Final [5 July 2022]

Waipā District Council

Waipā District Council Plan Change 26: Green Infrastructure/Public Open Space Network Assessment

Contents

1 Introduction

1.1 Background

On 20 December 2021, the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (the RMA Amendment Act) was passed into law. The purpose of the RMA Amendment Act is to rapidly accelerate the supply of housing where the demand for housing is high. It addresses issues relating to housing affordability and choice by bringing forward the implementation of intensification policies contained in the National Policy Statement on Urban Development (NPS-UD).

The RMA Amendment Act introduces medium density residential standards (MDRS) in tier 1 urban environments. Waipā (Cambridge, Te Awamutu and Kihikihi), Hamilton and it surrounds are categorised as a tier 1 urban environment and Waipā District Council as a tier 1 council. This means that Waipā District Council (Council) is legally required to notify a plan change to incorporate the MDRS and intensification into the operative Waipā District Plan (OWDP) by 20 August 2022.

Central government has identified a number of qualifying matters that allow the Council to modify (or limit) the MDRS. The Council is also allowed to include other 'qualifying matters' that are important for its towns. In relation to accommodating a qualifying matter, S77J of the RMA Amendment Act requires Council to demonstrate why it considers that area is subject to a qualifying matter and that the qualifying matter is incompatible with the level of development permitted by the MDRS.

This report assesses the effects of the MDRS on Cambridge, Te Awamutu and Kihikihi's public open space/green infrastructure network and recommends which residential zoned land should have amendments to the MDRS because of open space network qualifying matters.

1.2 Project Brief

Waipā District Council has initiated a plan change to respond to the NPS-UD and the RMA Amendment Act to enable housing intensification in all residential zones of Cambridge, Te Awamutu and Kihikihi (inclusion of Medium Density Residential Standards into District Plan) not subject to qualifying matters.

Council has commissioned Xyst Ltd to provide a desk top assessment and provide technical advice and recommendations on green infrastructure (parks and reserves) needs and constraints to inform the RMA section 32 report and the District Plan changes under Plan Change 26.

This technical report advises on the existing green infrastructure network within Cambridge, Te Awamutu and Kihikihi, comments on the risks and opportunities associated with the proposed intensification, and makes recommendations on where Council should modify the MDRS to protect the open space network.

The following matters were advised to be out of scope of this report:

- an open space provision assessment of the adequacy of the open space network based on the proposed intensification,
- an urban forest impact assessment,
- identification of existing reserves and proposed reserves within growth cells that are currently zoned residential,
- detailed ecological, cultural and heritage impact assessments for individual sites by suitably qualified specialists, and
- mana whenua and stakeholder engagement.

2 Executive Summary

The open space networks within Cambridge, Te Awamutu and Kihikihi are defining features for these towns. They cater for residents' sport, recreation, play and well-being needs as well as providing critical habitats and biodiversity corridors and riparian margins along the Waikato River and other significant waterways. They also provide increasingly important ecosystem services such as carbon sequestration and water purification and protect iconic and culturally and historically significant sites.

Whilst acknowledging the critical need to respond to the housing crisis and the National Policy Statement on Highly Productive Soils, and the open space benefits intensification may present, the proposed MDRS present a range of potential cumulative and long-term adverse effects on the open space networks of the three towns. The significance of these adverse effects and the requirement for Council to address them through plan change 26 and subsequent plan changes is highlighted in the NPS for Indigenous Biodiversity Exposure draft just released in June 2022[1].

This report recommends a range of MDRS modifications to :

- protect, enhance, restore and reconnect the remnant natural areas to improve their long term ecological viability and support species that are identified as endangered or at risk such as the Pekapeka-tou-roa/Long-tailed bats
- protect and restore Te Mana o te Wai associated with the Waikato River, the Karāpiro Stream, the Mangapiko Stream, the Mangaohoi Stream and Punui River; waterways which are considered taonga tuku iho by mana whenua and critical in terms of placemaking and well-being
- retain the usability of the full extent of existing parks and reserves to meet the needs of future residents for sport, active recreation, play, and connection with nature and the community,
- protect Waipā's cultural and historic heritage, and
- provide for a healthy urban ngahere (forest) comprising large mature protected trees, street trees and trees within parks and reserves that contributes to Waipa's biodiversity, water quality, carbon sequestration, air quality, cultural heritage, visual amenity and place making aspirations.

It is likely that many of the proposed modifications will align with proposed recommendations to address flooding risks and stormwater management being considered by Council.

The short timeframes and limited budget has meant that the site by site analysis has been constrained to a desk-top assessment. Further refinement of the recommendations to align with other recommended qualifying matter modifications and potentially Hamilton City Council's proposed rules to protect the open space network and trees on private property and specialist analysis to support proposed modifications are recommended as part of the plan change process.

It is also recommended that Council:

- review its open space provision following plan change 26 to assess whether new reserves and/or extensions to existing reserves are required to meet future population projections,
- engage with the Waikato Regional Council regarding the NPS for Indigenous Biodiversity Exposure draft to understand current indigenous vegetation cover for the three towns, proposed targets for the three towns and what will be required to achieve those targets
- develop an urban ngahere (forest) strategy to assess the impact of plan change 26 on trees within the urban boundaries and plan for how existing and new trees within Council's transport

[1] https://environment.govt.nz/assets/publications/NPSIB-exposure-draft.pdf

corridors and parks and reserves can mitigate the impacts of the likely significant removal of non-protected trees on private properties within each town and achieve alignments with regional council indigenous vegetation cover targets likely to be required through the NPS for Indigenous Biodiversity

- consider opportunities to incorporate financial contributions into the plan change or create other funding mechanisms to mitigate the impacts of intensification to support the restoration of riparian margins and gullies and streetscape beautification as Hamilton City Council is doing, and
- consider ways to incentivise retention of large mature trees and indigenous vegetation cover on private properties.

3 Existing Public Open Space Network Overview

Waipā's public open space network is a major contributor to the hauora (wellbeing) and identity of the Waipā District, encompassing a wide variety of social, cultural, heritage and environmental values. They contain important natural landscapes and culturally significant settings that contribute to the character and sense of place of Waipā.

3.1 Provision

The 533 hectares of public parks and reserves within Cambridge, Te Awamutu and Kihikihi urban areas is comprised of premiere parks, sports parks, neighbourhood reserves, amenity reserves, conservation reserves, cemeteries, esplanade reserves, local purpose (stormwater) reserves, local purpose (community facility) reserves and easements for shared paths (see Appendix 1). In addition to these parks and reserves, the waterways flowing through each town, the 93 protected trees and the 6000 plus street trees are also considered to be critical components of the public open space network.

The public open space network is funded through a mix of rates and development contributions; with development contributions largely limited to new reserve acquisition and development in greenfield growth cells. Restoration activities to create and maintain green assets are not able to be funded through development contributions because these have to date been identified as operational expenditure rather than capital expenditure.

The networks are expanding as new growth cells are being developed and neighbourhood reserves, accessways and local purpose (stormwater) reserves are acquired by Council through the resource consent process. The development of the Te Awamutu to Pirongia Cycleway and other planned cycleways will also extend the network of easements and reserves to create regionally significant bike rides and local commuter routes.

While Council doesn't have adopted open space provision levels, it has sought to ensure that the majority of urban residents are within 5 minute walkable catchments of a neighbourhood reserve that is between 3,500 – 5,000m^2 or reserves that provide similar amenity. The key drivers for other recent acquisitions have been the protection of significant natural areas and biodiversity corridors along waterways and large mature trees, managing stormwater through water sensitive design approaches that recognise the multiple open space outcomes possible with this approach and working closely with the Transport team to develop an integrated walking and cycling network.

The majority of reserves have a configuration that aligns with best practice urban design guidelines such as Crime Prevention Through Environmental Design (CPTED), however, there are many older

reserves that have little to no road frontage and houses backing on to them. This is particularly the case in Te Awamutu.

At present, the majority of parks and reserves are adjoined by residential zoning with lots greater than 500m^2, house heights restricted to 9m (2 storeys), at least a 2m setback, 2.7m + 28 – 45 degrees recession plans, buildings covering a maximum of 40% of the site and restrictions on impermeable surfaces to limit these to 60% of the site and rules controlling house orientation, maximum building length, glazing, landscaping and boundary fencing where the lot is adjoining a reserve. The exception to this is open spaces within:

- St Kilda where building heights are 10m,
- compact housing areas[2] where building heights are 10m,
- compact housing areas located within C1 and C2/C3 which have a maximum of 3 storeys and 13m, and
- commercial zones where building heights are 14m (3 storeys) and there is no setback required.

3.2 Indigenous biodiversity

At the time of writing the OWDP, only 7.5% of indigenous vegetation cover remained in Waipā and it was noted that these areas were highly fragmented and confined to the hills and mountains, resulting in poor connectivity between mountains and hills, rivers and lakes, lowland natural areas, and the urban centres. The distribution of this indigenous vegetation cover, including areas identified as significant natural areas (SNA), is shown in Appendices 8.2 and 8.3. It is likely that this worryingly small percentage of indigenous vegetation cover has reduced further since that time and that bush stands have become increasingly fragmented as a result of land use changes and the removal of large mature trees and regenerating bush.

Waikato Regional Council has confirmed that based on its current information, Cambridge with a focus on improving existing publicly owned indigenous vegetation areas, including wetlands, will only reach 1% of the urban area covered in indigenous vegetation cover. This is a worryingly long way off from the proposed minimum 10% target set in the NPS for Indigenous Biodiversity Exposure draft. Te Awamutu is worse with largely exotic vegetation along the streams and Kihikihi has no areas mapped. While this information does need to be updated and urban boundaries extended, the dire state of the extent and quality of indigenous vegetation cover within the three towns is obvious.

There are significant waterways identified as biodiversity corridors in the OWDP through the towns that connect the towns to surrounding maunga such as Pirongia and Maungatautari and remnant bush stands. The location of these is shown in Appendix 8.3. These tend to be the only areas not subject to

[2] OWDP Policy 2.3.4.5 To enable compact housing in the following locations: (a) Areas identified for compact housing on the Planning Maps or on an approved structure plan; or (b) Where the intensive use is off-set by adjoining an area zoned for reserve purposes on the Planning Maps that is greater than 1000m², including the Cambridge town belt; or (c) Within a 400m radius of a Commercial Zone. (d) Compact Housing will be supported where it is consistent with compact housing provided on neighbouring land. Provided that: (i) In all cases compact housing shall be comprehensively designed and shall incorporate the sustainable design and layout principles (refer to Section 21 – Assessment Criteria and Information Requirements); and (ii) At the boundaries of the site, compact housing shall be consistent with the predominant height and bulk of development in the neighbourhood; and (iii) Sites which adjoin a cul-de-sac should be avoided.

full vegetation removal prior to earthworks for both greenfield and brownfield developments. Outside of these biodiversity corridors, only Cambridge has a significant natural area within the urban area.

These ecological viability of these critical corridors and significant natural areas is enhanced by 93 protected trees on private land, over 6,000 street trees and a large number of mature trees on parks and reserves and private properties which contribute to the urban ngahere (forest).

The water quality and instream habitat of waterways flowing through the District's towns, the Waikato River, the Karāpiro Stream, the Mangapiko Stream, the Mangaohoi Stream and the Punui River, are all degraded and face significant issues likely to result in further decline.

Council, the Waikato Regional Council and community organisations have a wide range of extensive catchment projects underway to address these challenges. Council recently initiated a long-term project to restore public reserve land along the Mangapiko and Mangaohoi Streams within the Te Awamutu urban boundary. This supports the aspirations of the Maungatautari to Pirongia Ecological Corridor Project (Taiea te Taiao) that recently received Ministry for the Environment and Department of Conservation funding to improve riparian margins, create wetland habitat, reduce predators and increase biodiversity along the Mangapiko Stream.

Cambridge, Te Awamutu and Kihikihi are home to a number of endangered and/or protected species which live and/or forage in these bush remnants and individual mature trees. These include pekapeka-tou-roa/long-tailed bats, karearea/New Zealand falcon, native copper skinks and native freshwater species such as longfin eels. Many of these species are facing substantial population declines and residential development is an identified key contributor to this worrying trend.

Pekapeka-tou-roa/Long-tailed bats, classified as 'Threatened – Nationally Critical' (the highest threat category for a New Zealand species – see Figure 1) have been found throughout the urban boundaries of all three towns. They are a taonga for mana whenua of the Waikato region. They are absolutely protected under the Wildlife Act. Calculations accepted by experts show an alarming decline in bat population with a predicted continuing decline in current circumstances of between 6-9 percent per annum in the following years.

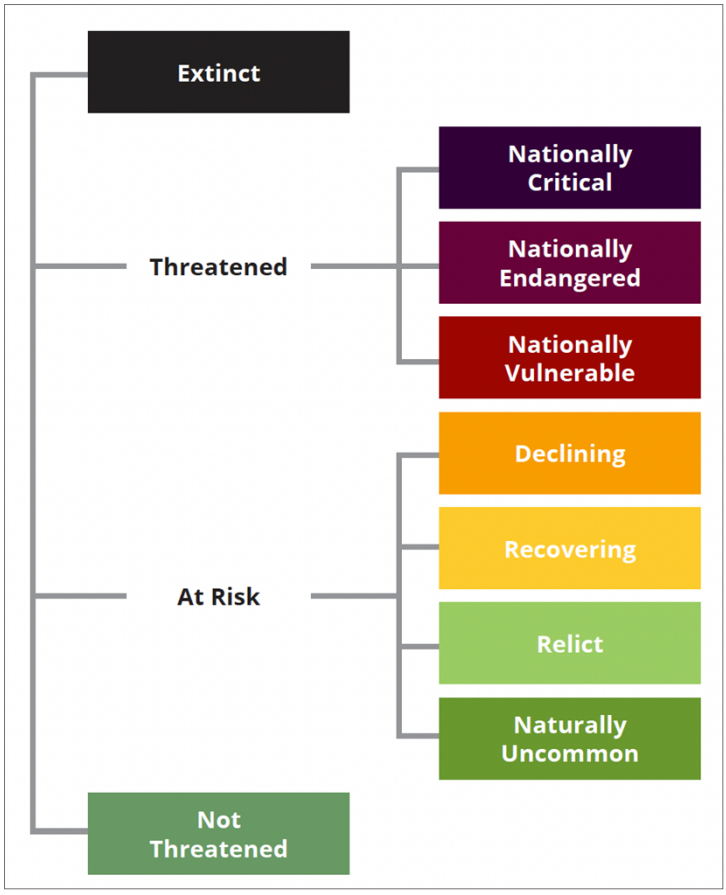


Figure 1 The New Zealand Threat Classification System (Department of Conservation)

Bats need mature trees to roost and bred in. They are highly mobile and have large home ranges which can include unprotected urban habitat on private land. Protecting their habitat (for roosting and foraging) and maintaining connectivity of vegetation are crucial for bats being able to persist and flourish in Waipā. This requires a unified catchment approach that connects urban and rural habitats for pats to survive. Habitat loss through land clearance, habitat degradation, fragmentation, increasing artificial light and disturbance and loss of roosts reduces roosting, foraging and socialising areas. Individual bats and colonies are also threatened by the local felling of individual trees. Predation and competition by introduced predators such as mustelids, rats, cats, and possums have also all been implicated in the decline of bats.

Waipā District Council is part of the Waikato Bat Alliance; a partnership between Hamilton City Council, Waikato-Tainui, Te Haa o te whenua o Kirikiriroa (THaWK), Nga Iwi Toopu o Waipa (NITOW), Waikato Regional Council, Waipā District Council, Waikato District Council and Department of Conservation (DOC). Late last year the Council endorsed the Waikato Regional Bat Strategy which aims to provide a framework for mana whenua, councils and DOC to collaborate on bat habitat protection and restoration measures in the Waikato region, share resources, and align policies and planning.

The Strategy notes that '*unprecedented housing development pressure has revealed the gaps in current central government direction and inadequacies of existing local authority planning, policy and regulation to manage this conflict. Existing plans and policies were put in place when the range and needs of bats were even less known than they are now. As a result, planning and policy in the Waikato*

region are currently inadequate to protect bats and their habitat, and a case-by-case approach is being taken in assessing development proposals and resource consents.'

The importance of bat habitat protection and restoration and creation was clarified through the Amberfield Environment Court decision (ENV-2019-AKL-308) between Weston Lea Limited and the Director-General of Conservation and Hamilton City Council which is understood to be the first substantive Environment Court decision on this matter. This decision concluded that: '*the provisions of Chapter 11, Indigenous Biodiversity, of the Regional Policy Statement should dictate the actions taken in respect of the on-going validity and survival of the known indigenous bio-diversity in the locality. The policies, implementation methods, and rules of this chapter are as on point with respect to the valuable qualities of the site short of the document simply being an instruction manual to the preservation and enhancement of the long-tailed bat. The relevance of these matters is undeniable.'*

The decision also references Part 2 of the Act s6(c): *In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance: the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.*

3.3 Mana whenua

Numerous reserves contain archaeological sites and hold an important place in the historical, spiritual, ancestral and cultural identity of the iwi and hapū that are mana whenua of Waipā. Mana whenua's iwi management plans and documents such as Te Ture Wahimana o Te Awa o Waikato - the Vision and Strategy for the Waikato River and project-specific cultural impact assessments set out the importance of the open space network to mana whenua and their aspirations for the network. Priorities include:

- protecting the mana and the mauri of open spaces,
- valuing Te Ao Maori and enabling mana whenua involvement in planning and decisions,
- acknowledging, protecting and restoring sites of significance,
- ensuring physical and visual access to ancestral lands, cultural landscapes and taonga, and
- enabling iwi and hapū to have a living and enduring presence of our public open spaces through for example the practice of customary activities.

The OWDP identifies Lake Te Koo Utu in Cambridge as a cultural landscape and there are cultural alert layers along all of the waterways through Cambridge, Te Awamutu and Kihikihi.

Council has partnered with mana whenua to understand, protect, restore and share their connections to Waipā's open spaces and the cultural values of these spaces through projects such as the Lake Te Koo Utu Concept Plan and the Wharemarama Reserve development.

3.4 Sport, recreation and play

The sports parks and neighbourhood reserves within the three towns are highly utilised; with a recent sports field study identifying a shortage in the current playing hours for winter codes in Cambridge of 30 hours per week that is projected to increase to 56 hours in 2038 based on population projections and recreation trends available in 2020[3]. Insufficient and low quality play provision has also been

[3] Central Waikato Sub-Region Sports Field Supply and Demand Study. Prepared by GLG in September 2020

identified as an issue by the community and Council. Council through the Long Term Plan 2021 – 2031 approved a significant programme of work to increase the level of service for these reserves to respond to increased demand resulting from population growth.

3.5 Other values

Many reserves have historic heritage values associated with them and are significant to local community groups such as the Returned Services Association and individual community members.

The public green infrastructure/open space network crucially provides a range of ecosytem services. It naturally manages stormwater, reduces flooding risk and improves water quality. It can provide for the cumulative rehabilitation of the urban environment by intercepting dust, moderating ambient air temperatures and wind velocities and treating air quality.

The open space network also provides an opportunity for people to connect with each other and with nature through activities such as volunteering with one of the many local restoration groups such as the Cambridge Tree Trust, Predator Free Cambridge and Bush to Burbs. It is widely accepted that such activities support the wellbeing of our open spaces and in turn the wellbeing of residents and communities. Increasingly there is a focus on how our open space network can support the 50-80% of New Zealanders that will experience mental distress or addiction challenges in their lifetime (Government Inquiry into Mental Health and Addiction/Oranga Tāngata, Oranga Whānau, 2018[4]) and create thriving communities. DOC and the Mental Health Foundation's Healthy Nature Healthy People initiative, for example, is focused on encouraging and enabling Kiwis to connect with nature to maintain and improve their health and wellbeing.

3.6 Ownership and administration

With the exception of Rewi Maniapoto Reserve in Kihikihi, all of the parks and reserves are either Crown- or council-owned and entirely council-administered. Council's Parks Team currently maintain stormwater reserves and transport's reserves to provide an integrated open space network for the community.

The majority of the public open space is held under the Reserves Act 1977 as recreation reserve or local purpose reserve. A large number of reserves are subject to the Waikato Tainui Claims Settlement Act 1995 which provides for residual Crown land to be offered for purchase to Waikato Tainui in certain circumstances. Reserve management plans, the OWDP and other planning documents such as town centre plans, concept plans and development plans guide Council's decisions on the development and management of its parks and reserves.

3.7 Cambridge network overview

The defining features of Cambridge's 419ha of open space network (see map in appendix 8.4 and OWDP planning maps 22-29) are the:

- Cambridge Town Belt comprising 284ha of land around the original urban boundaries of Cambridge on which almost all of Cambridge's sport parks are located and which is managed

[4] https://mentalhealth.inquiry.govt.nz/inquiry-report/he-ara-oranga/chapter-1-the-inquiry/1-4-context/

as open-space that provides for the physical welfare and diverse recreational needs of a growing community, while maintaining the park-like qualities for which it is valued
- premiere reserves including Lake Te Koo Utu, Victoria Square and Leamington Domain that have significant cultural, recreational, amenity and/or biodiversity values
- Waikato River and Karāpiro Stream and esplanade reserves and recreation reserves along the Waikato River and Karāpiro Stream; much of which is SNA
- significant conservation reserve between Cambridge Park and C4 growth cell which is a SNA
- Te Awa cycleway along the Waikato River
- neighbourhood reserves – Kings Garden Reserve, 2 new reserves in Cambridge North, 2-3 new reserves in growth cells C1 and C2/C3, 2 new reserves in growth cell C4, Gill Lumb Park, Cambridge Skate Park
- amenity reserves such as Lindsay Park, Gill Lumb Park, a new reserve in C3 and accessways
- heritage reserves such as Wharemarama Reserve, the cenotaph and the proposed heritage reserve in growth cell C1
- Hautapu and Leamington cemeteries
- stormwater reserves that serve a secondary recreation, biodiversity and amenity benefits such as the St Kilda reserves, the lineal reserves along the expressway and the proposed stormwater network in growth cells C1 and C2/C3
- approximately 1% of the urban area is covered in indigenous vegetation cover (which needs improving) and 2.6% in exotic vegetation cover (provided by WRC June 2022; based on areas large enough to sustain themselves)
- 88 protected trees, and
- 4725 street trees.

Many of these reserves have views to the Waikato River and surrounding maunga including Pukemako, Maungatautari, the Pukekura Range and Kakepuku which contribute significantly to their amenity and/or cultural values.

The vision for these reserves and objectives and policies guiding their development and management are set out in the following documents:

- Cambridge Town Belt Reserve Management Plan (WDC 2012)
- Urban Reserves Management Plan Volume 1 - Te Awamutu and Cambridge (WDC 2006)
- Lake Te Koo Utu Concept Plan (WDC 2021)
- Hautapu and Leamington Cemetery Concept Plans (WDC In development)
- Te Ture Te Whaimana o Te Awa o Waikato (Waikato River Authority)
- Cambridge Town Concept Plan Refresh (WDC September 2019)
- Operative Waipā District Plan, and
- Waikato Regional Policy Statement.

The majority of open spaces within Cambridge are adjoined by residential zoning. The main exceptions to this are open spaces within and/or adjoining:

- compact housing areas
- the Cambridge, Cambridge North and Leamington commercial zones including Victoria Square, the southern edge of Lake Te Koo Utu (Lakewoods), the eastern edge of Lake Te Koo Utu and Karāpiro Gully (Carters Flat) and a section of the esplanade reserve along the Waikato River (Duke St and Wilson Sr – Lola Silcock Reserve)
- the industrial land along Matos Segedin Drive that adjoins the Waikato River, and
- the large lot residential zoning off Thornton Road, in the St Kilder Large Lot Residential Area and south.

3.8 Te Awamutu network overview

The defining features of Te Awamutu's open space network (see map in appendix 8.5 and OWDP planning maps 37-39 and 42) are the:

- premiere Reserves including Memorial Park and Centennial Park that have significant cultural, recreational, amenity and/or biodiversity values
- Mangapiko Stream and the Mangaohoi Stream and esplanade reserves and recreation reserves along the streams which form part of the Pirongia to Maungatautari Ecological Corridor
- Te Awamutu to Pirongia cycleway (in development)
- sports Parks including Albert Park, Castleton Park, Anchor Park, Sherwin Park, Victoria Park and the Te Awamutu Stadium
- neighbourhood reserves including Russel Park, McNair Park and proposed reserves in T1, T2 and T11 growth cells
- amenity reserves such as Mahana Lane Reserve and accessways
- heritage reserves such as Selwyn Park and Anzac Green
- Te Awamutu Cemetery
- stormwater reserves that serve a secondary recreation, biodiversity and amenity benefits e.g reserves in Te Awamutu East and proposed reserves in T1, T2 and T11 growth cells
- no identified indigenous vegetation cover and approximately 0.9% in exotic vegetation cover (provided by WRC June 2022; based on areas large enough to sustain themselves)
- 5 protected trees, and
- 1193 street trees.

Many of these reserves have views to surrounding maunga including Pirongia, Maungatautari and Kakepuku which contribute significantly to their amenity and/or cultural values.

The vision for these reserves and objectives and policies guiding their development and management are set out in the following documents:

- Urban Reserves Management Plan Volume 1 - Te Awamutu and Cambridge (WDC 2006)
- Memorial Park Concept Plan (WDC 2021)
- Te Awamutu Cemetery Concept Plan (WDC In development)
- Te Awamutu and Kihikihi Town Concept Plan (WDC 2010)
- Operative Waipā District Plan, and
- Waikato Regional Policy Statement.

The majority of open spaces within Te Awamutu are adjoined by residential zoning. The main exceptions to this are open spaces within:

- compact housing areas, and
- the commercial zone around the CBD.

The OWDP does not identify any outstanding natural landscapes or outstanding natural features or SNAs in Te Awamutu.

3.9 Kihikihi network overview

The defining features of Kihikihi's open space network (see map in appendix 8.6 and OWDP planning maps 40 and 41) are the:

- Kihikihi Domain

- heritage reserves including Turata and Military Stockade Reserve
- Rewi Manipoto Reserve (Māori freehold land administered by Ngāti Maniapoto)
- Puniu River
- Kihikihi to Te Awamutu cycleway
- neighbourhood reserves including Leslie Park
- amenity reserves including Jean Gatton Reserve and Brian Rochford Reserve
- Kihikihi Cemetery
- stormwater reserves that serve a secondary recreation, biodiversity and amenity benefits e.g proposed reserves in the T6 growth cell
- no identified indigenous or exotic vegetation cover (provided by WRC June 2022; based on areas large enough to sustain themselves), and
- 107 street trees.

Many of these reserves have views to surrounding maunga including Pirongia, Maungatautari and Kakepuku and the surrounding rural land which contribute significantly to their amenity and/or cultural values.

The OWDP does not identify any outstanding natural landscapes or outstanding natural features or SNAs in Kihikihi and there are currently no protected trees identified in the OWDP.

The vision for these reserves and objectives and policies guiding their development and management are set out in the following documents:

- Urban Reserves Management Plan Volume 2 - Pirongia, Kihikihi and Ohaupo (WDC 2006)
- Rata-Tu Management Plan (WDC 2013)
- Kihikihi Domain Strategic Plan and Reserve Management Plan (WDC 2009)
- 2021 Kihikihi Urban Development Plan
- Operative Waipā District Plan, and
- Waikato Regional Policy Statement.

The majority of open spaces within Kihikihi are adjoined by residential zoning. The main exceptions to this are open spaces within:

- compact housing areas,
- the commercial zone around the CBD.

4 Current framework to protect and enhance the open space network

The OWDP has a range of objectives, policies and rules to protect and enhance Waipā's open space network within urban areas; including:

- Section 02 Residential zone which aims to ensure residential developments result in high quality and well-functioning urban developments with well-designed public spaces and residential interfaces that contribute to the open space network's amenity, usability and visitor safety.
- Section 15 Infrastructure, Hazards, Development and Subdivision which specifies the requirements to give effect to the directions and outcomes in the Waikato River Vision and Strategy and the Waipā River Accord, to protect cultural sites and landscape values and to provide for esplanade reserves, protected trees and street trees.

- Section 22 Heritage and Archaeology that promotes the protection, retention and maintenance of listed heritage items located on both public and private land.
- Section 23 Protected Trees that sets out rules to maintain the health and existing values of protected trees listed in Appendix N4.
- Section 24 Indigenous Biodiversity which adopts a cascade of rules approach for activities that affect areas of indigenous vegetation and wetlands with the focus being on protecting, enhancing, restoring and reconnecting the remaining natural areas to improve their long term ecological viability. The section sets out that the objective of the biodiversity corridors is to maintain and enhance indigenous biodiversity, ecological processes and connectivity within the biodiversity corridors identified on Planning Map 49 (Appendix 8.3).
- Section 25 Landscapes and Viewshafts which provides a framework to protect natural and cultural landscapes that within Cambridge, Te Awamutu and Kihikihi is largely focused on the amenity and values of the waterways and areas where the cultural alert layer applies.
- Section 26 Lakes and Waterbodies which specifies that any building with 23m of the edge of the Waikato, Mangapiko and Mangaohoi rivers/streams is a non-complying activity to avoid adverse effects on the natural character and water quality of these water bodies.

Rules that are of particular importance to the open space network are including in appendix 8.5.

The Waikato Regional Policy Statement/Te Tauāki Kaupapahere o te rohe o Waikato (RPS) provides an overview of the resource management issues in the Waikato region, and the ways in which integrated management of the region's natural and physical resources will be achieved. Of particular importance to this assessment are the Part B sections on fresh water bodies, heritage, indigenous biodiversity and landscape, natural character and amenity. RPS policies that are of particular relevance to Waipā's open space network are including in appendix 8.8. The Waikato Regional Plan implements the RPS and provides direction regarding the use, development and protection of natural and physical resources in the Waikato region.

The Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and the Nga Wai o Maniapoto (Waipa River) Act 2012 set out the importance of restoring and protecting the health and wellbeing of these rivers (and all waters that flow into and form part of them) for present and future generations. Te Ture Wahimana o Te Awa o Waikato - the Vision and Strategy for the Waikato River – sets the direction for how this will be achieved and is in its entirety part of the RPS.

The RMA is the key piece of legislation for managing Aotearoa New Zealand's indigenous biodiversity outside public conservation land. It includes several mechanisms that can be used by councils to help protect and restore indigenous biodiversity (see figure 2) and addresses other public open space network challenges such as the provision of access to and along the waterways.

The National Policy Statement Freshwater Management 2020 (NPSFM) is one of four pieces of national direction for managing New Zealand's freshwater. The NPSFM introduced Te Mana o te Wai as a fundamental concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater p[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. Waikato Regional Council is in the process of undertaking changes to the RPS and Regional Plan to bring them into line with the NPSFM.

The Government is proposing a National Policy Statement for Indigenous Biodiversity that builds on the draft created by the Biodiversity Collaborative Group. That draft highlighted the crisis point that our unique biodiversity has reached. While not finalised or in effect, this NPS is pending and highlights the national importance that will be placed on protecting and restoring indigenous biodiversity when considering adverse effects of residential developments and activities. The discussion document on

the draft NPS prepared by the Ministry for the Environment in 2019 outlines that the four main adverse effects that must be avoided in relation to SNAs are:

- loss of ecosystem representation and extent
- disruption to ecological sequences, mosaics or processes
- fragmentation or loss of buffering or connectivity within and between ecosystems or habitats, and
- a reduction in population size or occupancy of any indigenous taxa that are listed as 'threatened' or 'at risk' in the New Zealand Threat Classification System lists.

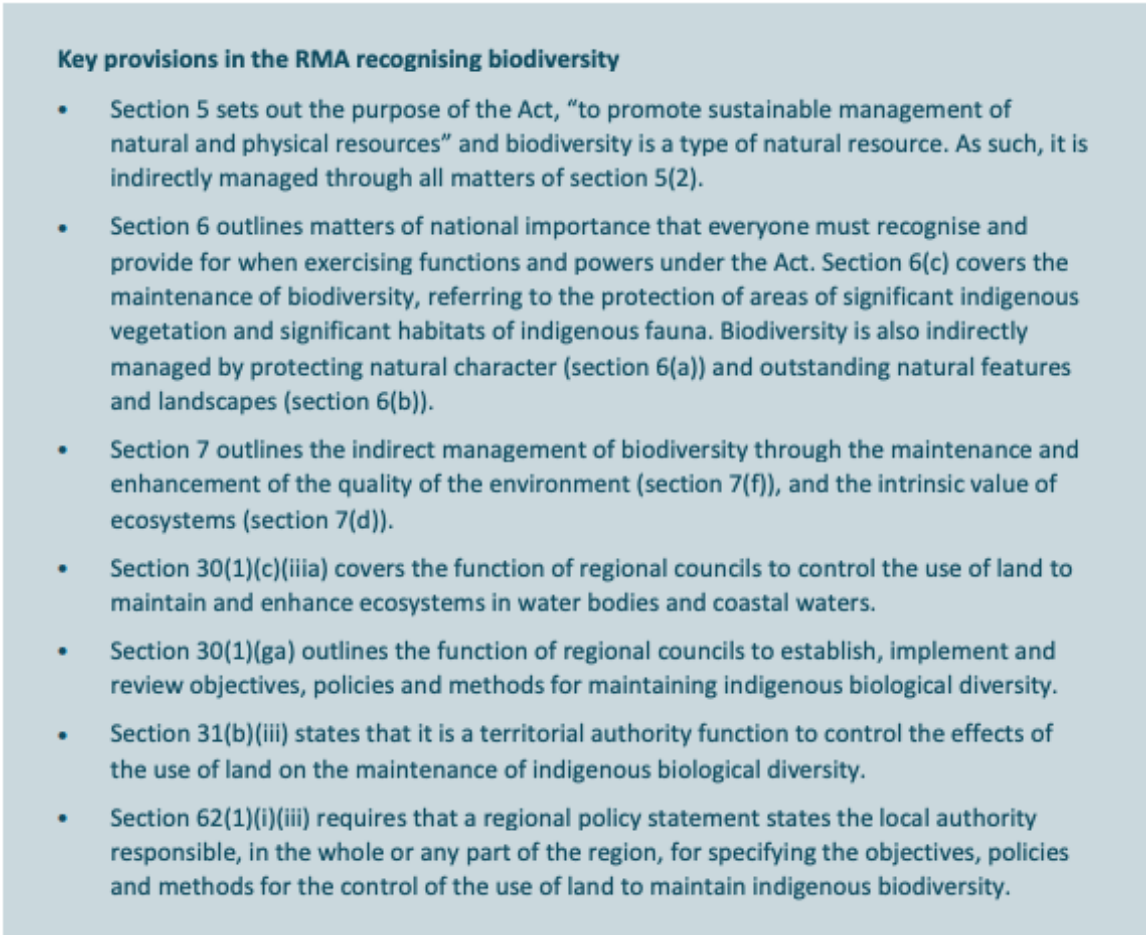


Figure 2. Key provision in the RMA recognising biodiversity (source: He Kura Koiora i hokia A discussion document on a proposed National Policy Statement for Indigenous Biodiversity)

Critical policies in the NPS for Indigenous Biodiversity Exposure draft just released in June 2022)[5] related to this assessment include:

- A precautionary approach is adopted when considering adverse effects on indigenous biodiversity (policy 3)
- SNAs are protected by avoiding and managing adverse effects from new subdivision, use and development (policy 7)

[5] https://environment.govt.nz/assets/publications/NPSIB-exposure-draft.pdf

- The importance of maintaining indigenous biodiversity outside SNAs is recognised and provided for (policy 8)
- Increased indigenous vegetation cover is promoted in both urban and non-urban environments (policy 14).
- Local authorities are required to give effect to Te Rito o te Harakeke which at a minimum requires them to recognise and provide for the health of indigenous biodiversity, taonga, wider environment and the people (3.2)
- That the protection, maintenance and restoration of indigenous biodiversity does not preclude subdivision, use and development in appropriate places and forms (3.5(1)((b)
- Local authorities must adopt a precautionary approach toward proposed activities where: the effects of indigenous biodiversity are uncertain, unknown or little understood; but those effects are potentially significantly adverse (3.7)
- Local authorities must amend its plans to ensure that identified adverse effects on SNAs of any new subdivision, use or development are avoided (3.10(2))
- Local authorities must amend its plans to ensure that were adverse effects on an SNA are managed by applying the effects management hierarchy (3.10(4))
- Local authorities must make or change their plans to ensure that the existing activities identified in relevant regional policy statements may continue as long as the effects on any SNA (including cumulative effects): (a) are no greater in intensity, scale, or character over time than at the commencement date; and (b) do not result in the loss of extent or degradation of ecological integrity of the SNA
- Local authorities must make or change their plans maintain indigenous biodiversity outside SNAs (3.16), and
- The regional council must set targets for indigenous vegetation cover for urban and non-urban environments that are not less than 10% which local authorities must try and achieve through their policy statements and plans (3.22)(3)&(4)).

The Wildlife Act 1953 is the core species-focused piece of legislation in Aotearoa New Zealand. It outlines the protection and control of wild animals and birds and provides for the absolute protection of a number of species including pekepeka-tou-roa/long-tailed bats.

The Biosecurity Act 1993 provides the legal framework to guide pest management. The Waikato Regional Pest Management Plan identifies harmful organisms considered to be pests in the Waikato region and rules that apply to each species.

The Heritage New Zealand Pouhere Taonga Act 2014 promotes the identification, protection, preservation and conservation of the historical and cultural heritage of New Zealand.

The Conservation Act 1987 and the Reserves Act 1977 also contribute to the legislative system to protect biodiversity. Their focus is on managing activities on parks and reserves rather than protecting public parks and reserves from the effects of activities on private land.

Recently there has been many concerns raised about the adequacy of the aforementioned legislative framework. The Environmental Defence Society in its 2021 report titled Conserving Nature concludes that:

Despite the best efforts of those involved in protecting Aotearoa New Zealand's conservation estate and indigenous species, biodiversity continues to decline and there is widespread acknowledgement that goals in this area have not been met. The causes for this are multiple:

- *Historical land fragmentation, and a lack of connectivity between our wild spaces, limits the places where our rare and endangered species can thrive. Migratory species are especially hard hit by these*

factors. Climate change impacts will exacerbate these issues. A more scaled, ecosystem-based approach is currently lacking

- *Land use change, agricultural intensification, urban sprawl and development, and the downstream effects of these changes and increased degradation of land and waterways*
- *A failure to resolve conflict and prioritise protection in the face of economic pressures and ongoing stakeholder conflict, especially in relation to fisheries and agricultural impacts*
- *The impacts of introduced species and the inherent conflicts between protecting indigenous species and economically or highly valued introduced species*
- *A lack of dedicated threatened species legislation and a very old, unclear Wildlife Act, which is no longer fit for purpose.*

What these factors point to is a current imbalance within our frameworks and systems, that often prioritises economic and other concerns over protection, and fails to connect the green dots. To make any meaningful improvements to the status of our rare and indigenous flora and fauna, this needs to be addressed.

5 Proposed residential zone changes

The National Policy Statement on Urban Development 2020 (NPS-UD) focus is on enabling housing development that meets high demand for housing, the diverse needs of communities and the need for more affordable housing in a way that ensures well-functioning and liveable urban environments. The NPS-UD enabled greater residential heights and densities, removed car parking requirements, and specified what, as a minimum, well-functioning urban environments must have (See Figure 3).

Objective 1:
New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

Policy 1:
Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

a) have or enable a variety of homes that:
   (i) meet the needs, in terms of type, price, and location, of different households; and
   (ii) enable Māori to express their cultural traditions and norms; and
b) that are suitable for different business sectors in terms of location and site size; and
c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and

Figure 3 NPS-UD Objective 1 and Policy 1

The RMA Amendment Act has brought forward the implementation of intensification polices in the NPS-UD and introduced MDRS in all tier 1 urban environments.

Theses MDRS are included in Part 1 of Schedule 3A which also contains objectives and policies that must be included in a district plan. In addition to these mandatory changes, Council is also required to amend or delete exiting provisions in the district plan that are contrary to the medium density

residential standards. The intensification provisions are intended to ensure that in urban areas, intensification in desirable and suitable locations is enabled in plans.

Cambridge, Te Awamutu and Kihikihi have been categorised as tier 1 urban environments. Table 1 compares the MDRS with what is understood to be the OWDP rules applying to Waipā's residential zone.

Modelling undertaken by m.e consulting in June 2022 estimated the MDRS plan enabled capacity (the net additional dwellings that would be enabled with the application of the MDRS to the ODP base zones) and the commercially feasible capacity (the net additional dwellings that are estimated to represent potentially feasible development options for commercial developers) for each town (see Figure 4). The modelling highlights that only 9% of the plan enabled capacity is estimated to represent commercially feasible options. Nearly all (92%; 5,800 dwellings) of the feasible capacity is estimated to occur within Cambridge, with only a minor share (7%; 490 dwellings) within the combined Te Awamutu/Kihikihi urban areas.

TOWN	PLAN ENABLED CAPACITY (Number of new households)	COMMERCIALLY FEASIBLE CAPACITY (Number of new households)
Cambridge	36,500	5,800
Te Awamutu	27,300	470
Kihikihi	5,010	20

Figure 4 Plan Enabled Capacity and Commercially Feasible Capacity Estimates (Source: Residential Capacity Modelling Medium Density Residential Standards: Waipa District. Prepared by m.e consulting. 13 June 22 – draft)

Table 1 Comparison of MDRS and OWDP standards

PROVISION	MDRS	OWDP
Dwellings permitted (max)	3	1
Building height (max)	11m + 1m for pitched roof and 3 storeys	In general, 9m and 2 storeys Exceptions: - Cambridge Park 10 -13m - St Kilda Structure Plan Area 10m - Compact Housing Area 10m - Compact Housing Areas located within C1 and C2/C3 Structure Plan 13m and 3 storeys
Height in relation to boundary (max)	4m + 60 degree recession plan	2.7m + 28 – 45 degrees recession plan
Setbacks (min)	Front yard – 1.5m Side yard – 1m Rear yard – 1m (excluded on corner sites)	Front yard – 4m Side yard – 2m Rear yard – 2m
Building Coverage (max)	50% of the net site area	40% of the net site area Impermeable areas less than 45% Cambridge North Structure Plan; less than 60% in the remainder of the residential zone
Outdoor living space (min)	Ground floor – 20m^2, 3m dimension Above ground floor: 8m^2, 1.8m dimension	Residential: 50m^2 , 4m dimension Compact housing: Ground floor –20m^2 (1 bedroom unit), 30m^2 (2-3 bedroom units) 4m dimension Above ground floor: 8m^2, 2m dimension
Outlook space (per unit)	Principal living room: 4m depth 4m width All ofther habitable rooms 1m depth, 1 m width	No requirement
Windows to street	20% glazing of the street-facing facade	15% glazing on the front façade of a building that adjoins a public place
Windows to reserves	No requirement for glazing adjoining parks and reserves	15% glazing on the front façade of a building that adjoins a public place
Landscaped area	20% of the developed site with grass or plants	40% of the developed site with grass or plants 30% for compact housing

6 Intensification

Intensification of existing urban areas presents a number of benefits to Waipā's open space network and its reserve users. It should for example reduce the need for greenfield developments in the peri-urban areas which has to date almost exclusively resulted in the removal of all existing vegetation other than along waterways. A compact urban form also increases the likelihood of reserve users walking or cycling to reserves reducing the requirement to utilise valuable reserve land for parking. It can improve passive surveillance of reserves and may provide a mechanism to rectify encroachments and poor planning decisions made in the past such as esplanade reserve waivers and/or reductions and buildings backing on to esplanade reserves that compromise Council's ability to develop safe, attractive and accessible walkways along waterways and biodiversity corridors.

Intensification does however present potential significant adverse effects on the existing and proposed open space network which must be carefully considered to determine how to avoid these effects. Table 2 outlines the adverse effects by reserve category. These effects are explored at a micro level in section 7.3 to explore what changes to the MDRS are required to avoid and/or mitigate these effects.

In addition to adverse effects on the public open space network, the MDRS is likely to lead to removal of large mature trees and indigenous vegetation cover on private properties.

Table 2. Potential Adverse Effects of the Proposed Intensification on Open Space Categories

TYPE OF OPEN SPACE	POTENTIAL EFFECTS
Conservation reserves	• Increased light, vehicle movement at night and noise effects occurring closer to SNA is likely to adversely affect the habitat and behaviour of native fauna. such as Pepeka Tou Roa/long-tailed bat. This can lead to species abandoning foraging areas or roost trees and can sever commuting routes which can have significant adverse effects on a species' population. • Intrusion of pest plants and weeds as a result of seed source and propagules being located closer to SNA and increased risk of garden waste being dumped. Particularly an issue for smaller SNAs with a lack of a dense indigenous vegetation buffer. • Increased number of domestic and feral cats within conservation reserves. Cats have a devastating impact on our biodiversity, including endangered species such as bats and lizards, through predation, disturbance and disease transmission; this is particularly the case for greenfield developments. • Increase overland flowpaths from increase in impermeable surfaces can greatly increase the amount and rate of stormwater flow. This can lead to scouring, degradation of water quality of the receiving water body and slope stability issues. Stormwater can also transport a range of contaminants such as heavy metals which accumulate in estuarine receiving environments. In residential areas, contamination can also occur through activities such as washing cars on impermeable surfaces, whereby cleaning chemicals and detergents are readily transported into drains and aquatic receiving environments. • Increased risk of encroachments. • Increase requests to install pipes through reserves to waterways resulting in vegetation removal and long term maintenance requirements.

	• Building platforms close to the top of slopes together with increased impervious surfaces changing the water table may increase risk of slumping/landslides. • Significantly less private open space available to create buffers through landscaping covenants. • Construction earthworks in close proximity to small streams within SNAs have the potential to result in sediment discharge into the stream environment which can accumulatively effect receiving stream environments. • Increase risk of human activities that adversely affect conservation values e.g. illegal dumping, fires and off-track activity e.g. mountain bike jump building with population growth and reduced private open space within residential lots.
Lakes and waterbodies (riparian margins and waterbodies)	• Loss of viewshafts to and from waterways. • Development pressure to waive or reduce esplanade requirements and build within existing 23m setback. • Vegetation removal and/or substantial pruning along identified key biodiversity corridors. • Greater likelihood of retaining walls on reserve boundaries which may detract from amenity and safety and present long-term liabilities. • Degradation of river and stream water quality through poor sediment control during construction and through the reduction in permeable surfaces. • Increase risk of erosion and scouring through increases in impervious surfaces and increase number of stormwater pipes entering waterways. • Detrimental effects on cultural values.
Premier Reserves	• Visual dominance associated with 3 stories and 1m setback that may detract from amenity and reduce usable reserve space because of shading (particularly for reserves on southern sides of buildings), reverse sensitivities and reserve visitors' desire not to recreate close to private properties. • Degradation of river and stream water quality through poor sediment control during construction and through the reduction in permeable surfaces. • Loss of viewshafts to and from reserves. • Existing reserve trees potentially effected by development on adjoining properties that require pruning and/or development within the dripline of trees.
Sports Parks	• Risk of reverse sensitivities associated with noise, lights, parking, traffic and ball sports increased as a result of an increase in the number of residential lots on boundaries, setbacks reduced to 1m and removal of parking requirements that will likely see greater demand for on-street parking by residents reducing the parking options available to reserve visitors. • Reserves become 'wetter' and potentially less usable from run off from adjoining properties. • Existing reserve trees potentially effected by development on adjoining properties that require pruning and/or development within the dripline of trees.
Neighbourhood Parks	• Visual dominance associated with 3 stories and 1m setback that may detract from amenity and reduce usable reserve space because of shading

	(particularly for reserves on southern sides of buildings), reverse sensitivities and reserve visitors' desire not to recreate close to private properties. • Usable reserve size effectively reduced because buildings and residential activities moving up against reserve boundaries. • Existing reserve trees potentially effected by development on adjoining properties that require pruning and/or development within the dripline of trees. • Loss of viewshafts to and from reserves. • Reserves become 'wetter' and potentially less usable from run off from adjoining properties. • Increased risk of pedestrian/vehicle conflict at access points with driveways next to them as a result of the removal of on-site vehicle turning requirements and driveways potentially servicing multiple households. • Greater number of users with population increases within walkable catchments combined with virtually unusable private open spaces in terms of play. • Greater pressure to locate wastewater pump stations on or adjoining reserves because of their location in relation to gravity-fed infrastructure catchments.
Cemeteries	• Visual dominance associated with 3 stories and 1m setback that may detract from amenity and reduce usable reserve space because of shading (particularly for reserves on southern sides of buildings), reverse sensitivities and reserve visitors' desire not to grieve close to private properties. • Reserves become 'wetter' and potentially less usable from run off from adjoining properties and driveways potentially servicing multiple households. • Loss of viewshafts to and from reserves.
Local purpose (stormwater reserves)	• Reserves potentially less able to provide secondary recreation and biodiversity outcomes as they are modified to accommodate greater stormwater run-off.
Accessways	• Visual dominance associated with 3 stories and 1m setback that may detract from amenity and safety; particularly for existing narrow accessways. • Increased risk of pedestrian/vehicle conflict at access points with driveways next to them as a result of the removal of on-site vehicle turning requirements.
Protected trees	• Pressure to have protected trees in more than one registered title. • Pressure to prune and/or remove protected trees. • Tree health adversely effected by construction works and/or long term effects of changes to ground water, increased impervious surfaces in close proximity and shading. • Lower likelihood of resident's seeking tree protection.
Street trees	• Significantly reduced front yard setbacks may result in shading and reduced street tree 'space' for roots and branches at maturity. • Potentially greater risk of wind tunnels. • Health of existing street trees adversely effected by construction works and/or long term effects of changes to ground water, increased impervious surfaces in close proximity and shading.

	• Future street tree planting options more restricted as result of less space within the road corridors to accommodate large mature trees.

7 Open Space Qualifying Matters

7.1 Overview

The RMA Amendment Act sets out in s77I the qualifying matters that Council may make the height and density requirements of the MDRS less enabling to specified residential zones. Section 77I(a) – (i) are set and section 77I(j) can be determined by Council. Table 3 sets out the qualifying matters applicable to Waipā's open space network.

Table 3. Potential Adverse Effects of the Proposed Intensification on Open Space Categories

QUALIFYING MATTER	DESCRIPTION
ss71I(a) A matter of national importance that decision makers are required to recognise and provide for under section 6	Section 6: In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance: (a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development: (b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development: (c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna: (d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers: (e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga: (f) the protection of historic heritage from inappropriate subdivision, use, and development: (g) the protection of protected customary rights: (h) the management of significant risks from natural hazards.
ss71I(b) A matter required in order to give effect to a national policy statement (other than the NPS-UD) or the New Zealand Coastal Policy Statement	NPSFM Draft NPS for Indigenous Biodiversity

ss71I(c) A matter required to give effect to Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River	
ss71I(f) Open space provided for public use, but only in relation to land that is open space	
ss71I(j) any other matter that makes higher density, as provided for by the MDRS or policy 3, inappropriate in an area, but only if section 77L is satisfied	See section 7.2

7.2 J matters

It is recommended that the following matters should be considered as ss71I(j) matters:

- Protected trees

Cambridge has 88 trees and Te Awamutu has 5 trees identified as protected trees in Appendix N4 of the OWDP. Each tree has been inspected, evaluated and scored using the Standard Tree Evaluation Method. Trees need to achieve a minimum STEM score of 110 points to be considered for inclusion on the protected tree list.

These trees are a highly valued community feature which provide multiple important benefits ranging from visual amenity and place making to biodiversity and carbon sequestration. Council's arborist has identified that the health of the protected trees could definitely be affected by the MDRS; particularly if the existing OWDP provisions aren't retained.

Council undertook a plan change in 2019 to create a strong framework to protect the best trees in the best location. Section 23 of the OWDP sets out policies and rules to maintain protected trees; with applications to remove a protected tree being a discretionary activity. Section 15 contains rules requiring that any new lot created must be able to accommodate all buildings outside of the Root Protection Zone of a protected tree whether the protected tree is on the new lot or on an adjacent site and that the Root Protection Zone of any protected tree must be contained entirely within any new allotment.

During the plan change process, Council developed a Tree Policy to provide policy direction for the management of amenity trees on Council land and protected trees on private property. Council's view at the time was that this policy would be sufficient to protect trees within the road corridor and within parks and reserves.

- Street trees

Between the three towns there are just over 6,000 streets trees that, along with the protected trees and trees on parks and reserves, provide the multiple benefits associated with urban ngahere

(forests). It is considered that these trees are an important contributor to creating the well-functioning urban environment envisaged in the NPSUD and to mitigate many of the effects of intensification. While Council previously considered that the 2020 Tree Policy would sufficiently protect these trees, this was written at a time when the OWDP front setbacks supported large specimen trees to grow to maturity. Many of the mature street trees extend beyond the road corridor into adjoining private property. The MDRS could have a range of effects on these street trees, for example, increased requests to prune or remove trees to enable developments with only a 1.5m front yard setback and construction works and the creation of climatic, hydrological and soil conditions that may adversely affect the health of trees.

7.3 Assessment of qualifying matters application

Appendix 8.9 addresses the s77J and s77L RMA Amendment Act requirements by:

- setting out the public open space areas subject to qualifying matters at a site by site level
- outlining how the qualifying matter is incompatible with the level of development permitted by the MDRS
- evaluating the specific characteristic on a site-specific basis to determine the geographic area where intensification needs to be compatible with the specific matter
- evaluating an appropriate range of options to achieve the greatest heights and densities permitted by the MDRS while managing the specific characteristics, and
- describing how modifications to the MDRS are limited to only those modifications necessary to accommodate qualifying matters and, in particular, how they apply to any spatial layers relating to overlays, precincts, specific controls, and development areas.

7.4 Recommendations

The focus of this report has been to ensure the intensification envisaged through the RMA Amendment Act to respond to the national significance of Aotearoa's housing crisis is implemented in Waipā in a way that ensures it is within environmental limits, that ensures our biodiversity is protected and enhanced, it leads to well-functioning urban environments with accessible and usable natural and open spaces that support thriving communities.

The report identifies potential cumulative and long-term adverse effects of subdivision, use and development enabled by the MDRS based on a desk top assessment of the information on Waipā's open space network. As well as focusing on the adverse effects on the open space network values, the potential for reverse sensitivities in locating higher densities close to existing and planned activities has also been considered.

The implementation of MDRS across Cambridge, Te Awamutu and Cambridge will negatively impact aspects of the the open space networks within these towns and for this reason modifications to the MDRS are recommended in appendix 8.8 to:

- protect, enhance, restore and reconnect the remnant natural areas to improve their long term ecological viability and support species that critically endangered such as the Pekapeka-tou-roa/long-tailed bats
- protect and restore Te Mana o te Wai associated with the Waikato River, the Karāpiro Stream, the Mangapiko Stream, the Mangaohoi Stream and Punui River; waterways which are considered taonga tuku iho by mana whenua and critical in terms of placemaking and well-being

- retain the usability of the existing parks and reserves to meet the needs of future residents for sport, active recreation, play, and connection with nature and the community, and
- provide for a healthy urban ngahere (forest) comprising large mature protected trees, street trees and trees within parks and reserves that contributes to Waipa's biodiversity, water quality, carbon sequestration, air quality, cultural heritage, visual amenity and place making aspirations.

It is also strongly recommended, that as Hamilton City Council is proposing, Council consider:

- listing future rules related to the protection of the Waikato River, heritage and natural environment on LIMs to increase the likelihood of compliance,
- how to create funding mechanisms other than general rates to fund both streetscape beautification and restoration activities that contribute to indigenous biodiversity, Te Mana o te Wai and Te Ture Whaimana o Te Awa o Waikato to mitigate the impacts of the intensification enabled through the plan change, and
- ways to incentivise retention of large mature trees and indigenous vegetation cover on private properties.

These recommendations have been put forward without having been able to review Hamilton City Council's draft rules in their proposed Plan Change 9 Historic Heritage and Natural Environment and Plan Change 12 Growing Up (with a focus on the health and wellbeing of the Waikato River). Hamilton City Council has been considering the impacts of the MDRS on the open space network and particularly the Waikato River for longer than Waipā District Council and has greater resource to assess the effects and determine the best approach to avoid, minimise or mitigate the effects on the open space network. For this reason it is strongly recommended that Council engage with Hamilton City Council to consider whether amending the recommendations in this report to align with Hamilton City Council's rule framework would create a stronger, regionally consistent approach to protecting and restoring the region's open space network.

The short time frames and the release of the NPS for Indigenous Biodiversity Exposure draft in June haven't enabled time to discuss in depth with the regional council the likely indigenous vegetation cover targets for the three towns and what will be required to achieve those targets. The regional council has highlighted based on their current data Cambridge has only 1% urban indigenous vegetation cover and that Te Awamutu and Kihikihi are recorded as having 0% urban indigenous vegetation cover; being areas deemed sufficiently large to be self-sustaining. This highlights the critical importance of protecting, enhancing and ideally extending or buffering the SNAs and biodiversity corridors and Council ensuring green field growth cells result in significant additional areas of protected indigenous vegetation cover. While brownfield developments are likely to not result in large areas of self-sustaining indigenous vegetation cover being created, there will be opportunities through good design to retain existing large mature trees and indigenous planting and create spaces for new plantings. It is highly recommended that Council work with the Waikato Regional Council on updating the data and considering opportunities to meet proposed draft targets urgently.

There were several sites that were considered as part of this assessment but discounted as sites that required modifications to the MDRS. These include:

- Kihikihi Speedway, Kihikihi Domain: While the MDRS will increase the number of residents impacted by this noisy activity and potentially affect their ability to secure another lease once the current lease expires in June 2031, it isn't considered an open space characteristic that makes the level of development inappropriate in light of the national significance of urban development and the objective of the NPS-UD.

- Lake Te Koo Utu: This significant site to mana whenua only has commercially zoned private land directly adjoining the reserve and this has recently been developed as part of the Lakewoods development.
- Military Stockade (236 S15): It is considered that the heritage values associated with this reserve won't be effected by the development of the surrounding residential zoned land because of the scale of the reserve and the fact it is bounded on all sides by roads.
- Turata: This significant site to mana whenua is surrounded by commercial , industrial and reserve zoning and so won't be effected by the MDRS.

There are four sites where further engagement with mana whenua is recommended to understand their views on how the MDRS will affect their relationship to with their ancestral lands, sites, waahi tapu and what modifications would satisfactorily address these effects.

8 Appendices

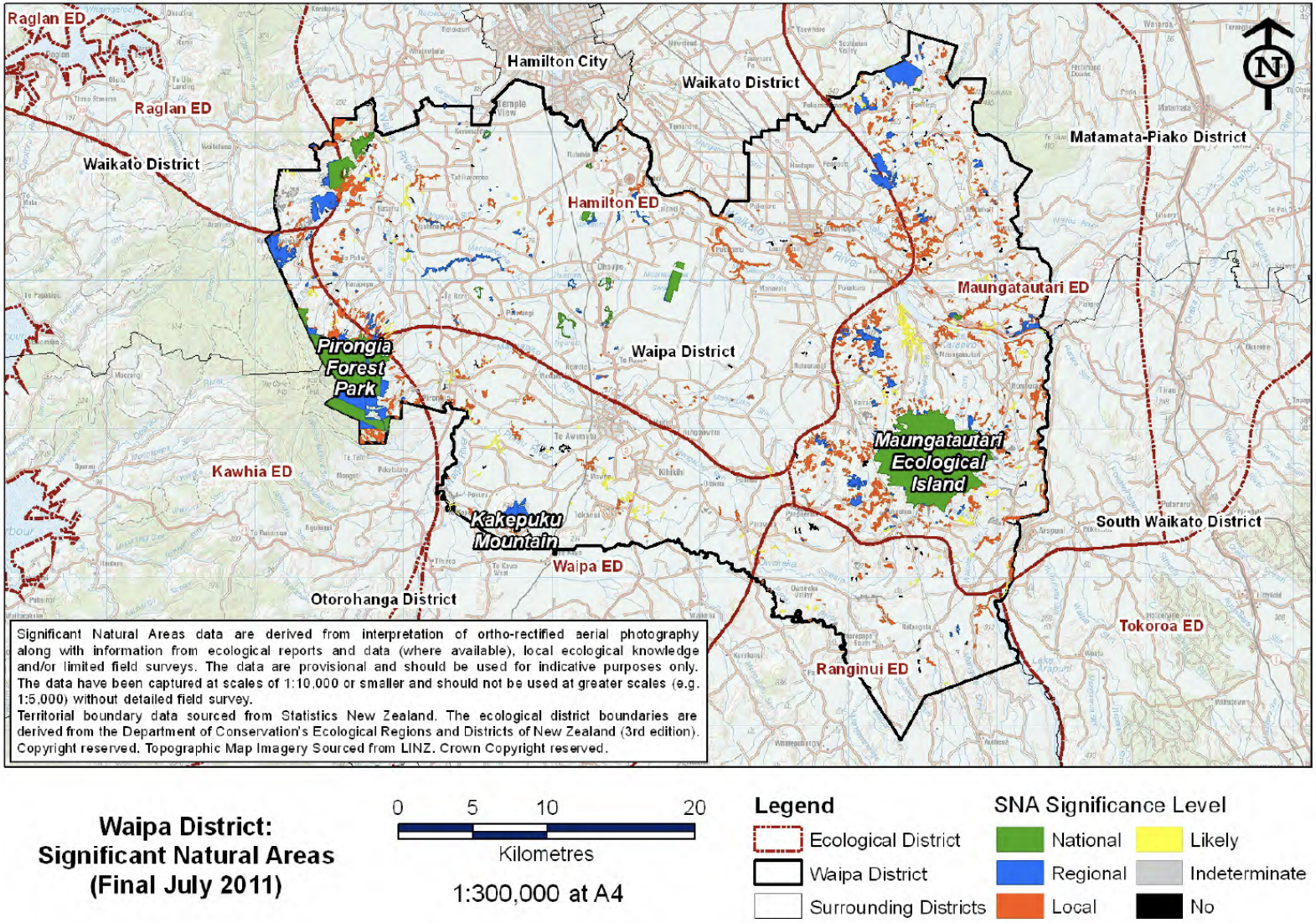
8.1 Reserve provision

RESERVE CATEGORY	CAMBRIDGE AREA (HA)	TE AWAMUTU AREA (HA)	KIHIKIHI AREA (HA)
Amenity (local purpose (stormwater) reserves, local purpose (accessways)	56	10	1
Car park	2	1	0
Conservation	91	0	0
Grazed (category tbc)	118	2	4
Neighbourhood	9	13	3
Premier	21	7	0
Special Purpose (land for cemeteries, commercial campground and community facilities)	12	5	2
Sport	104	25	25
Unknown (category tbc)	7	12	1
Proposed new reserves as part of growth cells	C1 – 1 stormwater reserve, 1 neighbourhood reserve and 1 heritage reserve C2 – 1 neighbourhood reserve and swale network C3 - tbc C4 – 2 neighbourhood reserves and SNA C5 – tbc C7 - tbc *C11 – tbc**	T1 – 1 neighbourhood reserve and multiple stormwater reserves T2 – 1 neighbourhood reserve, 1 stormwater reserve and shared path T3 – tbc T4 – tbc T5 – tbc T9 – tbc T10 - tbc T11 – 1 neighbourhood reserve and multiple stormwater reserves T14 - tbc	*T6 – tbc**
TOTAL HECTARES OF EXISTING RESERVES	419	77	37

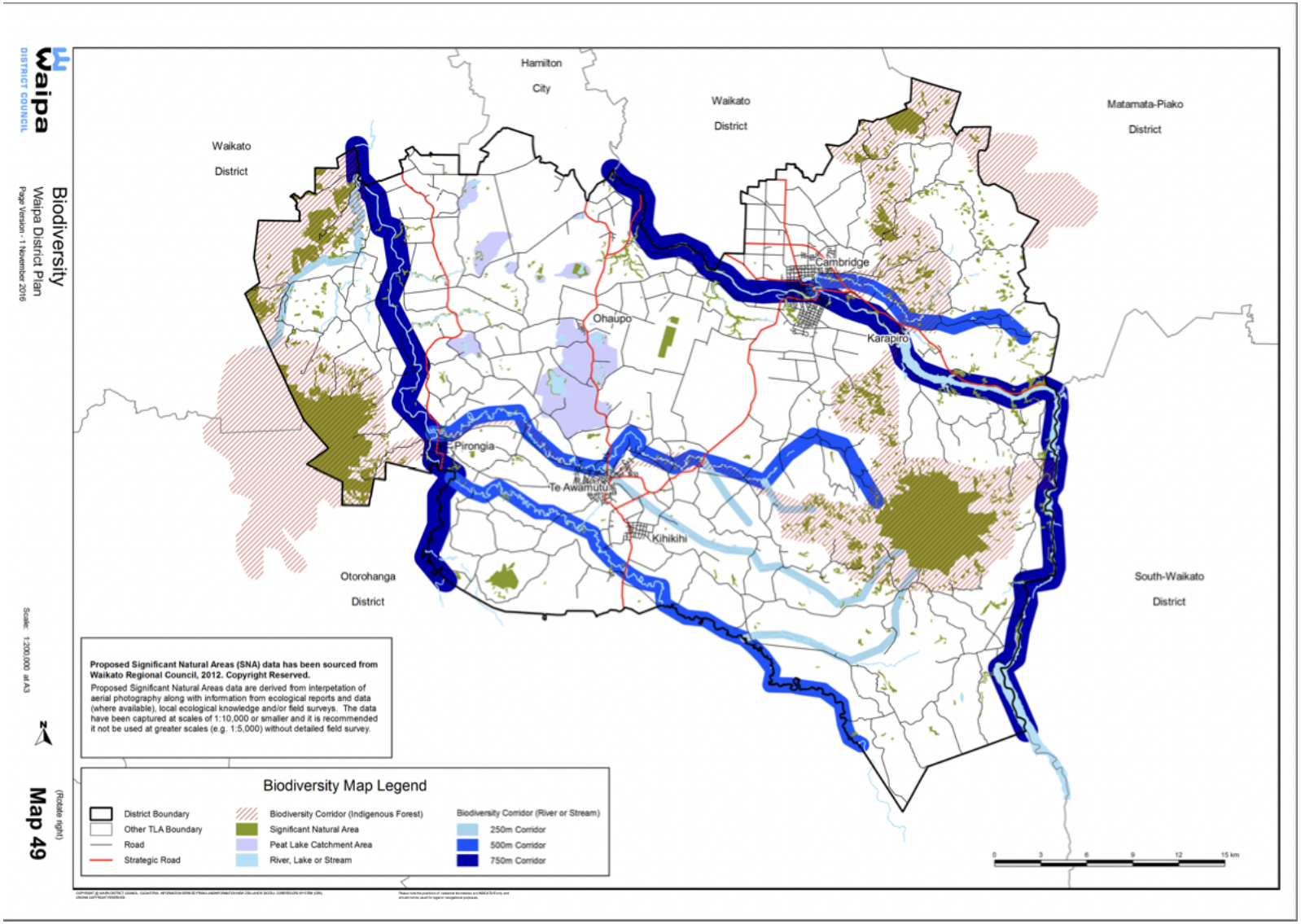
*****These growth cells are currently zoned large lot residential and are being investigated for rezoning.*

8.2 Significant Natural Areas of the Waipā District with ecological districts overlain

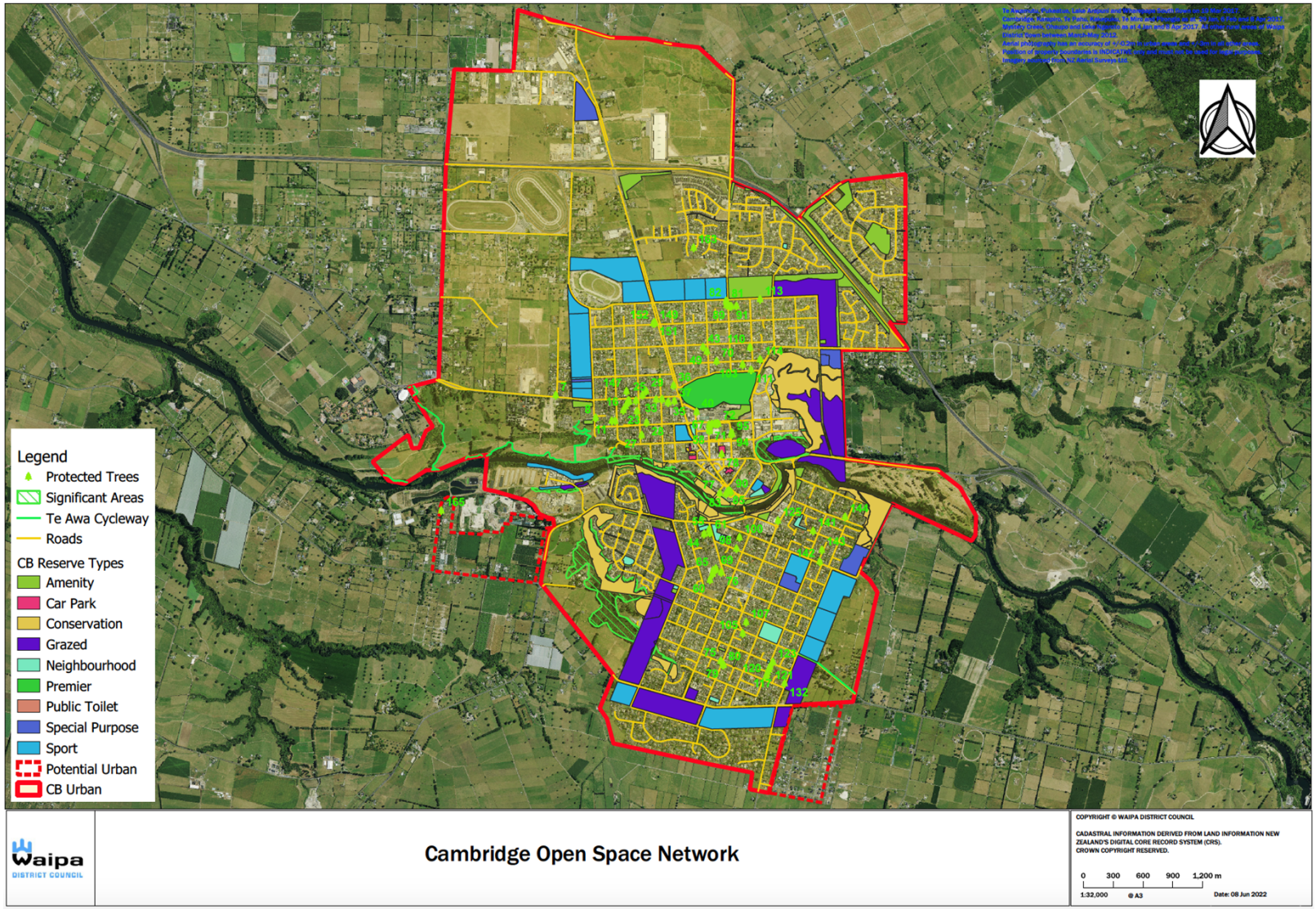
Source: Waikato Regional Council Technical Report 2013/16



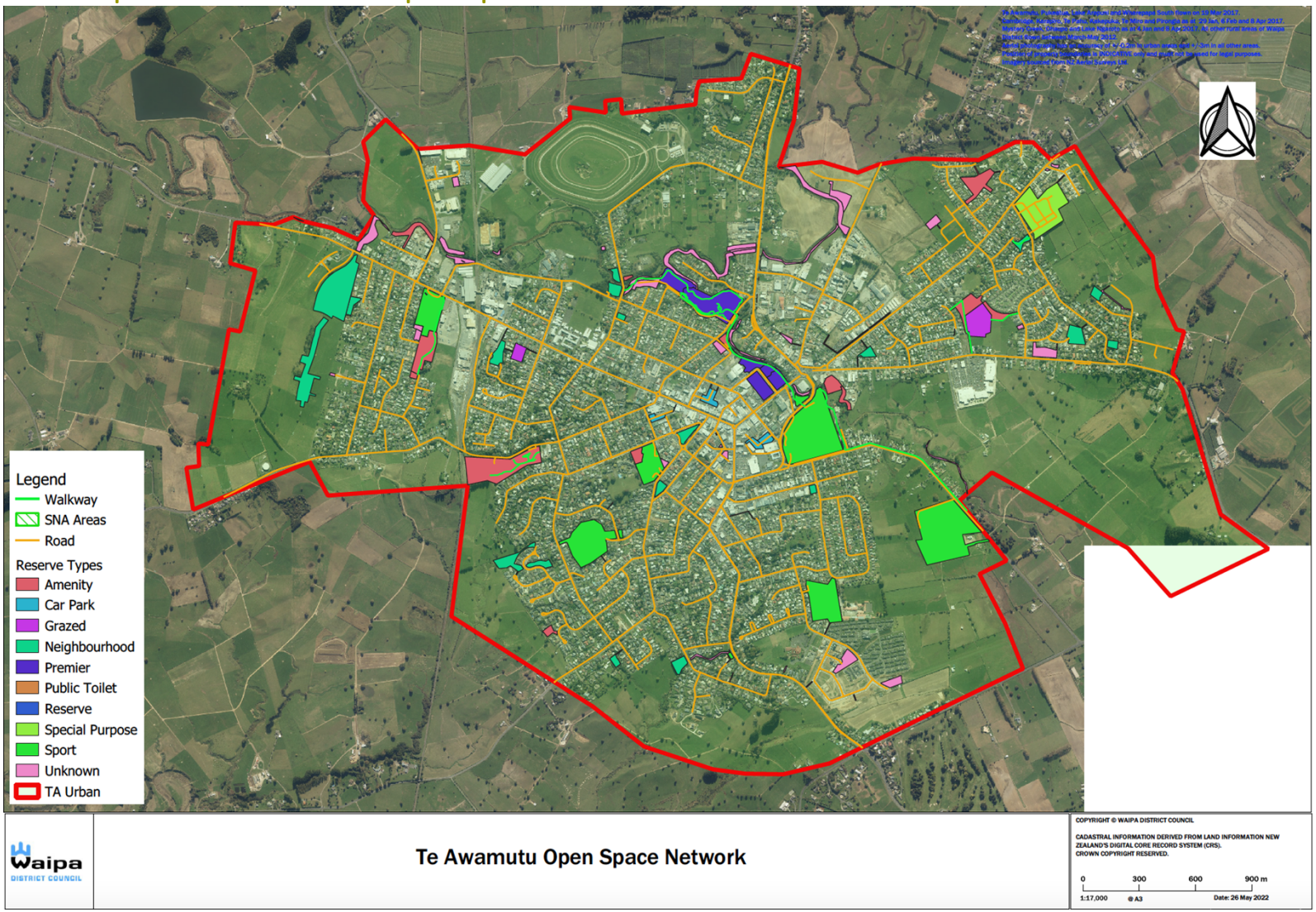
8.3 Operative Waipā District Plan Map 49 Biodiversity



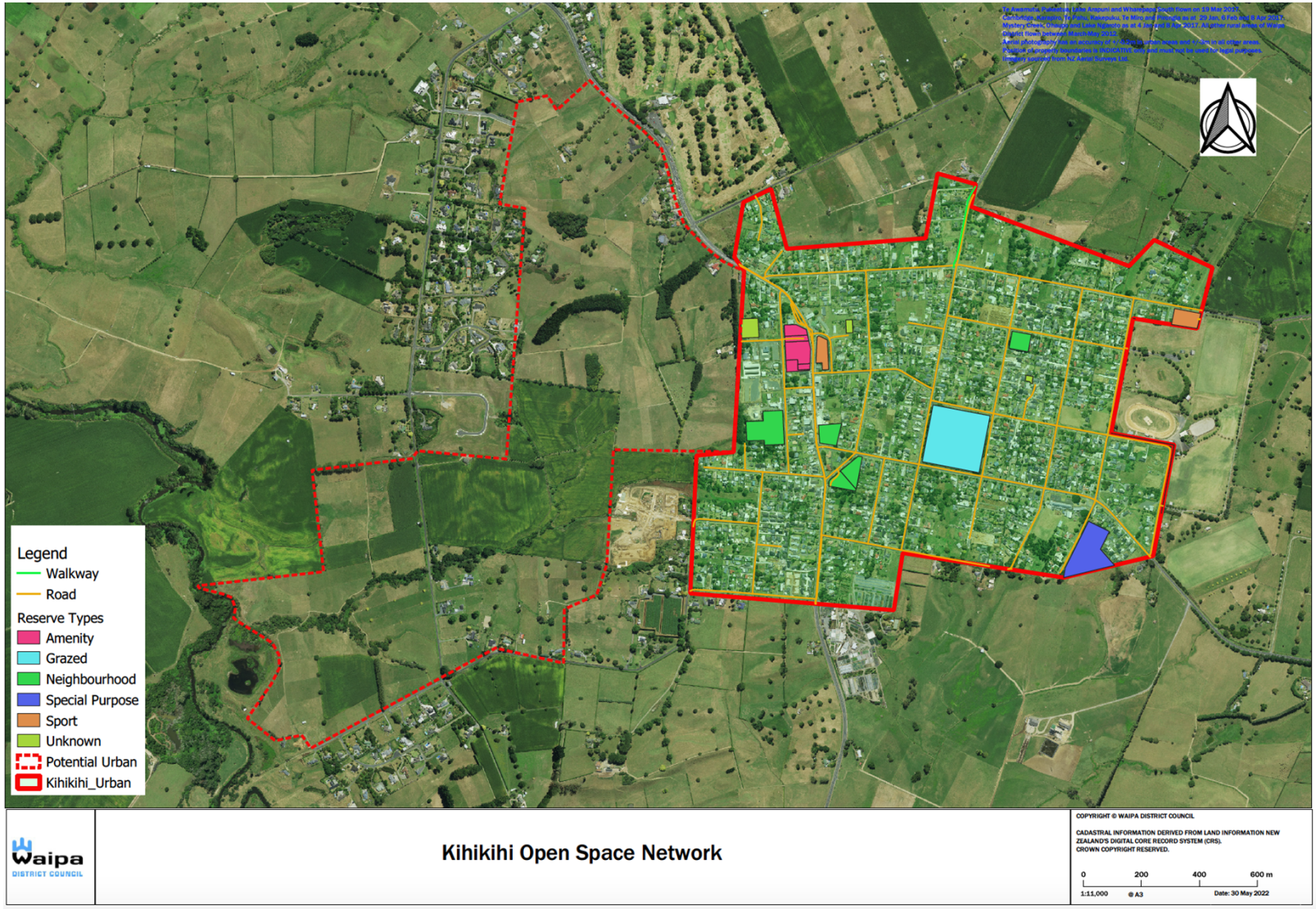
8.4 Map of Cambridge's open space network



8.5 Map of Te Awamutu's open space network



8.6 Map of Kihikihi's open space network



8.7 Operative Waipā District Plan rules that protect and enhance Waipā's open space network

OWDP SECTION	OWDP RULES THAT HELP PROTECT AND ENHANCE THE OPEN SPACE NETWORK
Section 02 Residential zone	2.4.2.6 The minimum building setback from any residential boundary interfacing with Te Awa cycleway as identified on the structure plan maps shall be 5m. 2.4.2.8 The maximum length of the wall and roofline of any building parallel or up to an angle of 30 degrees to any internal site boundary that adjoins the Residential Zone or the Reserves Zone shall be 23m, provided that: (a) Building lines in excess of 23m shall have the wall and roofline stepped to a minimum of 2.4m and a minimum length of 3m; and (b) For every additional 23m in length the wall and roofline of a building shall be stepped to a minimum of 2.4m and a minimum length of 3m. 2.4.2.9 Within the Cambridge Park Structure Plan Area shown on the Planning Maps, buildings shall not be located closer than 12m from the Indicative Top of the Bank as shown on the structure plan in Appendix S3. 2.4.2.11 Buildings shall not penetrate a recession plane at right angles to the boundary inclined inwards at the angles shown in the diagram from 2.7m above ground level at internal site boundaries that adjoin the Residential Zone a reserve of less than 1ha in size, or a public walkway. The angles in the diagram below shall be applied using the methodology in Appendix O6. Provided that where an internal boundary of a site abuts a driveway or right of way the recession plane may be measured from points 2.7m above the furthest boundary of the drive way or right of way. 2.4.2.12 Site coverage must not exceed 40% of the net site area, except that this rule does not apply to the St Kilda Structure Plan Area (refer to Rules 2.4.2.14 and 2.4.2.15) and compact housing (refer to Rule 2.4.2.44). 2.4.2.13 Impermeable surfaces must not exceed: (a) 45% of the net site area in the Cambridge North Structure Plan Area; (b) 60% of the net site area in the remainder of the Zone (except St Kilda Structure Plan Area). 2.4.2.20 The minimum area of glazing on the front façade(s) of a building that adjoins a public place shall be 15%. Provided that: (a) Where a site adjoins a public place, the front façade(s) of a building shall be all the sides of a building that faces the public place; and (b) Where the front façade(s) of a building is not parallel to a public place, the minimum area of glazing shall only apply to the longest wall facing the public place; and

	(c) Where the front façade(s) of a building is not parallel to a public place and the façades facing the public place are of equal length, then the façade at the least acute angle to the public place shall be deemed to be the front façade and the 15% glazing requirement shall only apply to that façade; and (d) The percentage area of glazing shall be measured as the framed wall opening size to accommodate the entire window. (e) This rule shall not apply to relocated buildings or a garage that is an accessory building. 2.4.2.21 Fences between buildings on the site and any road, public walkway or reserve shall be no higher than 1.2m in height if not visually permeable, or no more than 1.8m in height if visually permeable. Except: (a) In the T2 Growth Cell Structure Plan Area all fences within the building setback from Frontier Road or Pirongia Road shall be no more than 1.2m in height, whether or not they are visually permeable. For the avoidance of doubt, this rule does not apply to fences constructed within the building setback from Pirongia Road where construction has been undertaken to ensure design integration in accordance with S23.4 of Appendix S23. 2.4.2.22 Within the C1 and C2/C3 Structure Plan areas, fences between buildings on the site and any road, public walkway or reserve shall be no higher than 1.2m in height; fence design and materials shall retain a level of transparency (visually permeable) so as not to provide a blank façade adjacent to the street edge, public walkway or reserve. To be deemed transparent any fence must meet the following requirements: (a) Uses materials with continuous vertical or horizontal gaps of at least 50mm width to create 50% or more see through visibility; or (b) Uses any materials for the lower half of the fence, wall or hedge, and materials with continuous vertical or horizontal gaps of at least 50mm width to create 50% or more see through visibility on the upper half. 2.4.2.23 Landscape planting between buildings on the site and any public place shall allow visibility between the dwelling and the public place. 2.4.2.25 Within the Residential Zone, the design and layout of development shall ensure that water bodies and reserves are fronted by either the front or side façade of a dwelling. 2.4.2.44 Compact housing within the compact housing area overlay shall have a minimum area of 2,000m² and shall meet the following requirements: (f) Landscaping and permeable surfaces: At least 30% of the net site area of any site or unit site area shall be grassed, planted in trees and/or shrubs or otherwise landscaped in a manner that retains the permeable nature of the surface.
Section 15 Infrastructure, Hazards, Development and Subdivision	15.4.2.9 Any new Lot created must be able to accommodate all buildings outside of the Root Protection Zone of a protected tree whether the protected tree is on the new lot or on an adjacent site. 15.4.2.10 The Root Protection Zone of any protected tree must be contained entirely within any new allotment.

	15.4.2.11 Within the urban limits and the Large Lot Residential Zone, the design and layout of subdivisions shall ensure that water bodies and reserves are fronted by either roads or the front or side boundary of a lot. 15.4.2.12 Where new lots are to be created within high amenity landscapes, viewshafts, river and lake environs, significant natural features, and visually sensitive hill country, as identified on the Planning Maps, then the following shall apply: (b) The subdivision plan shall define the building platform and associated access alignment on each lot. The building platform shall be located so that at the time of building construction no part of any complying building will extend above the ridgeline nearest to the building platform, when viewed from a public place; and (c) The building platform, roads, and accessways shall minimize intrusion into the landscape, or viewshaft; 15.4.2.27 Where any subdivision in the residential or large lot residential zone includes the creation of new roads; the design, layout, construction and formation of the new road, except for service lanes, must provide for the planting of street trees. 15.4.2.28 Planting of street trees must be at an equivalent rate of one tree per residential property road frontage using an appropriate species for the location. Council may approve groups of trees where the kerb line and location of services and the area available are sufficient to accommodate the group of trees in the long term. 15.4.2.56 Subject to Rules 15.4.2.57 to 15.4.2.61, where any land adjoins the banks of any river or lake as defined in Section 230(4) of the Resource Management Act 1991 and where any lots of less than 4ha is created when the land is subdivided, an esplanade reserve 20m in width shall be set aside from that lot along the bank of any river or along the margin of any lake, as the case may be and shall vest in accordance with Section 231 of the Resource Management Act 1991 and where a reserve or road of less than 20m width already exists along that bank of a river or along that margin of a lake, then additional land shall be vested to increase the width to a minimum of 20m. For subdivision or development of 7 or more lots: 15.4.2.68 In all zones, the location, layout and design of reserves shall demonstrate: (a) That the reserve is directly linked to footpaths from the surrounding development; and (b) That the reserve is fronted on two sides by roads; and (c) That on street parking is provided adjacent to the reserve.
Section 22 Heritage and Archaeology	22.4.1.1(c) Development including buildings, earthworks, driveways or wastewater treatment systems within 20m of the boundary of a cultural site is a restricted discretionary activity.

Section 23 Protected Trees	Restricted Discretionary Activity: 23.4.1.3 Any pruning or maintenance of a protected tree that is not a permitted activity. Assessment will be restricted to the following: (i) Impact on the health and value of the tree; and (ii) Impact on the amenity of the surrounding area; and (iii) Necessity for carrying out the works; and (iv) Methods to be used. Discretionary Activity: 23.4.1.4(a) Any building works including disturbance of the ground within the root protection zone of a protected tree (other than maintenance permitted by this Plan in Rule 23.4.1.1(g). Discretionary Activity: 23.4.1.4(b) Any removal of a protected tree.
Section 24 Indigenous Biodiversity	24.4.1.1 (n) Removal of indigenous vegetation for any other purpose within the biodiversity corridors as identified on Planning Map 49 is a non-complying activity for national or regional SNA and a discretionary activity for local SNA (as identified in Appendix N5) 24.4.1.1 (n) Removal of indigenous vegetation for any other purpose within the biodiversity corridors as identified on Planning Map 49 is a controlled activity where clearance is less than 1ha and a restricted discretionary activity where clearance is greater than 1ha.
Section 25 Landscapes and Viewshafts	25.3.2.1 Activities, buildings, and infrastructure on the surface of the water and on the land adjacent to the Waikato River and the hydro lakes, shall be managed so that adverse effects on the qualities that contribute to the aesthetic and natural value of these areas are avoided, remedied or mitigated. 25.3.2.2 To maintain the character and amenity of the Waikato River and lakes natural landscape areas, the stability of these locations, and the biodiversity and habitat of the Waikato River and hydro lakes, the removal of the indigenous vegetation adjacent to the Waikato River and the hydro lakes shall be avoided. 25.3.2.3 Promote opportunities to enhance the natural character of the Waikato River margins where it has been compromised. 25.3.2.4 Buildings shall be designed and appropriately set back from the Waikato River to recognise its associated cultural, amenity and natural character values.
Section 26 Lakes and Waterbodies	Non-complying activity 26.4.1.5(a) Any building within 23m of the edge of the Waipā, Waikato, Pūniu, Kaniwhaniwha, Mangapiko, Mangaohoi, Karāpiro and Owairaka rivers/streams as measured at their maximum annual water level, as shown on the Planning Maps, except within the Karāpiro and Arapuni Hydro Power Zone. 26.4.2.1 No building, wastewater treatment system, earthworks or vegetation clearance shall be erected or undertaken within 23m of the edge of any lake or water body (excluding a natural wetland) as measured at its maximum annual water level, provided that this rule shall not apply to: (a) The Karāpiro and Arapuni Hydro Power Zone. (b) Maimai not exceeding 6m² in floor area; or (c)

	Earthworks and vegetation removal associated with conservation planting of river banks and lakes; or (d) St Kilda Residential Structure Plan Area; or (e) Clearance of vegetation undertaken in accordance with Rule 26.4.1.1(e) or (f); or (f) Harvesting of forestry over 5m from a water body.

8.8 Waikato Regional Policy Statement policies that protect and enhance Waipā's open space network

SECTION	WAIKATO REGIONAL PLAN POLICIES THAT HELP PROTECT AND ENHANCE THE OPEN SPACE NETWORK
2 Te Ture Whaimana o Te Awa o Waikato – Vision and Strategy for the Waikato River	**2.5.1 Vision for the Waikato River** Tooku awa koiora me oona pikonga he kura tangihia o te maataamuri *"The river of life, each curve more beautiful than the last"* Our vision is for a future where a healthy Waikato River sustains abundant life and prosperous communities who, in turn, are all responsible for restoring and protecting the health and wellbeing of the Waikato River, and all it embraces, for generations to come. **2.5.2 Objectives for the Waikato River** In order to realise the vision, the following objectives will be pursued: a. The restoration and protection of the health and wellbeing of the Waikato River. b. The restoration and protection of the relationships of Waikato-Tainui with the Waikato River, including their economic, social, cultural, and spiritual relationships. c. The restoration and protection of the relationships of Waikato River Iwi according to their tikanga and kawa with the Waikato River, including their economic, social, cultural and spiritual relationships. d. The restoration and protection of the relationships of the Waikato Region's communities, with the Waikato River, including their economic, social, cultural and spiritual relationships. e. The integrated, holistic and co-ordinated approach to management of the natural, physical, cultural, and historic resources of the Waikato River. f. The adoption of a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River, and in particular, those effects that threaten serious or irreversible damage to the Waikato River. g. The recognition and avoidance of adverse cumulative effects, and potential cumulative effects, of activities undertaken both on the Waikato River and within the catchment on the health and wellbeing of the Waikato River. h. The recognition that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities. i. The protection and enhancement of significant sites, fisheries, flora and fauna. j. The recognition that the strategic importance of the Waikato River to New Zealand's social, cultural, environmental and economic wellbeing, requires the restoration and protection of the health and wellbeing of the Waikato River.

	k. The restoration of water quality within the Waikato River so that it is safe for people to swim in and take food from over its entire length. l. The promotion of improved access to the Waikato River to better enable sporting, recreational, and cultural opportunities. m. The application to the above of both maatauranga Maaori and the latest available scientific methods. 2.5.3 Strategies for the Waikato River To achieve the vision, the following strategies will be followed: a. Ensure that the highest level of recognition is given to the restoration and protection of the Waikato River. b. Establish what the current health status of the Waikato River is by utilising maatauranga Maaori and latest available scientific methods. c. Develop targets for improving the health and wellbeing of the Waikato River by utilising maatauranga Maaori and latest available scientific methods. d. Develop and implement a programme of action to achieve the targets for improving the health and wellbeing of the Waikato River. e. Develop and share local, national and international expertise, including indigenous expertise, on rivers and activities within their catchments that may be applied to the restoration and protection of the health and wellbeing of the Waikato River. f. Recognise and protect waahi tapu and sites of significance to Waikato-Tainui and other Waikato River iwi (where they do decide) to promote their cultural, spiritual and historic relationship with the Waikato River. g. Recognise and protect appropriate sites associated with the Waikato River that are of significance to the Waikato regional community. h. Actively promote and foster public knowledge and understanding of the health and wellbeing of the Waikato River among all sectors of the Waikato community. i. Encourage and foster a 'whole of river' approach to the restoration and protection of the Waikato River, including the development, recognition and promotion of best practice methods for restoring and protecting the health and wellbeing of the Waikato River. j. Establish new, and enhance existing, relationships between Waikato-Tainui, other Waikato River iwi (where they so decide), and stakeholders with an interest in advancing, restoring and protecting the health and wellbeing of the Waikato River. k. Ensure that cumulative adverse effects on the Waikato River of activities are appropriately managed in statutory planning documents at the time of their review. l. Ensure appropriate public access to the Waikato River while protecting and enhancing health and wellbeing of the Waikato River.
6 Built Environment	Policy 6.1 Planned and co-ordinated subdivision, use and development

	Subdivision, use and development of the built environment, including transport, occurs in a planned and co-ordinated manner which: a. has regard to the principles in Section 6A; b. recognises and addresses potential cumulative effects of subdivision, use and development; c. is based on sufficient information to allow assessment of the potential long-term effects of subdivision, use and development; and d. has regard to the existing built environment.
8 Fresh Water Management	**Policy 8.1 Approach to identifying fresh water body values and managing fresh water bodies** Waikato Regional Council will facilitate a process that will involve regional communities, to identify values and establish subsequent fresh water objectives, limits and targets for fresh water bodies. The value setting process will: a. provide for variability in catchment management response; b. assist in ensuring that adverse effects of activities on the identified values of water bodies are managed in an integrated manner; c. determine any outstanding fresh water bodies and significant values of wetlands; and d. recognise that where a freshwater body is currently used for the purposes of renewable electricity generation or domestic or municipal supply, those uses are recognised as being values associated with that water body.
11 Indigenous Biodiversity	**Policy 11.1 Maintain or enhance indigenous biodiversity** Promote positive indigenous biodiversity outcomes to maintain the full range āf ecosystem types and maintain or enhance their spatial extent as necessary to achieve healthy ecological functioning of ecosystems, with a particular focus on: a. working towards achieving no net loss of indigenous biodiversity at a regional scale; b. the continued functioning of ecological processes; c. the re-creation and restoration of habitats and connectivity between habitats; d. supporting (buffering and/or linking) ecosystems, habitats and areas identified as significant indigenous vegetation and significant habitats of indigenous fauna; e. providing ecosystem services; f. the health and wellbeing of the Waikato River and its catchment; g. contribution to natural character and amenity values; h. tāngata whenua relationships with indigenous biodiversity including their holistic view of ecosystems and the environment; i. managing the density, range and viability of indigenous flora and fauna; and j. the consideration and application of biodiversity offsets.

12 Landscape, natural character and amenity	Policy 12.1 Outstanding natural features and landscapes Identified values and characteristics of outstanding natural features and landscapes (including seascapes) of regional or district significance are protected from adverse effects, including cumulative effects, arising from inappropriate subdivision, use and development.

8.9 Areas subject to qualifying matters

TOWN	AREA	QUALIFYING MATTER	POTENTIAL EFFECTS	PROPOSED MDRS AMENDMENT
Cambridge	Residential zoned land along the Waikato River and Karāpiro Stream	S77I(a) (sections 6(a)-(e) and (h)) and (c) S71I(c)	Degradation of SNAs and biodiversity corridors through vegetation removal, increased risk of pest and weed incursion and cat predation and reduced ability to require landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species. Adverse effects on cultural values (to be ascertained by council in consultation with mana whenua). Loss of natural character. Loss of views to and from the Waikato River and Karāpiro Stream. Water quality effected by reductions in water clarity, sedimentation, contaminations and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways. Adverse effects on slope stability through increased impervious surfaces, building platforms being brought close to the top of banks, increased number of pipes through banks and scouring and erosion at outfall structures.	Retain 20m esplanade reserve requirement (OWDP rule 15.4.2.56) Retain biodiversity corridor rules (OWDP rule 24.4.1.1) Insert new building setback rule requiring buildings to be setback 20m from significant natural areas unless the findings of an ecological assessment from a suitably qualified and experienced ecologist determines the effects of the proposed non-compliance can be adequately avoided, minimised or mitigated to not adversely affect the biodiversity values of the significant natural area. Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), building setback (OWDP rule 26.4.1.5(a)) and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation either: between the Waikato River and: - Addison Street - Pope Terrace - Victoria Street, Wilson Street, Duke Street, Byron Street and Alpha Street - Williamson Street Or:

				for all residential properties directly adjoining the Waikato River or esplanade reserves along the Waikato River. Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), building setback (OWDP rule 26.4.1.5(a)) and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation either: between Karāpiro Stream and Thornton Road, or: for all residential properties directly adjoining the Karāpiro Stream or esplanade reserves along the Karāpiro Stream. Insert a new infrastructure rule similar to Wellington City Council's draft INF-ECO-P33 – e.g. 'Only allow for upgrade to existing infrastructure and new infrastructure within Significant Natural Areas and Biodiversity Corridors where is can be demonstrated that: - There is an operational need of functional need that means the infrastructure's location cannot be avoided; and - Any adverse effects on indigenous biodiversity values within a Significant Natural Area or Biodiversity Corridor can be avoided or adverse effects remedied.' Insert a new outdoor artificial lighting rule for all residential zones within 20m of an SNA and/or Biodiversity Corridor similar to Wellington City

				Council's draft Light-R2 rule – e.g. Outdoor artificial lighting within 20m of an significant natural areas and/or a biodiversity corridor as identified on Map 49 is a restricted discretionary activity where matters of discretion are restricted to: - Whether there is evidence the area is used by at risk, threatened or endangered bird species for reproduction, feeding or nesting - Whether there is a functional need or operational need for the proposed lighting, - Whether lights are directed and shielded to avoid light spill, - Whether the lowest intensity lighting appropriate for the task is used, - Whether adaptive light controls are used to manage light timing, intensity and colour, and - Whether lights with reduced or filtered blue, violet and ultra-violet wavelengths are used. *Note: Consideration should be given to additional low impact design requirements e.g. detention tanks, swales, filter strips and rain gardens within specified buffer of reserve boundary. These matters are likely to be recommended as part of the stormwater assessment.* *Note: any agreed rules should also be applied to Carters Flat if rezoned.*
Rationale: The Waikato River is the tuupuna awa (river ancestor) and is a living taonga to each iwi. The OWDP identifies it as one of the two most important biodiversity corridors through Waipā. Its national significance is clearly indicated by 'A matter required to give effect to Te Ture Whaimana o Te Awa o Waikato – the Vision and Strategy for the Waikato River' being listed as a qualifying matter in the RMA Amendment Act.				

There is a significant extent of SNA (WP 372, 372a) along the Waikato River within the urban boundary which has the potential to be affected directly and indirectly by the proposed MDRS. Much of this SNA isn't currently protected as reserve land. In addition to the potential adverse effects on indigenous flora and fauna, the MDRS will likely effect the natural character by bringing high density housing (taller and extended building frontages) closer to the banks of these waterways. Intensification is also likely to result in a significant amount of pressure for Council to accept reduced esplanade reserve or strip widths, which if approved, compromise Council's ability to provide for the purposes set out in s229 of the RMA. It is critical that within the urban boundaries Council takes the full 20m of esplanade reserve and utilises redevelopment opportunities to rectify existing uses that encroached within this 20m esplanade area. It is also likely that intensification will result in increased requests to locate stormwater infrastructure across esplanade reserves to direct stormwater to the waterway. These works and the ongoing maintenance of this infrastructure has the potential to adversely affect both the esplanade reserves (particularly where they contain SNA) and the receiving environment. It is outside the scope of this report to assess the natural hazards associated with the MDRS adjoining these waterways but it is understood that this, along with natural character, is one of the reasons for the current OWDP 23m building setback.

Karāpiro Gully is a wide, deeply incised gully extending several kilometres from north of Karāpiro to the eastern edge of Cambridge township. The Karāpiro Stream flows along its base and is a tributary to the Waikato River, with the confluence at the eastern edge of Cambridge. While heavily modified, the gully is a SNA no WP 369 because it contains under-represented riparian shrublands and linkages for wildlife among significant sites. Pekapeka-tou-roa and karearea have been identified within the gully. Sections of SNA (WP366 and 366a) extend beyond the gully along both sides of the stream to the Waikato Expressway. This catchment is identified as a priority area in the Waikato and Waipā River Restoration Strategy for streambank erosion protection and restoration.

Both waterways have the cultural alert layer along them and there are a number of archaeological sites along the riparian margins.

It is considered that implementing the MDRS adjoining the riparian margins may present significant adverse effects on the ability to protect and restore the biodiversity corridors and the endangered and at risk species within these corridors and improve the waterway's water quality and instream habitat.

The recommended approach to protect the Waikato River and the Karāpiro Stream (a significant tributary) is aligned to Te Ture Whaimana o Te Awa o Waikato's objectives of restoring and protecting the health and wellbeing of the Waikato River, recognising that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities, adopting a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River, recognising and avoiding adverse cumulative effects , and potential cumulative effects, of activities within the catchment on the health and wellbeing of the Waikato River and improving public access. It also addresses a number of RMS section 6 matters and is aligned to Policies 3, 7 and 9 of the NPSFM.

Cambridge	Residential land adjoining the reserve (SNA WP 377) between Cambridge Park and C4	S77I(a)	Degradation of the SNA through adverse effects associated with increased risk of pest and weed incursion and cat predation and reduced space to require landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species such as the native species identified as being potentially present on this site. Water quality effected by reductions in water clarity, sedimentation, contaminations and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways. Adverse effects on slope stability through increased impervious surfaces, building platforms being brought close to the top of banks, increased number of pipes through banks and scouring and erosion at outfall structures.	Insert new building setback rule requiring buildings to be setback 20m from significant natural areas unless the findings of an ecological assessment from a suitably qualified and experienced ecologist determines the effects of the proposed non-compliance can be adequately avoided, minimised or mitigated to not adversely affect the biodiversity values of the significant natural area. If the above rule isn't supported, retain 12m building setback from top of bank within Cambridge Park (OWDP 2.4.2.9). Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation for all properties directly adjoining the significant natural area. Insert new rules referred to above to restrict infrastructure within SNAs and/or Biodiversity Corridors and to restrict artificial light within 20m of a SNA and/or Biodiversity Corridor. *Note: Consideration should be given to additional low impact design requirements e.g. detention tanks, swales, filter strips and rain gardens within specified buffer of reserve boundary. These matters are likely to be recommended as part of the stormwater assessment.*

Rationale: This SNA, which was likely originally a tawa-mangeao forest and wetland, is the only large SNA within the three towns. Pekapeka-tou-roa were detected in a recent bat survey. It was considered by the consultants that the bats occasionally use some mature trees for roosting but that the recorded activity suggested that bats mostly use the site, particularly the gully area, for commuting and foraging. While no lizards were observed it was considered that there was habitat suitable for the native copper skink. The assessment suggested the potential habitat for seven native freshwater fish species in the wider system, including four species classified as 'At Risk-Declining' but that given the presence of a culvert the most likely species that could be present are longfin and shortfin eels. The stream within the gully flows directly into the Waikato River. It is considered that implementing the MDRS adjoining the SNA may present significant adverse effects on the ability to protect and restore the SNA and the endangered and at risk species within it and improve the waterway's water quality and habitat. The recommended approach will support the long term viability of the SNA being one of the last substantial remnant native bush areas within Cambridge and its role as a habitat for threatened and at risk species by creating a buffer along the edge of the SNA to reduce any further adverse effects associated with residential development. The recommended approach also protects this tributary to the Waikato River and is aligned to Te Ture Whaimana o Te Awa o Waikato's objectives of restoring and protecting the health and wellbeing of the Waikato River, recognising that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities, adopting a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River, recognising and avoiding adverse cumulative effects , and potential cumulative effects, of activities within the catchment on the health and wellbeing of the Waikato River and improving public access. It also addresses a number of RMS section 6 matters and is aligned to Policies 3, 7 and 9 of the NPSFM.				
Cambridge	Residential land adjoining Addison Kingsley Reserve (SNA WP375)	S77I(a)	Degradation of the SNA through adverse effects associated with increased risk of pest and weed incursion and cat predation and reduced space to require landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species such as the native species identified as being potentially present on this site. Water quality effected by reductions in water clarity, sedimentation, contaminations	Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation between the Cambridge Town Belt (incl. SNA WP377) and: - Spencer Street, and - Shaw Street. Insert new rules referred to above to restrict infrastructure within SNAs and/or Biodiversity

			and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways.	Corridors and to restrict artificial light within 20m of a SNA and/or Biodiversity Corridor. *Note: Consideration should be given to additional low impact design requirements e.g. detention tanks, swales, filter strips and rain gardens within specified buffer of reserve boundary.*
Rationale: This SNA is of local significance and contains significant elements of under-represented kahikatea forest. Common species include tarata, māhoe, tōtara, kānuka, wheki, and mamaku. There is also a stream running through the SNA with wetland habitat along the side of the stream towards the headwaters of the eastern arm of the gully. Over the years groups such as Cambridge Trees Trust and Predator Free Cambridge have invested time and resources into restoring this gully system that covers approximately 11.4ha. The site is high-value habitat for indigenous fauna. Fantails and tuī are prevalent, ruru are heard most nights, kererū inhabit the area over winter, and kākā sometimes visit the area. A 2021 acoustic bat survey detected pekapeka-tou-roa/long-tailed in the reserve for the first time, confirming their presence in the area. It is considered that the SNAs proximity to Maungatautari supports this diverse collection of fauna. Council is yet to develop a master plan to guide development of the town belt between the SNA and the Waikato River which is currently grazed. To extend and increase the long-term viability of the SNA's rich biodiversity and provide a critical connection through to the biodiversity corridor along the Waikato River it is recommended that this area be explored for native revegetation (noting that mana whenua and Heritage New Zealand will need to be engaged because of the cultural and heritage values associated with this site). The recommended approach will support the long term viability of the SNA and its role as a habitat for threatened and at risk species by creating a buffer along the edge of the SNA to reduce any further adverse effects associated with residential development. The recommended approach also protects this tributary and is aligned to Te Ture Whaimana o Te Awa o Waikato's objectives of restoring and protecting the health and wellbeing of the Waikato River, recognising that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities, adopting a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River , recognising and avoiding adverse cumulative effects , and potential cumulative effects, of activities within the catchment on the health and wellbeing of the Waikato River and improving public access. It also addresses a number of RMS section 6 matters and is aligned to Policies 3, 7 and 9 of the NPSFM. The recommended approach would also support the retention of the amenity of the Leamington Cemetery which will become Cambridge's main cemetery within the next 10-15 years once Hautapu Cemetery reaches capacity.				
Cambridge	Residential land within C3 along the Te Awa	S77I(f)	Loss of amenity. Degradation of biodiversity corridors through increased risk of pest and weed	Retain 5m building setback (OWDP 2.4.2.6)

	Great New Zealand River Ride.		incursion and reduced space to require landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species. Adverse effects on cultural values (to be ascertained by council in consultation with mana whenua). Loss of natural character. Water quality effected by reductions in water clarity, sedimentation, contaminations and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways. Adverse effects on slope stability through increased impervious surfaces, building platforms being brought close to the top of banks, increased number of pipes through banks and scouring and erosion at outfall structures	
Rationale: The Te Awa Great New Zealand River Ride is a 20m easement along the Waikato River edge of the C3 growth cell. The OWDP 5m building setback was created to protect the green and open nature of this ride. The MDRS would reduce this setback to 1m. It is considered that this would significantly compromise the amenity of this nationally significant bike trail. Additionally it would bring the effects of high density residential activities closer to the biodiversity corridor along the Waikato River and the river itself.				
Cambridge	Arikirua Paa site within C3 (S15/676 and S15/42)	ss71I(a) – section 6(e)	Adverse effect on cultural values.	*Note: This is for mana whenua to determine. Council need to engage with Ngāti Haua and Ngāti Koroki Kahukura on the impacts of MDRS on this site.*

Rationale: The following excerpt was taken from Arikirua Paa Site Management Plan, drafted by Dr Alexy Simmons, Senior Archaeologist, Simmons and Assoc. Ltd, for the Te Awa Lifecare Village. Te Awa Lifecare Village is located immediately south of Growth Cell C3. *Arikirua Pā was the site of a large settlement of Ngāti Koroki Kahukura and Ngāti Hauā people. The pā was surrounded by approximately 18 hectares of gardens on the adjacent river terrace and the two terraces north of the pā). Arikirua Pā was at the centre of a major agricultural region and served as a regional nexus for the movement of people and goods from in land pā to and from Auckland. The pā became a hub of trade activity with the main trade route being the Waikato River. It was at this place, Arikirua Pā, that Ngāti Koroki Kahukura and Ngāti Hauā affirmed their support to establish the Kingitanga (King Movement) by using the notion of Owl Hunting as a metaphor for colonial distraction while grabbing the land.* Both Ngaati Korokii-Kahukura and Ngaati Hauaa, along with Waipa District Council, supported the Arikirua Management Plan in 2015 to achieve the vision for the site: "To preserve the unique archaeological, historical and cultural values of Arikirua Pā in perpetuity and manage landscape relationships, educational opportunities, amenity values, and access." It is unknown whether mana whenua would consider that the MDRS would impact the values of the pā and for that reason mana whenua engagement is recommended.				
Cambridge	Wharemarama Reserve	ss71I(a) – section 6(e)	Adverse effects on cultural values from loss of views to Pukekura range, visual dominance of adjoining development and intensity of residential activities adjoining a small culturally significant reserve.	*Note: This land is currently zoned large lot residential. If rezoned to residential, Council need to engage with Ngāti Koroki Kahukura on the impacts of MDRS on this site if the adjoining land, particularly the land south of the reserve towards the Pukekura range. It is understood viewshafts to this range from the reserve are significant.*
Rationale: This relatively new reserve was created to acknowledge the use of the area by Ngāti Koroki Kahukura as mara kai to feed the pa and the presence of archaeological features such as rua and a wharemarama (house for birthing and mate wahine). It currently has views to the south east to Pukekura range where there were eight pa along the ridgeline and subsequently where the raupatu (confiscation) line was determined. It is unknown whether mana whenua would consider that the MDRS would impact the values of the reserve and for that reason mana whenua engagement is recommended.				
Te Awamutu	Residential land along the Mangaohoi and	S77I(a) (sections 6(a)-(e) and (h))	Degradation of biodiversity corridors through vegetation removal, increased risk of pest and weed incursion and cat	Retain 20m esplanade reserve requirement (OWDP rule 15.4.2.56)

	Mangapiko Streams		predation and reduced space for landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species. Adverse effects on cultural values (to be ascertained by council in consultation with mana whenua). Loss of natural character. Loss of views to and from the streams. Water quality effected by reductions in water clarity, sedimentation, contaminations and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways. Adverse effects on slope stability through increased impervious surfaces, building platforms being brought close to the top of banks, increased number of pipes through banks and scouring and erosion at outfall structures.	Retain biodiversity corridor rules (OWDP rule 24.4.1.1) Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), building setback (OWDP rule 26.4.1.5(a))) and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation either: between the Mangapiko Stream and: - Christie Ave - Racecourse Road, and - Factory Road. Or: for all residential properties directly adjoining the Mangapiko Stream or esplanade reserves along the Mangapiko Stream. Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), building setback (OWDP rule 26.4.1.5(a))) and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation either: between the Mangaohoi Stream and: - Christie Ave - State Highway 13, - Domain Road, and - Park Road. Or: for all residential properties directly adjoining the Mangaohoi Stream or esplanade reserves along the Mangaohoi Stream.

				Insert new rules referred to above to restrict infrastructure within SNAs and/or Biodiversity Corridors and to restrict artificial light within 20m of a SNA and/or Biodiversity Corridor. *Note: Consideration should be given to additional low impact design requirements e.g. detention tanks, swales, filter strips and rain gardens within specified buffer of reserve boundary. These matters are likely to be recommended as part of the stormwater assessment.*
Rationale: The Mangapiko and Mangaohoi Streams are major tributaries of the Waipā River. The Ngā Wai o Maniapoto (Waipā River) legislation was enacted in 2012 to include the upper catchment of the Waipā River through to its junction with the Pūniu River. Te Ture Whaimana o Te Awa o Waikato – Vision and Strategy for the Waikato River now applies to the whole of the Waikato and Waipā river catchments. Both streams headwaters extend up to Maungatautari. Pre-European vegetation assemblages would have resembled lowland broadleaf and podocarp forest in the headwaters of both streams, and kahikatea-pukatea floodplain forest on the alluvial plains. This vegetation was progressively and rapidly cleared for agriculture and alluvial plans and wetlands drained through straightening and dredging waterways. This was further exacerbated by residential development within Te Awamutu. The esplanade reserve network along the riparian margins is not contiguous with large gaps along the Mangapiko Stream and the Mangaohoi as it moves to the eastern edge of the town. The OWDP identifies both streams as biodiversity corridors and requires a 23m building setback. Both streams have been identified as important existing and/or future flyways for bats. Te Awamutu is prone to flooding. This was likely exacerbated by the clearance of dense riparian vegetation that would have de-stabilised banks and increased velocities of flood flows in bankful and out of bank events. The beds and banks of both streams are more prone to erosion and eroded material is being transported further during flood events. Both streams, which are home to five species of five species of indigenous freshwater fish (including two species classified as At Risk – Declining, are degraded with evidence that the Mangapiko Stream is severely polluted. Council has recently mapped the flood hazard extent and has initiated a protect to restore the riparian margins and reduce the risk of erosion. The Maungatautari to Pirongia Ecological Corridor Project, led by the NZ Landcare Trust and involving mana whenua, private landowners and agencies, will support the restoration of biodiversity corridors along these streams.				

It is considered the that MDRS adjoining the streams riparian margins may present significant adverse effects on the ability to protect and restore the biodiversity corridors and improve their water quality and instream habitat. It is also increasing the number of future landowners and residents that will face flooding risks and it is likely that this flood risk modelling will result in recommended MDRS restrictions that will align with the recommendations in this report. The recommended approach to protect these significant tributaries of the Waipā River is aligned to Te Ture Whaimana o Te Awa o Waikato's objectives of restoring and protecting the health and wellbeing of the Waikato River, recognising that the Waikato River is degraded and should not be required to absorb further degradation as a result of human activities, adopting a precautionary approach towards decisions that may result in significant adverse effects on the Waikato River , recognising and avoiding adverse cumulative effects , and potential cumulative effects, of activities within the catchment on the health and wellbeing of the Waikato River and improving public access. It also addresses a number of RMS section 6 matters and is aligned to Policies 3, 7 and 9 of the NPSFM.				
Te Awamutu	Centennial Park(Otawhao Pa (S15/332)), Wallace Terrace	ss71I(a) – section 6(e)	Effect on cultural values.	*Note: This is for mana whenua to determine. Council need to engage with Ngāti Apakura on the impacts of MDRS on this site.*
Rationale: The historic site of Ōtāwhao Pā and the land contiguous to that which includes the present-day Wallace Tce, Te Awamutu, were sites of substantial cultural significance to all iwi of Tainui waka, and particularly to mana whenua, Ngāti Apakura, Ngāti Rāhui and Ngāti Hinetū, including important marae and hapū represented in Ngā Iwi Tōpu O Waipā. Ōtāwhao pā was named after Tāwhao the 19th Century Tainui specialist high chief. A recent cultural impact assessment noted that the archaeological site is only a fraction of the pā's original size. It is unknown whether mana whenua would consider that the MDRS would impact the values of the pa within the reserve and for that reason mana whenua engagement is recommended.				
Kihikihi	Along the Punui River	S77I(a) (sections 6(a)-(e) and (h))	Degradation of biodiversity corridors through vegetation removal, increased risk of pest and weed incursion and cat predation and reduced ability to require landscaping to create a buffer for the SNA. Adverse effects on pekapeka-tou-roa/long-tailed bats and potentially other threatened and at risk species.	Note: T6 is currently Rural Residential. If this was to be rezoned, then as for other waterways: Retain 20m esplanade reserve requirement (OWDP rule 15.4.2.56) Retain biodiversity corridor rules (OWDP rule 24.4.1.1)

			Adverse effects on cultural values (to be ascertained by council in consultation with mana whenua). Loss of natural character. Loss of views to and from the Puniu River. Water quality effected by reductions in water clarity, sedimentation, contaminations and nutrient loading resulting from earthworks and the cumulative effects of increased impervious surfaces within catchments and increased contaminants entering waterways. Adverse effects on slope stability through increased impervious surfaces, building platforms being brought close to the top of banks, increased number of pipes through banks and scouring and erosion at outfall structures.	Modify MDRS to require current standards for site coverage (OWDP rule 2.4.2.12), impermeable surfaces (OWDP rule 2.4.2.13), building setback (OWDP rule 26.4.1.5(a))) and the requirement of a minimum of 30% of the net area to be landscaped with native vegetation for all residential properties directly adjoining the Puniu River or esplanade reserves along the Puniu River. Insert new rules referred to above to restrict infrastructure within SNAs and/or Biodiversity Corridors and to restrict artificial light within 20m of a SNA and/or Biodiversity Corridor. *Note: Consideration should be given to additional low impact design requirements e.g. detention tanks, swales, filter strips and rain gardens within specified buffer of reserve boundary. These matters are likely to be recommended as part of the stormwater assessment.*
Rationale: The Puniu River is subject to a deed of recognition in the Raukawa Claims Settlement Act 2014 and is very significant to mana whenua; flowing past four marae. The river flows into the Waipā River and is identified as heavily polluted. Water is not safe to swim in, river banks are eroding and the tuna population has plummeted. The Pūniu River Care group has been working since 2018 to improve the health of this awa with local marae, iwi and hapū. Given the significance and state of the river and the importance of this biodiversity corridor within a growing town with no SNAs and limited urban forest, it is recommended that the rules to protect Te Mana o Te Wai of other key waterways and biodiversity corridors should be applied to the Puniu River should growth cell T6 be rezoned residential.				
Kihikihi	Rewi Maniapoto Memorial and Reserve	ss71I(a) – section 6(e)	Effect on cultural values.	*Note: This is for mana whenua to determine. Council need to engage with Ngāti Maniapoto on the impacts of MDRS on this site.*
Rationale:				

This 1894 Rewi Maniapoto Memorial and Reserve is of great historical and cultural significance to both the local and national community of Aotearoa. It is a Category 1 Historic Place. The place is significant because Rewi Maniapoto is a nationally important figure in nineteenth-century New Zealand history who had an important role in the development of the Kingitanga (Maori King) movement; in the subsequent Waikato War (1863-4); and in creating reconciliation at the end of the conflict. It is of special significance as the burial place of Rewi Maniapoto, an important rangatira of huge importance to the Ngati Maniapoto and wider Waikato communities; and as the only land returned to Ngati Maniapoto within the area confiscated by the government after the New Zealand Wars. The reserve once contained the house of rangatira Rewi Manga Maniapoto (?-1894, Ngati Maniapoto); the house and the allotment of land it occupied were given to him by the government in 1881, as a marker of the respect in which he was held as a result of his role as a peacemaker after the Waikato Wars of the 1860s. Thirteen years after the house and land were given, a memorial to Maniapoto was built for him as a personal tribute from Governor George Grey (1812-1898), within metres of the house. It was erected while Maniapoto was still alive, and he watched it being built. He was present for its unveiling on 23 April 1894, and died two months later. The reserve has residential zoned land along its eastern boundary. It is unknown whether mana whenua would consider that the MDRS would impact the values of the pa within the reserve and for that reason mana whenua engagement is recommended.				
All	Residential zones directly (that is not separated by a road) adjoining all premier, sports, neighbourhood, special purpose and amenity reserves	S77I(f)	Risk of reverse sensitivities associated with noise, lights, parking, traffic and ball sports increased as a result of an increase in the number of residential lots on boundaries, setbacks reduced to 1m and removal of parking requirements that will likely see greater demand for on-street parking by residents reducing the parking options available to reserve visitors. Reserves become 'wetter' and potentially less usable from run off from adjoining properties.	Modify MDRS to require 4m setback for rear and side boundaries which adjoin public spaces. Note: Assessment Criteria where the standard is infringed should include: 1. Dominance, privacy and shading effects on adjoining sites; and 2. The effects on the function and associated amenity values of any adjacent open space zone.

			Existing reserve trees potentially effected by development on adjoining properties that require pruning and/or development within the dripline of trees.	
Rationale: Intensification adjoining these reserves is supported however the proposed setback (aligned to the current private open space minimum dimension) will reduce the risk of adverse effects on these reserves; particularly shading and visual dominance, and reduce the reverse sensitivity issues associated with current and planned activities within the reserves zones. Similar reverse sensitivity rules exist for utility services. Given the cost of land, Council's limited reserve acquisition budgets and difficulties in trying to retrofit urban areas (brownfield sites) to extend existing reserves, it is critical that Council protect the amenity and usability of these reserves to provide for future generations. The proposed modification also recognises that best practice urban design practices support private open space adjoining public parks and reserves.				
All	Residential zones directly adjoining reserves zones	S77I(f)	Reduced safety in public open spaces.	Retain the following OWDP rules - 2.4.2.20 - 2.4.2.21 - 2.4.2.22 - 2.4.2.23 - 2.4.2.25 Note: Assessment Criteria where the standard is infringed should include: 1. The effects on the function and associated amenity values of any adjacent open space zone.
Rationale: The MDRS doesn't specify standards for glazing, building orientation and reserve interface requirements to create passive surveillance of public open spaces. Retaining the existing rules is critical to ensuring quality public open spaces and enhancing reserve user safety. It isn't anticipated that this will have any impact on the desired intensification outcomes.				
All	Protected trees on private and public property	S77I(j)	Adverse effects on the health of protected trees resulting from trees being in more than one registered title.	Retain all current OWDP rules to protect the health and long term viability of protected trees; including - Rule 23.4.1.3 - Rule 23.4.1.4(a) - 23.4.1.4(b)

			Pressure to prune and/or remove protected trees. Tree health adversely effected by construction works and/or long term effects of changes to ground water, increased impervious surfaces in close proximity and shading.	- 15.4.2.9 - 15.4.2.10
Rationale: As set out in the report, Waipā's protected trees, particularly within Cambridge are significant to the towns' character and ecosystem services. Most date back to pre-European settlement. As confirmed through Council's recent plan change process, it is important that these trees are identified, protected and cared for so that they can be enjoyed by future generations. It is vital that the current protected tree list in Appendix N4 as protected trees and the OWDP rules protecting these trees from the adverse effects of urban intensification are retained and that more trees are protected under this mechanism.				
All	Residential zones adjoining arterial roads	S77I(j)	Significantly reduced front yard setbacks may result in shading and reduced street tree 'space' for roots and branches at maturity. Potentially greater risk of wind tunnels. Health of existing street trees adversely effected by construction works and/or long term effects of changes to ground water, increased impervious surfaces in close proximity and shading. Future street tree planting options more restricted as result of less space within the road corridors to accommodate large mature trees.	Modify MDRS to increase front yard setbacks from 1.5 to 4m. Retain OWDP rule 15.4.2.28. *Note: It is recommended that Council consider following the lead of others like Hamilton City Council in considering making new roads wider to fit street trees and landscaping.*
Rationale: As set out in the report street trees are critical to ecosystem services and to the character of Waipā's towns. They will play a significant role in offsetting the visual, environmental and climatic effects of the proposed intensification. The proposed modification to retain the current front yard setback along arterial roads only will reduce the adverse effects of intensification on the health and wellbeing of large mature trees along arterial roads which will support Council's placemaking and urban ngahere aspirations while still enabling higher densities. There is also evidence that enclosing streets				

with large mature streets trees support transitions to lower speed environments, defines streets as urban public places and promotes them as a pedestrian friendly spaces.

Retain the rule requiring the planting of the equivalent rate of one tree per residential property road frontage using an appropriate species for the location is critical to offset the effects of the MDRS and support the development of high quality public spaces that are pedestrian friendly. The wording of the rule, enables Council to consider proposals for groups of trees where the development form enabled by the MDRS doesn't enable adequate tree spacing.

8.10References

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