obligations.
- 15. Finally, it must be noted that there are opportunities for better drafting in the NPS-FM to make it clear how it should be applied. However, this needs to be dealt with in a considered manner through either the second Resource Management Act amendment bill or the review of the NPS-FM. This will ensure there are no unintended consequences.

Options

16. The Council can either decide to submit or not. It is recommend the Council submits. This is because the proposed change mirrors those proposed in the Resource Management (Freshwater and Other Matters) Bill. There is insufficient evidence to justify the change and it risks unintended consequences.

Significance

17. This item is assessed as not significant with regards to the Significance and Engagement Policy. Council is considering whether to approve lodgment of a submission. Decision-making as to whether to accept the submission will rest with Parliament.

Financial considerations—LTP/Annual Plan

18. This memorandum and the associated recommendations are consistent with the Council's adopted Long-Term Plan and estimates. Any financial information included in this memorandum has been prepared in accordance with generally accepted accounting practice.

Policy considerations

19. This memorandum and the associated recommendations are consistent with the policy documents and positions adopted by this Council under various legislative frameworks including, but not restricted to, the Local Government Act 2002, the Resource Management Act 1991 and the Local Government Official Information and Meetings Act 1987.

Iwi considerations

- 20. This memorandum and the associated recommendations are consistent with the Council's policy for the development of Māori capacity to contribute to decision-making processes (schedule 10 of the Local Government Act 2002) as outlined in the adopted Long-Term Plan and/or Annual Plan. Similarly, iwi involvement in adopted work programmes has been recognised in the preparation of this memorandum.
- 21. A discussion paper on the application of Te Mana o te Wai providing for a balanced approach has been discussed with the Wai Steering Group.

Community considerations

22. This memorandum and the associated recommendations have considered the views of the community, interested and affected parties and those views have been recognised in the preparation of this memorandum.

Legal considerations

23. This memorandum and the associated recommendations comply with the appropriate statutory requirements imposed upon the Council.

Appendices/Attachments

Document 3280206: Submission on the Local Government (Water Services Preliminary Arrangements) Bill

Taranaki Regional Council

11 June 2024

Document: 3280206

Finance and Expenditure Committee Parliament Buildings Wellington

Via email: fe@parliament.govt.nz

Submission on the Local Government (Water Services Preliminary Arrangements) Bill

Tēnā koutou katoa,

The Taranaki Regional Council (the Council) welcomes the opportunity to make a submission on the *Local Government (Water Services Preliminary Arrangements) Bill* (the Bill).

The scope of our submission is limited to the proposed amendments to the Water Services Act 2021 to preclude giving regard to the hierarchy of obligations within Te Mana o te Wai when making wastewater environmental performance standards.

The Council supports ensuring the application of Te Mana o te Wai is grounded in economic reality. While we have to start acting now, the reality for New Zealand is that our freshwater is in such a state that improvement will take decades. The system needs to reflect this and focus on improvement over time that does not result in undue hardship or disruption for communities.

The hierarchy of obligations within the National Policy Statement for Freshwater Management (NPS-FM) has been a central concern for how the freshwater regime poses potential economic risks¹. It has been interpreted by some as forcing a binary choice between the health of the environment and economic wellbeing. This is erroneous in the long-term. For example, long-term economic well-being cannot be provided for if people are sick from degraded water. But in the short-term, an absolute interpretation of the hierarchy could lead to the rapid and disruptive transition away from industries that use freshwater.

However, the predominant interpretation of Te Mana o te Wai is one of weighted balance, not absolute requirements. The hierarchy of obligations is but one component of the wider concept of Te Mana o te Wai. The wider concept also includes a high-level description and six principles (refer Appendix One for the full definition). When reading them all together, the leading interpretation, as stated by the 2024 Freshwater Hearings Panel on the Otago Regional Policy Statement, is that Te Mana o te Wai "envisages that waters may be in a degraded state, and if so they should be restored and protected in a state closer to the natural setting. *However, that is not an absolute requirement* [emphasis added]²". Restoring water quality is the main thrust, but this cannot undermine other parts of the hierarchy.

Further, in its Supplementary Analysis Report on the Resource Management (Freshwater and Other Matters) Bill, the Ministry for the Environment (the Ministry) found no evidence that the hierarchy of obligations is causing consents to be declined due to a devaluing of economic matters. The Ministry reviewed a sample of

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¹ The hierarchy of obligations requires that freshwater be managed in a way that prioritises: first, the health and well-being of water bodies and freshwater ecosystems; second, the health needs of people (such as drinking water; and third, the ability of people and communities to provide for their social, economic and cultural well-being, now and in the future.

² Appendix two paragraph 11.

notified resource consents in which the hierarchy of obligations featured in the decision. They found that most consents were granted. Applicants were able to demonstrate their proposed activity adhered to the hierarchy of obligations. Where there was inconsistency with the hierarchy, this was balanced against wider considerations. The Ministry found two decisions to decline a consent that referenced the hierarchy. However, they note for both examples "these consents would have likely have still been declined irrespective of the hierarchy of obligations.³"

The Council is also concerned that the current proposal in the Bill may in-fact tip the balance towards an absolute interpretation of Te Mana o te Wai. The rational for this is:

- Section 14 of the Water Services Act 2021 requires Taumata Arowai to give effect to Te Mana o te Wai when carrying out relevant functions. This includes making wastewater environmental performance standards.
- The proposed amendment would preclude consideration of the hierarchy of obligations component of Te Mana o te Wai. This includes the obligation under the third level of the hierarchy to prioritise social, cultural and economic well-being.
- Giving effect is therefore limited to the high-level definition and six principles of Te Mana o te Wai.
- As a decision maker, Taumata Arowai is likely to focus on the governance principle, which is "the
 responsibility of those with authority for making decisions about freshwater to do so in a way that
 prioritises the health and well-being of freshwater now and into the future."
- Without the hierarchy of obligations to make clear there are other matters that must be prioritised
 (albeit with different weightings), this could lead to an interpretation that giving effect to Te Mana
 o te Wai is solely focused on prioritising the health and well-being of freshwater.

Te Mana o te Wai is a concept that was developed as a cohesive whole. The three parts of its definition (high-level definition, six principles and the hierarchy of obligations) interact together to balance the overall interpretation. Prohibiting consideration of one aspect of Te Mana o te Wai upsets this balance. At best, the proposed amendment introduces more ambiguity likely to only be settled after costly legal proceedings. At worst, it risks turning a perceived problem (i.e. that the hierarchy of obligations does not provide for economic matters) into a real one.

As a response to the above risk, the Council does not support precluding Taumata Arowai giving regard to the full concept of Te Mana o te Wai. Wastewater environmental performance standards play an essential role in supporting the improvement of freshwater quality. And the concept of Te Mana o te Wai already provides for these being developed and applied in a phased approach that protects communities from undue hardship or disruption.

The Council does consider there are opportunities for better drafting in the NPS-FM to make it clear the weighted balancing interpretation prevails. However, this needs to be dealt with in a considered manner through either the second Resource Management Act amendment bill or the review of the NPS-FM. This will ensure there are no unintended consequences.

Yours sincerely,

Steve Ruru	
Chief Executive	
³ Para. 49.	

Appendix One: Te Mana o te Wai definition from the NPS-FM

Concept

- (1) Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.
- (2) Te Mana o te Wai is relevant to all freshwater management and not just to the specific aspects of freshwater management referred to in this National Policy Statement.

Framework

- (3) Te Mana o te Wai encompasses 6 principles relating to the roles of tangata whenua and other New Zealanders in the management of freshwater, and these principles inform this National Policy Statement and its implementation.
- (4) The 6 principles are:
 - (a) Mana whakahaere: the power, authority, and obligations of tangata whenua to make decisions that maintain, protect, and sustain the health and well-being of, and their relationship with, freshwater
 - (b) Kaitiakitanga: the obligations of tangata whenua to preserve, restore, enhance, and sustainably use freshwater for the benefit of present and future generations
 - (c) Manaakitanga: the process by which tangata whenua show respect, generosity, and care for freshwater and for others
 - (d) Governance: the responsibility of those with authority for making decisions about freshwater to do so in a way that prioritises the health and well-being of freshwater now and into the future
 - (e) Stewardship: the obligations of all New Zealanders to manage freshwater in a way that ensures it sustains present and future generations
 - (f) Care and respect: the responsibility of all New Zealanders to care for freshwater in providing for the health of the nation.
- (5) There is a hierarchy of obligations in Te Mana o te Wai that prioritises:
 - (a) first, the health and well-being of water bodies and freshwater ecosystems
 - (b) second, the health needs of people (such as drinking water)
 - (c) third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.



Kia uruuru mai

Karakia to close meetings

Kia uruuru mai Fill me with

Ā hauora Vitality

Ā haukaha Strength

Ā haumaia Bravery

Ki runga, Ki raro Above, below

Ki roto, Ki waho Within, outwards

Rire rire hau

Let the wind blow and bind

Paimārie Peace upon you

Nau mai e ngā hua

Karakia for kai

Nau mai e ngā hua Welcome the gifts of food o te wao from the sacred forests o te ngakina from the cultivated gardens

o te wai tai from the sea

o te wai Māori from the fresh waters
Nā Tāne The food of Tāne

Nā Rongoof RongoNā Tangaroaof TangaroaNā Maruof Maru

Ko Ranginui e tū iho nei I acknowledge Ranginui above and Papatūānuku

Ko Papatūānuku e takoto ake nei below

Tūturu o whiti whakamaua kia

Let there be certainty

tina Secure it!

Tina! Hui e! Taiki e! Draw together! Affirm!

AGENDA AUTHORISATION

Agenda for the Policy and Planning Committee meeting held on Tuesday 11 June 2024

Confirmed:

4 Jun, 2024 9:21:46 AM GMT+12

A D McLay

Warneles

Director Resource Management

Approved:

31 May, 2024 2:06:29 PM GMT+12

S J Ruru

Chief Executive