



Report on Māori Relationships to Urban Green space

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Executive summary

This report examines how urban Māori connect to urban places and in particular to green urban spaces. Through examining this relationship, the report shares key considerations related to the value of green spaces to urban Māori and the potential challenges that may continue to harm connections to place and nature. The literature referenced in this report shows the important role of Māori place connections and mātauranga in shaping meaningful engagement with green space and how this should inform future planning considerations for the protection of urban green space while supporting increased well-being for urban Māori. Through examining literature related to urban Māori experiences, tools for co-management, national directives, and current examples of Māori in urban spaces, this report presents considerations for urban green space development with the rising need for housing.

Recommendations from the findings of this report are offered here to inform future policy development;

- Scope urban spaces for inequities related to nature access and develop Māori informed response eg increase tree cover in cities, increase diverse biodiversity, increase opportunity for varying engagement opportunities in planning for Māori of both Mana Whenua and Mātāwaka descent.
- Create guidelines for supporting the development of green spaces that is Mana Whenua developed.
- Develop guidelines for inclusion of Mātāwaka in urban planning.
- Support the development of Māori housing models that factor green spaces into the housing infrastructure.
- Utilise Māori concepts such as Kaitiakitanga to facilitate relationships of care and protection over green spaces.
- Develop guidelines for Mana Whenua and Mātāwaka relationships in urban planning.
- Use iwi, national and local policy and plans to guide best practice for green space development that is informed by a Māori perspective.

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Introduction

Indigenous people worldwide share close and intimate relationships with all forms of nature. This relationship is formulated through distinct worldviews that draw from cultural narratives, values and concepts (Watene, 2022). For Māori in Aotearoa/New Zealand, this view of nature also encompasses a framework where all aspects of nature are intertwined and are connected through stories of creation and genealogy, linking Māori to their natural and spiritual environments (Harmsworth & Awatere, 2013; Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022; Watene, 2022; Watene, 2016). Concepts such as Whakapapa, Mana, Mauri and Kaitiakitanga support this view that Māori people are part of the natural world (Harmsworth & Awatere, 2013; Watene, 2022; Walker, Wehi, Nelson, Beggs & Whaanga, 2019; Tipa & Welch, 2006). This holistic approach has informed cultural practices with nature for many generations and further developed guiding principles to enact authority and care over lands, waters, and tribal territories (Harmsworth & Awatere, 2013; Watene, 2022; Tipa & Welch, 2006).

The introduction of colonisation and the subsequent rise of urbanisation and modern living has meant that opportunities to maintain such connections to the natural world have become challenged today (Marques, Freeman, Carter & Pedersen Zari, 2021). It is no longer disputed that environmental degradation is widely seen in Aotearoa/New Zealand where important biodiversity, landscapes and waterbodies are affected by development, climate change and pollution (Harcourt, Awatere, Hyslop, Taura, Wilcox, Taylor, Rau & Timoti, 2021). Increased degradation can have lasting negative effects on indigenous communities and recognising the pressing issues upon Māori relationships to nature is needed (Harcourt et al., 2021; Tipa & Welch, 2006).

Damage to water quality, forest management, soil health and broadly the health of nature have echoed the need for Māori to be included in decision making to ensure the longevity of Māori relationships with the natural world (Harcourt et al., 2021; Lambert & Mark-Shadbolt, 2021; Hutchings, Smith & Harmsworth, 2018; Selby, Moore & Mulholland, 2010; Te Aho, 2010; Walker et al., 2019). A clear example of such a strain on nature relationships can be seen in urban areas where over 80% of Māori now call home (Walker et al., 2019; Kukutai, 2013). Although previous generations of Māori migrated to urban spaces to obtain better life outcomes, urban spaces have contributed to the loss of identity, language, culture and relationships to important landscapes and nature (Bedford, Didham, Ho & Hugo, 2004; Haami, 2018; Tapsell, 2014; Williams 2015). With increased biodiversity loss taking place in urban areas, impacts on Māori communities who are rebuilding relationships to nature will become challenged if limited intervention is undertaken. As urban areas continue to grow in order to meet the needs of urban people, remnant and

reconstructed green areas will become important sites for urban dwellers to experience nature outside of their homes (Clarkson, Wehi & Brabyn, 2007; Soga & Gaston, 2016; Hanna & Wallace, 2021). Protecting these green spaces not only requires efforts from local government, but also the wider community, including Māori.

This report examines how urban Māori of both Mana Whenua and Mātāwaka descent connect to urban places and how this may shape use and connection to green urban spaces. Through examining this relationship, the report shares key considerations related to the value of green spaces to urban Māori and the potential challenges that may continue to harm connections to place and nature more broadly, in urban spaces. The literature from this report shows the important role of Māori place connections and mātauranga in shaping meaningful engagement with green space but also, how this may inform future planning considerations for the protection of urban green space and supporting increased well-being for urban Māori.

The key aims of this report are to;

- Present Māori relationships to urban green space
- Identify key mechanisms that may support or hinder this relationship
- Share how these aspects must be considered in the wake of urban housing intensification.

The role of connection

Māori connection to nature is established through the concept of whakapapa, forming ties between the physical and spiritual worlds (Ka'ai & Higgins, 2004; Harmsworth & Awatere, 2013; Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022). Creation narratives associated to primordial gods and ancestors such as Ranginui and Papatūānuku inform whakapapa relationship by detailing how Māori descend from these ancestors (Ka'ai & Higgins, 2004; Roberts, 2013). It is through this lineage that knowledge and practices of responsibility and obligation are developed (Mikaere, 2011; Roberts, 2013). Through the recognition of whakapapa narratives, relationships between Māori and nature incorporate a kinship approach where Māori are part of the natural world. Māori will often recite their connections to both their ancestors and their links to their landmarks including mountains, rivers, lakes and their ancestral marae (Kawharu & Pfeiffer, 2013). Ties to the natural world inform the development of cultural practices for Māori such as the use of Karakia before harvesting resources to pay respect to Māori gods, the use of the Maramataka and creation narratives to guide planting and resource collection as well as guiding the appropriate use of such resources in respect to the vitality of Mauri (Ka'ai & Higgins, 2004; Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022; Walker, 2021; Whaanga & Matamua, 2016). Connection to ancestors and atua informs place-based relationships and enables the development of concepts such as tūrangawaewae and ahi kā, where a sense of place and responsibility to place are embodied through narratives, cultural practice and the maintenance of knowledge (Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022; Taiapa, Moewaka Barnes & McCreanor, 2021; Whaanga & Matamua, 2016). Roles such as kaitiaki and practices of kaitiakitanga develop from these relationships and further support the obligation that many tangata whenua feel towards their home spaces (Kawharu, 2000; Mutu, 2010).

Urban Migration

A drift from traditional lands

Urbanisation has impacted indigenous peoples across the globe and Māori are not exempt from such experiences (Hoskins, Lee-Morgan, Knox, Dennis, Henry, Nathan, Smiler & Ratana, 2019). The process of urbanisation of Māori spanned over many years with a large volume of Māori migrating from rural areas to urban areas after the Second World War (Morrow, 2014). This acceleration was prompted by the desire of many Māori to obtain better financial stability, work opportunities and lifestyle for themselves and their whānau (Haami, 2018; Williams, 2015). Initially, Māori who had migrated to urban areas maintained strong connections with their homelands and were able to sustain some form of connection to important places, knowledges and cultural practices of their

tribal regions (Williams, 2015). However, as generations passed and continued to reside in urban areas, developing disconnection to homelands, knowledges systems, culture, language and identity were inevitable (Marek, 2020; Haami, 2018; King, Hodgetts, Rua & Morgan, 2018; Williams, 2015). This disconnection experienced by urban Māori severed long held relationships to nature, place and knowledge that are both important for cultural connection, overall health and well-being and long held obligations to ancestors and atua (Marques, Freeman, Carter & Pedersen Zari, 2021; Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022, Walker, 2021).

The impacts of such loss to Māori initiated movements in the early 1970's for the revitalisation of culture, language, identity, knowledge and broadly, connection to the Māori world (Harris, 2004; Walker, 2004). This movement initiated revitalisation instruments such as Kohanga reo, the Māori language Act and the Waitangi Tribunal (Harris, 2004; Walker, 2004). It was during this period that Māori both local and transient were recognised in Aotearoa society for increased protest actions and challenging the government of the time. The rise of pan-tribal movements further contributed to addressing Māori struggles by uniting Māori for the common goal of land reclamation, revitalisation of language, culture and identity of Māori in Aotearoa (Harris, 2004).

Mana Whenua and Mātāwaka

The renaissance brought about great change in Aotearoa for Māori by restoring roles in managing concerns across a number of issues such as local and national resource issues, education, social welfare and more broadly, the opportunity to enact self-determination over Māori affairs (Harris, 2004; Walker, 2004). This process revitalised important tribal boundaries and identities such as the essential role of Mana Whenua hapū and whānau, who held authority for decision making over their traditional lands and territories, while also allowing the development of the term Mātāwaka, who are described as transient people (Bargh, 2016; Mutu, 2010; Ryks, Simmonds & Whitehead, 2019).

For Mana Whenua, connection to space is guided through long-held whakapapa connections to the area (Ryks, Pearson & Waa, 2016). When looking towards urban spaces, these sites may be viewed as colonial-built environments, however, they are built over and through Mana Whenua territories (Marek, 2020). Evidence of Mana Whenua occupation of urban spaces vary across Aotearoa cities however, important features like maunga, pā sites, local water ways as well as names, are reminders of the people who were and continue to maintain their important roles as ahi kā of these urban areas (Bennett, Matunga, Steyl, Borell, Dionisio & Hāpuku, 2021; Michel, Dobson-Waitere, Hohaia, McEwan & Shanahan, 2019). These reminders of such connections that Mana Whenua hold to urban areas can help in terms of decision making and planning for urban spaces and encourage the

reinvigoration of important narratives and practices associated to such features (Bennett et al., 2021; Walker, 2021).

The term Mātāwaka is used to describe transient Māori who now resided outside of their traditional lands like those who reside in urban areas (Ryks, Pearson & Waa, 2016; Ryks, Simmonds & Whitehead, 2019). For Mātāwaka, relationships to urban spaces are more complex as they include aspects of disconnection but also the building of nuanced relationships to place, which historically included the establishment of urban pan-tribal marae and identities (Barcham, 1998; Rangiheuea, 2011). Given their occupation of urban areas, Mātāwaka share relationships to urban places that still recognises whakapapa connections to atua and ancestors in a broader sense (Ryks, Pearson & Waa, 2016; Walker 2021).

In urban spaces, both groups coexist together and share different relationships to the urban space that intertwines aspects of mana, whakapapa, kaitiakitanga, place-based connections, migration and occupation (Ryks, Pearson & Waa, 2016; Walker et al., 2019).

Urban development

Challenges for urban green space

Green spaces in cities are not only seen as parks but also include gardens, sidewalks, trees, small forested areas, gully systems and wide open spaces that may have diverse forms of vegetation (Taylor & Hochuli, 2017). Green spaces provide areas for urban dwellers to connect with nature, which can result in increased physical and mental wellness (Cox, Shanahan, Hudson, Fuller & Gaston, 2018; Shanahan, Fuller, Bush, Lin & Gaston, 2015; van Heezik, Freeman, Falloon, Buttery & Heyzer, 2021). These sites vary in size and biodiversity and can be widely dispersed across a city (Richardson, Pearce, Mitchell, Day & Kingham, 2010). Although efforts of restoration of nature in urban spaces is being undertaken, there are instances of biodiversity loss which require diverse approaches to remedy such issues (Stanley, Beggs, Bassett et al., 2015). When nature is limited in urban areas challenges can arise for those who wish to maintain cultural knowledge and practices (Marques, Freeman, Carter & Pedersen Zari, 2021). Cultural practices like the collection of rongoā not only supports health outcomes for Māori, it is also integral to understandings of identity and connection to land (Mark, Boulton, Allport, Kerridge & Potaka-Osborne, 2022). Varying native plant species such as Kawakawa, Kumarahou and Karamu among others, are essential to create forms of rongoā (Durie, 2010). Therefore, native vegetation for the purpose of expressing cultural practices should be factored into the development of green spaces.

Considering the impacts of colonisation and urbanisation on Māori and the loss of knowledge, identity and culture, limitations of nature, especially native species, in urban spaces will hinder the revitalisation of important knowledges and practice. If green spaces are not reflective of the people who once resided in the area, they are likely to have minimal engagement from some Māori communities (Marques, Freeman, Carter & Pedersen Zari, 2021). Green spaces should encourage connection between people, nature, culture and ultimately aid in understandings of identity for Māori (Marques, Freeman, Carter & Pedersen Zari, 2021).

Access to green space is not equally distributed in urban areas, for example tree cover in Auckland varies across the city with some suburbs having higher canopy cover than others. Most notably, tree cover in the southern parts of the city like Māngere-Ōtāhuhu are 8% and 9% in Ōtara-Papatoetoe, the lowest in the Auckland area (Auckland Council, 2019). In addition, 39% of Auckland's total tree cover exist on public land, with only 7% designated as Auckland Council parkland (Auckland Council, 2019). Limited tree cover in these public spaces and the uneven distribution of trees in Auckland can mean that some communities will not have access to experience diverse forms of nature in their neighbourhoods. Moreover, the lack of tree cover in Māngere, Ōtāhuhu, Ōtara and Papatoetoe can be detrimental for urban Māori who make up over 15% of the population for Māngere-Ōtāhuhu and Ōtara-Papatoetoe boards (Auckland Council, 2020). When access to nature is limited, opportunities to undertake cultural practices in public spaces like the collection of rongoā and food sources becomes challenged, resulting in a reliance on homes spaces and outer urban peripheries for cultural practices (Walker, 2021). Planning for green space protection and expansion is important to ensure these inequities are addressed and should factor increasing access for all parts of a city including those that may be more marginalised than others.

Opportunity for urban green spaces

The Auckland Urban Ngāhere Strategy, sets out plans to achieve increased tree cover and management across the city and recognises the essential role of trees for social, cultural, health and well-being outcomes (Auckland Council, 2020). Importantly, the strategy sets a clear framework to ensure that tree cover in Auckland is adequately planned for in the cities current and future development. Moreover, this form of planning can greatly benefit when Mana Whenua are included in planning strategies for natures reinvigoration and ensure that the most vulnerable communities have the same opportunity for green space and nature use.

Likewise, the Nature in the City Strategy 2020-2050 developed by the Hamilton City Council highlights how ecological, cultural and social outcomes can be achieved when diverse ways of knowing are used. Both the needs of nature, local communities and importantly, the roles and

perspectives of local iwi were incorporated into the strategy to plan for the long-term sustainability of nature in Hamilton (Hamilton City Council, 2020). The strategy advocates for larger investment in green growth across the city and to increase vegetation cover from 2% to 10% (Hamilton City Council, 2020). The strategy further calls to uplift kaitiakitanga, recognising the integral role of kaitiaki and the need to foster connection to urban nature in all its forms (Hamilton City Council, 2020). This type of connection can manifest through restoration of nature projects that draw on kaitiakitanga knowledges of local hapū, the reinvigoration of significant narratives of the area as well as the utilisation of mātauranga Māori to inform nature planning and design (Hamilton City Council, 2020).

Both strategies show how the inclusions of Mana Whenua can help to deliver benefits for marginalised communities and encourage wide ranging benefits for Māori and the wider urban community. Examples like Te Pūkaki Programme in Auckland and the restoration of the Kaiwharawhara catchment in Wellington, further support the benefits of joint management of natural areas as well as allowing indigenous leadership to flourish in nature engagement activities (Hall, Wehi, Whaanga, Walker, Koia & Wallace, 2021). Both instances show that when Māori are given the space to lead nature projects, cultural, ecological, social and economic benefits can flourish for all involved (Hall et al., 2021). The inclusion of cultural knowledges in how green spaces function in urban areas are also evidenced in planning documents by Ngāti Whātua Ōrākei where increased greenery is prioritised to deliver multiple benefits for iwi members (Orakei Visual Framework, 2018; Combined Reserve Management Plan, 2021). Functions to support ecological, health and cultural needs of the iwi are highlighted such as; the need for spaces to cater for mārā kai, arts, designated tapu areas, sites for rongoā growing and gathering, sites for recreational activities, which help to shape and direct the vision of Ngāti Whātua Ōrākei for green spaces (Orakei Visual Framework, 2018; Combined Reserve Management Plan, 2021).

Likewise, Waikato-Tainui are working alongside regional and city councils to plan for future urban growth through the Hamilton-Waikato Metropolitan Spatial Plan (2020). The recognition of the importance of green spaces for not only recreational use but also for ecological and cultural need are emphasised. Moreover, projects such as the Mārā Hūpara in Auckland, New Zealand, uses traditional Māori knowledges of play and intertwines this into green space, providing recreational function for local children and supports the reinvigoration of local knowledges (Auckland Council, 2019; Otter, 2020). Mana Whenua played an integral role by way of providing perspectives about important social and cultural dimensions related to the design and function of the Mārā Hūpara (Otter, 2020). Users not only benefit from a new function of the green space but also learn about

important knowledges related to bird snaring, river crossing as well as encouraging physical skills like jumping and climbing.

These examples showcases the important relationships of Mana Whenua to urban areas and the benefits of their inclusion in developing new functions for green spaces. The examples further display how the use of green spaces can facilitate connection for Mana Whenua and Mātāwaka by drawing on Māori cultural knowledges and western tools like ecological science to develop new use, planning and functions of green urban spaces.

National directives to support Māori

Opportunity for whānau, hapū and iwi in key decision making related to aspects of nature, mātauranga and resource management has been challenged over many generations. This is particularly evident within the Waitangi Tribunal Claim known as Wai262 which challenged the crown and government to recognise their role in the protection of mātauranga and culture of whānau, hapū and iwi (Waitangi Tribunal, 2011). Reports such as Ko Aotearoa tēnei by the Waitangi Tribunal detailed key recommendations to address the grievances raised in the claim and inform law reform that realise the aspirations of Māori and the role of the crown in helping to achieve such objectives (Te Puni Kokiri, 2018, Waitangi Tribunal, 2011).

From the tribunal report, initiatives to increase Māori involvement in decisions making related to their mātauranga, culture, language and engagement with nature have been undertaken. This includes the introduction of mechanisms such as Mana Whakahono-ā-rohe, Joint Management agreements, reforms to the RMA and changes to national policy statements (Te Puni Kokiri, 2018). The reform of the RMA provides provisions for Māori inclusion in how resources are managed and makes certain that this directive is further implemented at regional and local government level (Te Puni Kokiri, 2018). In addition, the National Policy Statements on Freshwater Management and National Environmental Standards include directive for Māori inclusion in the management of resources and that mātauranga Māori is used appropriately to achieve the objectives set in both the NPS-FW and NES (Te Puni Kokiri, 2018). Likewise, the Treaty Settlement process has helped iwi to regain their voice in matters affecting their people and rohe (Te Aho, 2017). Treaty Settlements also support co-management arrangements by addressing past grievances, facilitating the return of important taonga to iwi and re-establishing the economic base and rangatiratanga of iwi (Te Aho, 2017). The settlement process not only supports iwi and hapū to build relationships with the crown and government, but it further supports the establishment of co-management procedures for local resource issues as seen in examples like Ōkahu Bay of Ngāti Whātua Ōrakei and Maungatautari of

Ngāti Korokī-Kahukura where both lands were returned but are managed by iwi and the crown (Te Aho, 2017).

Under these provisions, Mana Whenua ought to be key decision makers in how green space are used whilst also addressing the role that Mātāwaka can play in supporting Mana Whenua aspirations. Inclusive directives should be developed to set the foundation for the recognition of co-management arrangements to further support Māori relationships and use of urban green space.

Iwi management plans

Māori and relationships to local councils have often experienced tension due to issues related to resource use and management, decision making opportunities, rates on Māori lands and issues with relationship building and maintenance between council and Māori (Bargh, 2016; Tawhai, 2010). Mechanisms through the Local Government Act, Local Electoral Act and RMA have been developed to ensure that such issues do not continue to hinder agreements that are guaranteed under Te Tiriti o Waitangi (Bargh, 2016). These tools offer further potential for inclusion of Mana Whenua in leading the protection of resources within their territories (Bargh, 2016). Iwi management plans support ideas of co-management and have been used across Aotearoa to encourage the directives from the LGA and RMA to assist Māori in decision making related to their regions (Thompson-Fawcett, Ruru & Tipa, 2017; Resource Management Act, 1991, s 58M). For councils, the use of iwi management plans provides opportunity to recognise the important roles of iwi and hapū to the region, recognise their sites and resources of significance and furthermore, understand the pressing issues that iwi and hapū currently face in their traditional territories. Iwi management plans can be effective tools for iwi but largely depend on sound relationships between iwi and council (Thompson-Fawcett, Ruru & Tipa, 2017; Waikato-Tainui, 2013).

The Waikato Tainui Environmental Plan - Tai Tumu Tai Pari Tai Ao, sets out key historical knowledges related to the Waikato region, how nature and biodiversity has been negatively impacted through the process of colonisation and furthermore, how the iwi aspires to now manage, develop and restore the natural environment in the Waikato region (Waikato-Tainui, 2013). Likewise, similar plans for nature and cultural restoration is expressed by Ngāti Whātua Ōrākei (2019) where activities to plan and restore nature and the opportunity for iwi members to engage in significance sites across the Ngāti Whātua Ōrākei region are outlined. Both plans provide important details such as underpinning values that guide the vision and actions of each iwi, relationships and connections to the iwi region, aspirations for nature's protection as well as outlining key objectives to maintain kaitiakitanga. Both plans illustrate Mana Whenua relationships to their respective areas and help to guide appropriate action by both councils in respect to iwi involvement in resource management.

Inclusion of Mātāwaka voice

Both the tools utilised to give Māori a voice and standing within Local Council decision making and Māori relationships to place could provide many urban based Māori, the opportunity of contributing positively to their urban homes. It is clear through the current mechanisms like national directives, management plans and resource management agreements that there is opportunity to express the role of Mātāwaka in supporting the aspirations for green spaces in urban areas. Utilising concepts such as kaitiakitanga, Māori narratives of place and cultural practice can provide these relationships between Mana Whenua, Mātāwaka and council to flourish in a way that places nature relationships at the forefront of our thinking (Walker, 2021; Walker et al., 2019). Moreover, management plans, council strategies and settlements arrangements could also benefit from a Mātāwaka perspective to help inform green space planning that can encourage wide ranging benefits for all urban dwellers, both local and transient.

Green spaces and housing initiatives

Housing needs

Nature is an important component for our overall health and well-being but can be challenged when other needs by urban dwellers are presented such as an increased need for housing. The lack of available housing in urban areas has resulted in experiences of homelessness, reliance on emergency housing and in many cases, housing becoming unaffordable for low and medium income earners across many Aotearoa cities (Fernandez, Joynt, Hu & Martin, 2022; New Zealand Infrastructure Commission, 2022). In response, housing infrastructure within urban spaces is expected to grow exponentially with 41,000 new home builds having gained consent to be undertaken, up by 24% since 2020 (Statistics New Zealand, 2022).

This response of intensive development will contribute to increased urban land cover and will encompass valuable rural lands found on the peripheries of the urban space (Hanna & Wallace, 2021; Statistics New Zealand, 2017). Traditionally biodiversity cover is low in urban spaces, with some cities like Hamilton having 2% of native vegetation cover remaining (Hamilton City Council, 2020). New housing initiatives should allow for and indeed encourage a more intense examination of the potential value that urban peoples gain from well-planned housing and green space. With the increase in housing infrastructure, there is prime opportunity to ensure that local narratives of hapū are intertwined into housing builds and ensures that green spaces are accessible for urban residence.

In addition, neighbourhoods that are seen as having more connected transportation infrastructure often contain better quality of housing and are seen as more desirable (New Zealand Infrastructure Commission, 2022). Concepts such as the 20 minute city have surfaced that theorise the opportunity to include all amenities within a 20 minute commute from the urban persons home (Mackness, White & Barrett, 2021). The concept would help in reducing green house gas emissions, provide closer access to services across the city and support increase housing density (Mackness, White & Barrett, 2021). Although an increase in housing and transportation corridors may provide relief to hardships experienced by urban people, they may further contribute to growing inequities, particularly those related to nature access and housing affordability. Increased desire by urban dwellers to live near easily connected amenities can increase housing prices within an area (Rigolon & Németh, 2020). Moreover, the development and inclusion of more connected green spaces can contribute to this form of gentrification and subsequently marginalise low-income families (Rigolon & Németh, 2020). Therefore, development must ensure that all urban dwellers have the same opportunities for access that does not result in forced movement due to affordability issues.

Māori Housing Models

There are complex issues that may support or hinder the use of green spaces by Māori for cultural practices and the maintenance of mātauranga in urban areas. Mechanisms such as iwi management plans, co-management arrangements, treaty settlements and legislation have been shown to support Māori, particularly Mana Whenua, with their aspirations to engage and protect nature. How these mechanisms translate into the urban space should now factor the role of housing and green space needs by Māori. Calls to decolonise urban spaces have prompted discussion about the need to recognise the important role of local hapū in not only decision making for urban areas but to ensure Māori are reflected in the built environment around them (Kake, 2020). This can increase the presence of Māori in decision making and planning for new urban projects, urban resource management, urban design, while also recognising important narratives, whakapapa roles, sites and ecology to Māori in urban spaces to ensure urban areas are culturally responsive (Kake, 2020).

Examples of development that connects communities with local amenities and supports responsibilities and obligations to nature by Māori can be seen by Ngāti Whātua Ōrākei who have developed a papakāinga project called Kainga Tuatahi (Auckland City Council, n.d). The housing development has drawn on important values of Ngāti Whātua Ōrākei to create homes that not only meet health and housing needs of iwi members but also ensures that they are connected through communal spaces located around the housing sites like walk ways and communal garden areas (Auckland City Council, n.d; Berghan, 2021). This papakāinga development has deliberately planned for green spaces to not only provide green aesthetics but to also encourage outdoor activity by

residence, further supporting the values of kaitiakitanga and kotahitanga (Auckland City Council, n.d; Berghan, 2021). Housing developments like those led by Ngāti Whātua Ōrākei display how developments can include communal green spaces that encourage connection between homeowners, nature and important cultural narratives of the iwi (Berghan, 2021).

Likewise, housing developments for kaumātua such as those of the Moa Crescent Kaumātua Village demonstrate the opportunity to include communities in the function of housing development that supports opportunity for outdoor activities and nature engagement (Reddy, Simpson, Wilson, Nock & Johnston, 2019). It further shows how connection to place can be fostered even for those kaumātua who identified as Mātāwaka (Reddy et al., 2019). The value of including kaumātua in the planning for the Moa Crescent Village is that the village becomes responsive to their needs which then leads to kaumātua taking ownership of the space and its maintenance (Reddy et al., 2019).

The Kainga Tuatahi example supports the ability of Mana Whenua to maintain their role as care takers of their whenua, support their tribal members and ensure that longevity of whakapapa knowledges about the local area (Berghan, 2021). In contrast, the Moa Crescent example supports Mātāwaka with the ability to have adequate housing while also learning to develop a sense of place outside of their tribal area (Berghan, 2021; Reddy et al., 2019). Both examples incorporate green space functions like mārā to create a sense of responsibility to these home spaces. This further contrast to more usual forms of housing development that focus on economic returns rather than ensure the cultural, social and environmental well-being of its residence as seen through Māori housing models (Berghan, 2021; Reddy et al., 2019).

Housing development should factor green space in planning that incorporates opportunities for multiple functions that does not encroach on remnant green spaces in urban areas. Such green spaces should be a mix of forested areas, communal gardens, recreational spaces that intertwine cultural knowledges as well as open green areas with diverse forms of biodiversity. This consideration can also amplify the needs of local Māori communities who may be reliant on such remnant green spaces for the maintenance of cultural knowledges and practices like the collection of rongoā, the harvesting of food, the expression of spiritual practices like karakia, that are specific to the area (Marques, Freeman, Carter & Pedersen Zari, 2021; Walker, 2021). Proximity between homes and green areas like trees and gardens should also be considered, along with tree visibility and biodiversity cover (Freeman, Stein, Hand & van Heezik, 2018; Hand, Freeman, Seddon, Stein & van Heezik, 2016; Konijnendijk, 2022).

These aspects will benefit Māori housing development and ensure that green spaces provide many functions such as connecting communities to nature and people, teach about local hapū knowledge

of biodiversity and encourage the maintenance of nature practices that are detrimental to Māori well-being. However, this must also be reflected in current planning policy to ensure the needs of urban people are met without compromising the state of biodiversity in urban areas.

Key findings and discussion

This report shows the different relationships to urban areas by Māori and how this may shape engagement with urban green spaces, the increasing use of policy and legislation to aid connection and environmental stewardship as well as the need to support both Mana Whenua and Mātāwaka to connect to urban nature. Moreover, the report alludes to the need for housing development to include green spaces that are informed by Māori needs and aspirations.

Layered connections to urban spaces

Relationships by Māori contain layers of responsibility and are dependant of the level of whakapapa connection that Māori share to urban areas as well as their level of involvement in urban space issues. Given the varying experiences of Mana Whenua and Mātāwaka to these areas, connecting to urban green spaces is not always a straightforward process. Factors such as colonisation, urbanisation and broadly, disconnection must be addressed when determining how best to allow green spaces to function as sites for cultural connection. These factors should encourage planners to understand how such areas can act as mediators of past grievances and offer opportunity to shift the perspectives of urban spaces as colonial symbols of the past.

Mana Whenua hapū and iwi like Ngāti Whātua Ōrākei and Tainui are currently mobilising to plan for the use of green spaces as sites for learning, research, cultural development and the protection of cultural narratives. This form of planning which includes local councils is an exemplar to be used to guide green space planning throughout Aotearoa and ensure that urban green spaces reflect the stories and important roles of local hapū and iwi, allowing the undertaking of cultural practices such as harvesting, spiritual practices, nature connection as well as general activities for increased health and well-being. Inclusion of Mana Whenua in decision making is further sanctioned in the RMA, LGA, NPS-FM and in some cases through Treaty Settlement agreements. These mechanisms that encourage co-management and the expression of rangatiratanga by Mana Whenua over traditional territories encourage leadership of green space development and protection by both Mana Whenua and local government agencies. The development of urban green space should support spaces that have multiple functions from being aesthetically pleasing to providing space for cultural, recreational and ecological outcomes. This focused activity would further support the recognition of both Māori and local government as important partners in future city planning.

A place for Mātāwaka

It is clear that more is needed to help support Mātāwaka connection to urban green spaces. Although Mātāwaka may use green areas for recreational purposes, initiatives are needed to understand how they might value such areas through cultural mechanism. Re-establishing cultural narratives of local hapū about the urban space may help to support this cultural connection to flourish as seen through the Mārā Hūpara and Moa Crescent examples.

Allowing Mātāwaka inclusion in planning processes for green spaces may also help connect them to nature. Potential for Mātāwaka inclusion in planning for urban green space can be beneficial along with the aspirations of Mana Whenua and national directives. There are varying ways to achieve this, both through cultural concepts like Kaitiakitanga or through stipulating such activities through iwi management plans, local council policy and national directives like the RMA or NPS. However, such directives should not impede on the aspirations of Mana Whenua hapū for urban green spaces. Moreover, a Mātāwaka voice in urban green space planning can provide a valuable perspective about green space function that can benefit wider urban dwellers.

The opportunity

Understanding Māori relationships to urban green spaces presents opportunity to ensure that such connections are not impeded by the proposition for future housing development. Housing development can benefit from having green spaces near-by and provide both benefits for people and property value. Housing development can also benefit from including a cultural mechanism in its planning and development as seen through the suggestions of papakāinga models by both Berghan and Kake (Berghan, 2021; Kake, 2020). Both examples advocate for decolonised forms of housing that allow the development of housing similar to pā and papakāinga that support Māori homeownership and allows responsibilities to place, people and culture to flourish.

These models for housing can be enhanced when green spaces are further included that encourage urban dwellers to explore and connect with local biodiversity and hapū and iwi stories. Examples of green space engagement illustrated in this report shows that gardens spaces, forested areas, street trees and public parks can all play a role in supporting connection to nature. The papakāinga and kaumātua housing models show how culturally framed housing development can encourage connection between dwellers but also support the retention of knowledge and the ability of local hapū to maintain their whakapapa responsibilities to nature.

Equally, including Mana Whenua narratives, important biodiversity, cultural practice and histories of occupation can further shape green spaces that facilitate story-telling, physical activity and provide wide ranging outcomes for its users. Housing that is connected to these green areas will provide its

dwellers with learning outcomes and help to establish and maintain some form of connection for its residence.

Recommendations

These recommendations are offered to inform future policy development. These recommendations address the role of green spaces to provide cultural outcomes in urban areas while also recognising the role of green spaces in housing developments.

- Scope urban spaces for inequities related to nature access and develop Māori informed response e.g. increase tree cover in cities, increase diverse biodiversity, increase opportunity for varying engagement opportunities in planning for Māori of both Mana Whenua and Mātāwaka descent.
- Create guidelines for supporting the development of green spaces that is Mana Whenua developed.
- Develop guidelines for inclusion of Mātāwaka in urban planning.
- Support the development of Māori housing models that factor green spaces into the housing infrastructure.
- Utilise Māori concepts such as kaitiakitanga to facilitate relationships of care and protection over green spaces.
- Develop guidelines for Mana Whenua and Mātāwaka relationships in urban planning.
- Use iwi, national and local policy and plans to guide best practice for green space development that is informed by a Māori perspective.

Future of Green Spaces using Te Ao Māori perspective

Using a Te Ao Māori perspective, green spaces can further include cultural outcomes for Māori when they are planned appropriately that includes the voices of Mana Whenua and Mātāwaka. Green spaces that factor such voices will offer a space for the reconnection of Māori to cultural knowledges about the urban area where they reside and further allow such knowledges to be expressed within a natural urban environment. Such areas will be well connected to housing developments where transportation corridors provide easy access between homes and nature.

Ideally future green spaces in urban areas will encompass not only large land areas like urban forest, parks and recreational spaces, they should also include patches of greenery throughout the urban space that aids in connecting biodiversity and ensures all urban peoples have access to some form of greenery in their neighbourhoods.

The future of green spaces should draw from local hapū narratives, iwi management plans, settlement agreements as well as the aspirations outlined in the WAI262 claim to develop spaces that are culturally appropriate where both nature and people can reside. Such sites should encourage many forms of cultural practices to be undertaken like the gathering of rongoā, the harvesting of food, opportunities to engage with atua and other spiritual beings like taniwha, and furthermore, encourage overall connection between Māori and nature. These green spaces will move beyond providing aesthetic values and support increased cultural, social and environmental well-being for urban people.

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