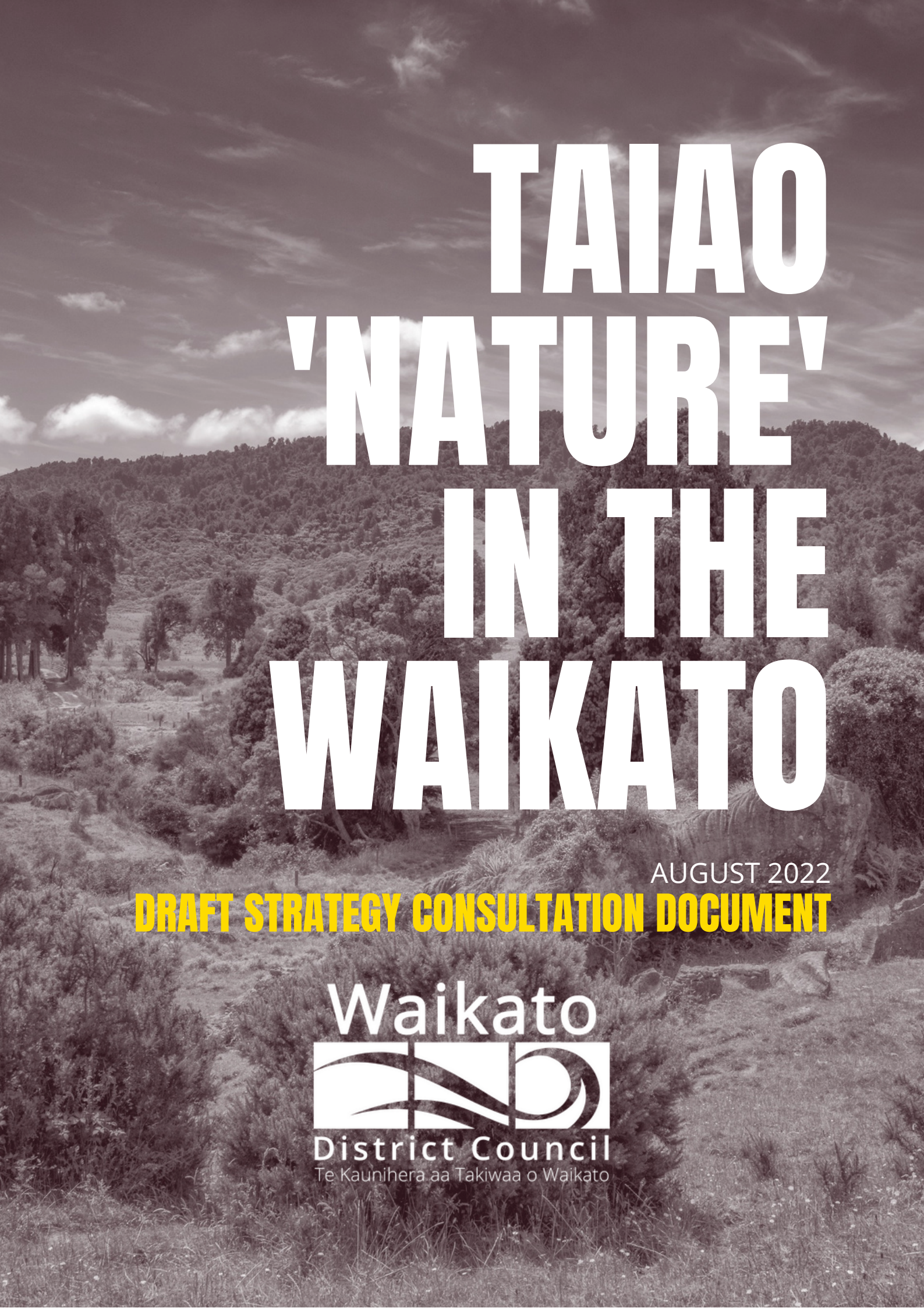

TAIAO 'NATURE' IN THE WAIKATO

AUGUST 2022

DRAFT STRATEGY CONSULTATION DOCUMENT

Waikato District Council
Te Kaunihera aa Takiwaa o Waikato

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INTRODUCTION

Where we have come from:

This document reviews the Conservation Strategy 2004[1] to identify broad priorities for protecting and enhancing Taiao, including indigenous biodiversity values[2], to improve conservation and ecosystems. This strategy encompasses the Waikato District open spaces, reserves, esplanades, private Land, wetlands, peat bogs, the Waikato and Waipa Rivers, and tributaries. The rivers, lakes and tributaries extend from downstream of the confluence of the Waipa and Waikato Rivers at Ngāruawāhia, all the way downstream to Port Waikato.

What is Taiao (nature)?

Taiao is "nature" and much more; it is the earth, natural world, environment, and our country. Taiao speaks to the natural environment that contains and surrounds us. It encompasses all the environment, its offspring and mauri. Because we are born of the earth, and it is born of us, we have an eternal connection to Taiao – the earth, sky, air, water, and life are all interdependent. Taiao is about finding our way forward by forging an interconnected relationship with that environment based on respect. That interdependency lies at the heart of our Taiao methodology[3].

Biodiversity has been mapped in Waikato District using a comparison study of indigenous ecosystems' historical and current cover as a spatially mapped layer from the Waikato Regional Council. Split between descriptions of indigenous ecosystems across the region and the current distribution of surviving indigenous ecosystems (e.g. Bioveg2).

Priority sites (high-value indigenous biodiversity) within the lower Waikato Zone identified 127 priority sites (Leathwick 2016). Totalling 14,592 ha, equating to 37% of the surviving indigenous-dominated cover, with only 5.2% of the potential terrestrial ecosystem extent (Kessels 2017)[4]. Some key examples of good Taiao catchment types include:

[1] https://www.waikatodistrict.govt.nz/docs/default-source/your-council/plans-policies-and-bylaws/strategies/conservation-strategy-2004.pdf?sfvrsn=918e95c9_2
[2] Biodiversity priorities for the Lower Waikato Zone
[3] https://fitforabetterworld.org.nz/taiao/
[4] https://www.waikatoregion.govt.nz/assets/WRC/WRC-2019/TR201736.pdf

- Mangatāwhiri;
- Managatangi;
- Whakapipi;
- Waikato at Tuakau Bridge;
- Awaroa (Waiuku);
- Waikato at Port Waikato;
- Ohaeroa;
- Whangamarino at Jefferies Road Bridge;
- Waikato at Mercer Bridge;
- Whangamarino at Island Block Road;
- Lake Opuatia (Peat Lake);
- Waerenga;
- Waikare;
- Matahuru; Waikato at Rangiriri;
- Whangape; Managawara;
- Awaroa AT Harris/Te Ohaki Bridge;
- Awaroa (Rotowaro) at Sansons Bridge;
- Waikato at Huntly – Tainui Bridge and Komakorau.

Elements of the Waikato District and Taiao (nature)

The Waikato district covers 418,893ha, a strategically-significant land area between two of the fastest-growing metropolitan centres in New Zealand - Hamilton and Auckland. It is also located in the heart of the 'golden triangle', the economic zone encompassing Auckland, Hamilton, and Tauranga, which generates over 50% of New Zealand's gross domestic product (GDP) and is home to over 50% of NZ's population.

The current state of Nature in the Waikato District identified 71,312 ha (16.4%) of the Waikato District as Significant Natural Areas (SNAs), and a further 47% of which are legally protected under statute or covenant. The SNAs comprise 61,292 ha of indigenous vegetation (85.9%).

The District is also home to large areas of significant indigenous vegetation, including the Haakarimata Scenic Reserve near Ngaruawahia.
The Waikato River (NZ's longest river) flows through the District. It is a critical water body contributing to the region's biodiversity, providing potable water for the area and neighbouring population centres. It has significant cultural value to iwi, hapū and Māori (Waikato Tainui and Maniapoto). T

The Waikato district boundary extends along the western coast of New Zealand, from Aotea Harbour to Port Waikato, and touches the eastern coastline at the settlement of Miranda on the Hauraki Gulf.

Some examples of well-managed reserve areas in the Waikato District:

- Waingaro reserve – WRC recently reviewed this in a Biodiversity Monitoring report on this reserve that used an adaptation of the Kahikatea Green Wheel monitoring tool as developed by WRC

- Coastal reserves around Raglan and Port Waikato (Whakaupoko West Franklin Landcare group) are managed well, particularly in restoration activities, and there is good community consultation with these
- Hakanoa Reserve Management Plan
- Mount Karioi
- Taupiri Range
- Whangamarino wetland

Hakarimata Summit Track [image credit Department of Conservation]

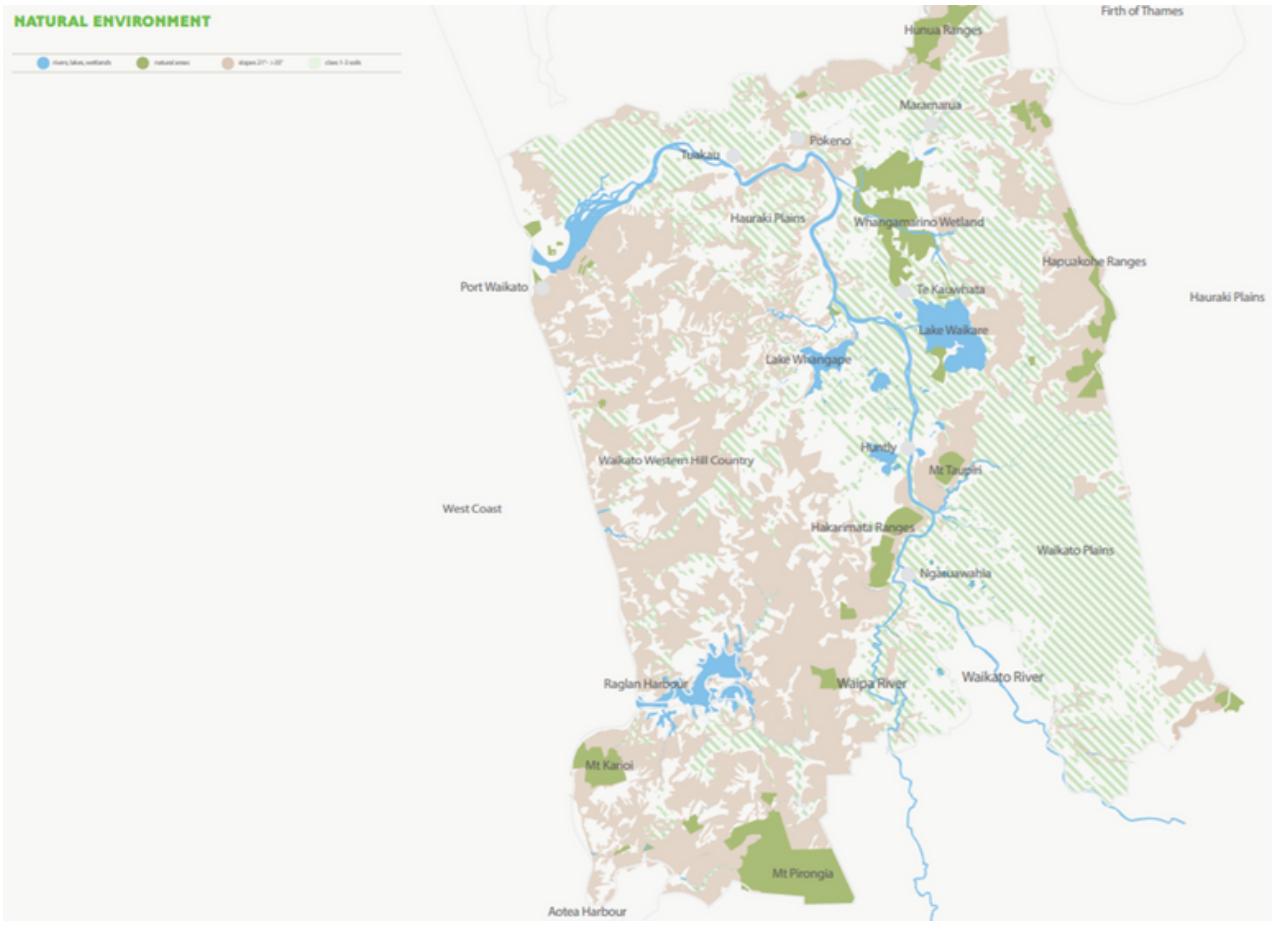
The Waikato district contains some of the country's most highly productive soils, which are vital contributors to the country's agricultural and horticultural sectors. The District, therefore, makes a critical contribution to the country's economy in terms of contribution to revenue generation and GDP. The Strategy is about maintaining and enhancing the natural environment while achieving the best community and economic outcomes. Emphasis should be placed on strengthening indigenous biodiversity and protecting native bush, wetlands, peat bogs and quality soils.

The Waikato district once contained large areas of forest and wetland. The dominant forest species were typically kauri in the north, podocarp in central locations and a combination of rimu and tawa in the south. Variations were seen between coastal and inland areas. The major wetland areas were northeast Hamilton and around the lower Waikato River. Indigenous lowland vegetation was modified by Māori and then primarily replaced with exotic pasture by European settlers to establish the District's social and economic foundation.

Taiao in Waikato and the rest of New Zealand is under pressure. At the same time, little deliberate felling of the indigenous forest takes place, and the main threats to forests are stock browsing and plant and animal pest infestation.

Drainage continues to pose a threat to wetlands and peat bogs. Large areas of rimu and tawa forest remain on the hill country, most of which is publicly owned and legally protected. Most of the internationally recognised Whangamarino Wetland is also legally protected. These areas and the lower Waikato lakes form a semi-continuous band of indigenous habitats from the northeast (Miranda) to the southwest (Aotea Harbour).

Outside of this band, indigenous vegetation and habitats have been significantly depleted; in some cases, only small remnants remain. Few of these remnants are formally protected (Map 1) unless they have been covenanted as part of a subdivision (council covenant) or through a QEII covenant initiated by a willing private land owner.



Map 1 - Waikato District Council Natural Environments

Why protect Taiao (nature)?

It is more cost-effective to conserve ecosystems or stop degrading our environment than start from scratch creating new ones in rural or brownfield areas. Conservation and current protection see District Plan[5] are no longer enough to arrest the loss of Taiao.

Investment needs to increase in maintenance/monitoring and restoration of Taiao for long-term sustainability (National Policy Statement – Indigenous Biodiversity[6]). The protection, maintenance, and monitoring of what you have. This can be done as non-statutory efforts through fencing and pest control while keeping tabs on the environment. Alternatively, regulatory protection can be put in place that legally requires conservation and restoration.

Restoration sits on a sliding scale. It takes many forms depending on the ecosystem, whether pristine or degraded. Passive restoration and letting nature take back what it needs on its own).

[5] https://www.waikatodistrict.govt.nz/your-council/plans-policies-and-bylaws/plans/waikato-district-plan/operative-district-plan/waikato-section
[6] https://environment.govt.nz/assets/publications/NPSIB-exposure-draft.pdf

Active restoration is where we actively weed and control pests, protecting areas (fencing) and adding new native plants to increase the diversity.

Passive (Rewilding):

Leave things alone (Nature does its own thing). The contrast between fencing and non-fencing native areas.

Active (Engineering with nature):

We actively enhance this (by fencing, weed and pest control, planting and maintenance)

Both options include assessing the area, soil and water conditions, tree and bush plantings and maintenance plans over time.

It has to be the right place with suitable species that are native eco-sourced and varied types of trees, plants and grasses. Recently planted trees to be used for carbon sequestration has come to the forefront, focusing on Pinus radiata.

Planting a monoculture species is easy, and building indigenous ecosystems is challenging but more rewarding from a biodiversity perspective and more adaptable over time.

Further research is needed, but wetlands and peat bogs all have carbon-sequestering species. Where can the Council help by providing reasonable solutions in different places?

Categories of Taiao (nature)

Conserving indigenous biodiversity and restoring ecosystems will have a positive knock-on effect on the climate. Specific economic capture of tangible benefits might include sustainable wood, improved agricultural yields and eco-tourism revenues. Non-valued elements include clean air, water, pollination, pest control, nutrient recycling, carbon sequestration, reduced animal-transmitted diseases and greater resilience to extreme weather and natural disasters. In comparison analogue, roads and bridges don't generate returns themselves, but they are foundational to increased economic benefits through the movement of goods and services. We value this infrastructure but do not apply the same principles to Taiao.

- Forests - Threats: encroachment from urban and agriculture, pollution, invasive pests, and wildfires
- Restorers: Replanting native trees; conserving plants and animals, and rewilding areas
- Wetlands – Threats: irrigation, dams, canalisation and agricultural drainable, pollution
- Restorers: Controls on water extraction, restoring water flows to wetlands, wastewater treatment
- Peat bogs -Threats: Peat extraction, drainage for agriculture, infrastructure, fire, overgrazing and pollution.
- Restorers: Re-wetting, conservation
- Cities/towns – Threats: Urban Sprawl, waste and emissions from industry, traffic
- Restorers: Better policy and planning, cleaning up waterways and former industrial sites, tree planting, and creating green spaces and urban wetlands. Protect pockets of native vegetation and waterways during development.

Benefits of Taiao (nature)

An example is the United Nations Environmental Protection initiative to restore 3.5 million square kilometres of land over the coming decade.

Investment in ecosystems can accrue an environmental benefit of $1 invested in biodiversity and can return between $3 - $75 of economic benefits from the subsequent ecosystem goods and services. Valuing the environment and better identifying its benefits are a critical step to protecting and restoring what we have.

Nature-based solutions are a smart investment now more than ever (see Figure 1 below).

Figure 1: Nature based solutions

OUR DISTRICT

Where we have come from:

The District's natural environment is one of the natural features and constraints that create Waikato's identity and make it a special place to live, work and play. Essential features of the natural environment include the Waikato River and its tributaries; the Waipa River; numerous lakes and wetlands; coastlines; steep hill country and inland range landscapes; and distinctive gully systems.

Areas of particular value are identified as outstanding natural features and natural landscapes, including significant amenity landscapes.

Those with particular terrestrial ecological value are identified as significant natural areas (SNAs), and the District is taking measures to provide and protect these areas under the district plan[7]. Through targeted restoration efforts, there is an opportunity to promote, protect and enhance these ahead of and during development.

[7] https://www.waikatodistrict.govt.nz/your-council/plans-policies-and-bylaws/plans/waikato-district-plan/district-plan-review/decisions/proposed-waikato-district-plan

Ecological enhancement such as restoration planting and pest control can enhance amenity values and is supported through Taiao in the Waikato.

The District's rural environment contains rural land and villages and will continue to be a central focus and integral part of our District. The rural environment and rural villages significantly contribute to the District's economy. It is vital to continue to protect the rural economy and the soils that support activities within the rural environment.

Waikato 2070 promotes sustainable farming practices by protecting outstanding landscapes, significant natural areas, and rural amenities. Lifestyle opportunities are also provided within the rural environment in the Waikato district. These must be managed carefully with an evidence-based approach in the future to help better maintain and sustain the rural environment.

How we went about updating the document and who helped us:

WDC formed a steering group of councillors and staff and set about undertaking the review of the conservation strategy. They developed the Vision and Goals and a communications plan of who could input into the process as below:

- Engagement with stakeholders such as Iwi, landowners, Agricultural partner Federated Farmers, Hamilton City Council, Waikato Regional Council, Auckland Council, Department of Conservation (DOC), Waikato River Authority, Biodiversity Forum, and Community groups with the majority providing views.
- Engage with the community via submissions/consultation to review the consultation strategy. Due to Covid-19 restrictions, it will be via online consultation and suggestions. Promotion will be supported through small additional boosts (WDC Facebook), other social media platforms, the WDC website and Shape Waikato, and media releases.
- Legal requirements (public notices) under Clause 83 of the Local Government Act 2002 were not considered to require a hearing as this review document will be updated every three years.
- Communication of the outcome to the community of the new Conservation Strategy (social, website, media release(s) Taiao in the Waikato.

Developing our vision and goals:

In consultation with the Council (Councillors and staff) and the Community wellbeing and Blueprints (community initiatives and District-wide).

The Conservation Strategy 2004 supported River, Lake and Lowland habitat restoration and Community-led Gully Restoration. WDC will amend its conservation strategy for its public open space areas (parks and reserves) and seek to showcase the best environmental management practices. Extending it to roading and waters operations and delivery where possible.

With the district's private landowners, WDC will seek to encourage bush blocks, bush areas, native fragments, and esplanades to be actively fenced off. In coordination with other agencies, it will provide essential information and support for the maintenance and restoration of Taiao. Consider opportunities to develop the WRC Enviroschools programme around the importance of indigenous biodiversity.

VISION

To create a liveable, thriving and connected environment where our district values understand the importance of our natural systems and Kaitiakitanga.

We all work together to protect, sustain, and improve our natural ecosystems. So all can enjoy and share the benefits as the foundation for Taiao in Waikato. The full range of New Zealand's indigenous ecosystems and species thrive from the mountains to the sea.

GOALS

- Maintain, create and improve a full range of natural habitats and ecosystems to a healthy functioning state across their natural range and genetic diversity.
- Support actions to conserve, maintain and improve a healthy ecosystem's ecological linkages and promote sustainable natural resource use and emissions reduction.
- Seek collaboration opportunities to work with others, including mana whenua, to achieve the Taiao in the Waikato vision.
- Unlock native bush and esplanade areas through access agreements and landowner support to provide for walking and cycling

Links to key documents

- National Policy Statement – Indigenous Biodiversity (NPS-IB) (draft)
- National PA Pest Management Plan (NPAPMP)
- Waikato Regional Plan*
- Waikato Regional Coastal Plan*
- Waikato-Tainui Environmental Plan, Tai Tumu Tai Pari Tai Ao
- Waikato Proposed District Plan (Decisions Version)
- Department of Conservation – Biodiversity Strategy (Kauri Dieback, Copper Skinks and Mudfish)
- QEII – Map of Protected Land

*Waikato Regional Council - Regional Plan and Coastal Plan [https://www.waikatoregion.govt.nz/Community/Your-community/iwi/Tangata-Whenua-Management-Plans/]

Strategic context:

How does the Conservation Strategy review fit in with New Zealand's international obligations and the upcoming legislation, including the Resource Management Act (RMA) and National Policy Strategy – Indigenous Biodiversity (see Appendix A). A summary is illustrated below:

1. International Obligations – United Nations Sustainable Development Goal (SDG) - 15 Life on the Land
2. New Zealand – Resource Management Act 1991 (Exposure Draft National Policy Strategy – Indigenous Biodiversity)
3. Reserves Act 1977, Wildlife Act 1956
4. Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy and Implementation Plan
5. Waikato Regional Council – Regional Policy Statement, Local Indigenous Biodiversity Strategies (LIBS)
6. Waikato District Council – Decision Version Proposed District Plan (Conservation Covenants, SNAs), rules that minimise vegetation removal
7. Conservation and Esplanade Strategies are part of this review and inclusive of the proposed updates; Connectivity Strategy 2022

STATE OF THE ENVIRONMEMT AND OPPORTUNITIES IN THE TAIAO (NATURE)

As in all countries, land of high value for agricultural production is the first to be cleared of native vegetation. In New Zealand and Waikato, the trend is for more marginal Land to be removed, often for non-native forestry or development. These pressures have led to the degradation of Waikato District native ecosystems through the loss and fragmentation of indigenous biodiversity.

Today less than 10 per cent of the indigenous forests and less than four per cent of wetlands that once dominated the Waikato district remain. Pressures leading to land clearance within the district include reclamation of land for agricultural and horticultural purposes, meeting the growing population's housing demands and industrial/commercial development.

The region's land area covered in indigenous terrestrial vegetation has decreased from 94 per cent in 1840 to 27 per cent in 2018. Since 1840 six local authority areas have lost over 80 per cent of their indigenous cover (Hamilton City, Matamata-Piako District, Rotorua District, South Waikato, Waikato District and Waipa District). There was a net loss of 89 hectares of indigenous forest and 312 hectares of indigenous scrub and shrubland from the region between 2012 and 2018.

The rate of vegetation loss reduced from an average of 85 hectares per year between 1996 and 2012 to 60 hectares per year between 2012 and 2018. The most significant losses between 2012 and 2018 occurred in the lowland bioclimatic zone. Much of the recent clearance happened in the less threatened environments (areas with >20 indigenous cover left), with gains in the two most threatened environments – (areas with less than 20 per cent cover of indigenous vegetation).

Therefore, our baseline is low, meaning the importance of protecting what we have cannot be over emphasised. These areas will help us sustain the Taiao while restoring our new sites. This is supported by SDG 15 – Life on the Land and where human life depends on our earth and its plants, which is becoming even more critical in the Climate Change era (see Appendix A).

Scope, geographic spread, Taiao and Iwi

Significant Natural Areas (SNAs) are recorded in the Proposed District Plan: Decision version. Indigenous Biodiversity and its life-supporting capacity in SNAs are protected or enhanced. The SNAs of the Waikato District: "Terrestrial and Wetland Ecosystems data" were derived from analysis and interpretation of aerial photography along with information from ecological reports and data (where available), local environmental knowledge and limited field surveys. The data comprises an extensive yet provisional inventory and assessment of SNA of terrestrial and wetland ecosystems of the Waikato District

The SNA layer was received as a dataset from the WRC and used in the PDP. It is noted that the information was based on a desktop assessment (aerial photography) or knowledge of significant native areas. A small percentage of landowners made submissions to the PDP, and these areas were checked as to whether they would meet the criteria of an SNA. These have either been retained or dropped from the SNA layer, which now provides guidance rather than a specific rule framework.

The study mentioned above identified 698 sites, comprising an area of 71,312 ha (16.4%) of the Waikato District, as SNAs. Almost 47% of the area of SNAs is legally protected under statute or covenant; 61,292 ha of the SNAs were comprised of indigenous vegetation (85.9%) of the total area of SNAs. The public consultation process revealed that most landowners were motivated to protect and restore SNAs found on their Land. However, while formal protection of natural areas was an ideal first step, the ongoing management of these SNA (including weed and animal pest control, fencing and restoration) is of primary concern. The NPSIB exposure draft and other legislation must consider incentives for landowners to protect and restore indigenous biodiversity.

Description - Opportunities for improving the Taiao (should reflect the actions)

Research and Evidence:

- Land protection with covenants
- Vegetation protection through, Community-led projects
- Fauna protection with targeted pest control
- Waterways, Esplanades through good urban management and a joined-up approach with the WRC
- Urban (residential/Commercial/Industrial), low-impact design for stormwater and recognition of urban trees
- Rural promotion of information with pest control and help to facilitate fencing bush blocks and native fragments
- Our Culture is one that values Taiao and the importance of indigenous biodiversity
- An economy that steadily maintains and restores Taiao-based activities.

Protection and management of native flora and fauna (Vision)

The Council will regularly report on the outcomes of conservation covenants partnering, providing education, and supporting (non-financial) landowners to protect native bush and waterways.

Restoration – empower (skills, knowledge and education) iwi, hapū, communities and landowners

Set up a portal on the WDC website to help iwi, hapū, landowners and community groups access restoration information. Include a range of technical information about the different areas within the Waikato and the types of vegetation present. Have critical links to other information and other organisations that can help, e.g., the Waikato Regional Council, Department of Conservation, Biodiversity Forum, Trees for Nature, etc.

Propagation Table

Coordinate with QEII for more significant-high-quality native areas where possible

Investigate a reduced covenant costing regime for QEII covenants within the Waikato District. Map these areas and coordinate monitoring initiatives with QE II staff.

Emerging Threats (Climate-related impacts), weeds and pests open up new areas

Climate change will increase pressures on natural systems, but we do not yet know how to respond adequately to this threat. What we do know is the predicted climate change impacts in the Waikato could include, and the timeframes will vary:

- Warmer air and water temperatures (lakes, rivers, streams, and wetlands)
- Sea level rise
- Changes in rainfall patterns
    - Increases in the frequency of storms and droughts
- Ocean acidification
    - Will impact inshore coastal ecosystems.

These changes will adversely affect our rural areas and natural indigenous biodiversity. The conditions may allow existing and new invasive pests to impact different habitats. This could mean that native species struggle to adapt to climate changes. We also know that healthy soils, native plants, wetlands, and peat bogs can capture carbon and reduce it from driving climate change (although this is a global issue).
While Taiao is the key focus, it will be improved by restoring the connectivity of natural areas that have become fragmented in an overwhelming dominance of the exotic landscapes. This will help increase natural resilience to climate change and our rural areas. It is integrating climate change into the strategy where it impacts indigenous biodiversity, e.g. sea-level rise, droughts and flooding.

Significant Natural Areas (SNAs)

The identified SNA layers let landowners know they have potential natural areas that could be protected with opportunities for further restoration. Under the previous conservation fund, the Council had provided a small contribution to applicants who undertook improvements to protect conservation areas.

This has included support for fencing, plants, weed and pest control. Although this funding has been reorientated to Community-led projects (including conservation), WDC will still provide support and education on Taiao in the Waikato.

WDC will seek to update the SNA layer with a better technical layer in coordination with the Waikato Regional Council. Most likely utilising a satellite-based approach subject to central government support. It would use image spectrometry and Artificial Intelligence to measure the reflectance of light for plant identification leading to enhanced education and monitoring outcomes.

To be augmented with land-based ecological assessments as and when they can be arranged, e.g. linked to land development applications. Non-regulatory policies are supported in this document. Includes assistance with establishing protective covenants, service delivery, education, funding ecological assessment with WRC and helping to manage the threats of Kauri Dieback and Long-Tailed Bats.

Esplanade reserves

Esplanade reserves may be required when land is subdivided, reclaimed, developed (through conditions), or when a road is stopped under the LGA 1974. Esplanade reserves can also be created voluntarily. They are classified as reserves under the Reserves Act 1977, and land ownership is transferred upon deposit (completion) of the subdivision plan to a territorial authority.

The boundary of an esplanade reserve is measured from its bank where it is a river or stream, its margin where it is a lake, or from the mean high-water springs (MHWS) in a coastal area. In all cases, the landward boundary is a fixed survey line. Accordingly, the landward boundary does not change as the water boundary accretes or erodes.

Esplanade Reserves created as part of a subdivision (each allotment that abuts a waterway) will sit under Council control to manage. The policy approach follows national and regional direction with four underlying principles, including:

1. Private property rights must be respected
2. Landowners are responsible for minimising the effects of land use on Waterbodies
3. Where esplanade management results in public benefits, funding should be available from public sources
4. The Council must be cost-effective in seeking to implement the above principles.

These principles are retained in this review, and where possible, WDC will promote access to wider walking networks, parks, and reserves with willing landowners.

Esplanade strips

A rule may require esplanade strips in a plan when land is subdivided, reclaimed, or developed; or when a road is stopped. A condition may also direct them to apply for resource consent for reclamation. Additionally, an esplanade strip may be created voluntarily by agreement.

Esplanade strips are a legal instrument made between landowners and territorial authorities. They are registered on the title, but the land within the strip remains in the ownership of the land owner. Although identified on a survey plan, they do not need to be formally surveyed.

The creation of a strip, and restrictions and requirements relating to its use and management, are noted on the title and bind every party having an interest in the land. The form of the agreement and standard restrictions imposed on an esplanade strip is defined in Schedule 10 of the RMA.

An esplanade strip can include provisions to exclude access by the public during certain times or under certain conditions (as prescribed in Form 31 of the Resource Management (Forms, Fees, and Procedure) Regulations 2003 - also see examples of conditions in the advantages and disadvantages space.

Unlike esplanade reserves, the width of an esplanade strip remains unchanged within the same allotment. So if a riverbank is eroded by 2 metres, the width of the esplanade strip extends beyond its old boundary by 2 metres to offset the lost ground.

Esplanade strips can be varied or cancelled by a territorial authority subject to the procedure in s234 of the RMA. Similarly, an esplanade strip can be changed, reviewed, and cancelled if a condition applies under s127-132 of the RMA.

Access strips

Access strips can enable public access to or along with water bodies or public land. They can be established by agreement between the land owner and the territorial authority under s237B of the RMA.

Access strips are surveyed and fixed, but their ownership remains with the land owner. The creation of a strip and restrictions and requirements relating to its public use is defined in Schedule 10 of the RMA and are set out as an easement registered against the title to the land.

Access strips may be cancelled by agreement between the land owner and territorial authority, considering the matters in s237B(4) of the RMA.

Summary on access

Overall, Esplanade Reserves, Esplanade Strips and Access Strips are a range of tools available to the Council, community groups and private land owners to provide public access to native bush or water bodies. Things for all parties to consider when determining the strategic approach for native bush and esplanade areas are the form of the protection and level of management.

- The Nature of the resources and the land abutting water bodies (inclusive of coastlines)
- The Nature of land uses (e.g., rural/urban/natural habitats/features and their proportions within the District)
- The possibility of developing an integrated network of access points to water bodies through the use of esplanade reserves, strips and Access strips.

The Council will treat Esplanade Reserves, Strips and Access Strips based on each case's merits and focus on public access or recreation demand. Where there are significant conservation features on privately owned riparian areas, encouragement for protection is essential.

Sustainable management, minimising conflicts, protecting public benefits, partnering with Tangata Whenua, community and recreation groups, and private landowners will be sought. Key reserve priorities are water bodies, including the Waikato and Waipa Rivers, the West Coast, lakes, and others (rivers, streams, and a short coastline area on the Firth of Thames). The Council also seeks to promote connectivity and conservation outcomes and work with conservation agencies, iwi, hapū, community groups, and landowners.

BRINGING IT TO LIFE AND CONSIDERATIONS

Māori and mana whenua

By 2022-25 Treaty partners, Iwi, hapū and Te Ao Māori organisations as mana whenua and kaitiaki are sufficiently supported.

Waikato District Council helps them to secure appropriate resourcing to help protect and manage indigenous biodiversity, particularly taonga species in their place and associated with local Marae.

Co-governance roles ensure the Treaty Partnership is honoured through Tino-rangatiratanga, fulfilling the promise of Te Mana o Te Taiao Aotearoa, the New Zealand Biodiversity Strategy, that Treaty partners are mana whenua and kaitiaki.

The Joint Management Agreement (JMA) is WDC and Waikato Tainui's response to the co-governance of the Waikato River. WDC also have a JMA with Ngati Maniapoto.

Both agreements support the conservation and Kaitiakitanga of the District's indigenous biodiversity. Taiao in Waikato should be viewed with this lens. Where each party can help manage and restore Te Awa and Taiao through conservation, it should be progressed as an ongoing partnership, and this section will evolve.

Working with private landowners/businesses (knowledge, skills and funding opportunities)

By 2023-26, new programmes are in place to support landowners, businesses, resource users/owners and industry in delivering more Taiao.

If appropriate, incentivise or seek sponsorship to protect and restore indigenous biodiversity as a standard part of the business within the Waikato District. It should not fall to only landowners; identifying opportunities for those supportive businesses will create dual benefits.

Collaboration – Central government, regional, Waikato River Authority, Community groups, DOC (Jobs for Nature): providing advice vs funding

What opportunities can we provide with our blueprint funding to manage and restore native habitats (Flora/fauna)? Consider whether WDC could be a platform for helping groups manage the logistics of conservation work using systems like the Econet-designed platform.

Track investment in labour time, flora (plants) and materials (fencing, traps, fertiliser) over time. Tap into government and regional funding where possible to accelerate restoration.

Biosecurity

The control of plant and animal pests (and other risks that require positive action) needs to be recognised as the core dimension of indigenous biodiversity management.

Protecting Taiao should utilise central and local government expertise in pest control and provide this to landowners and customers as tools, knowledge, and services. Support the development of new technologies for controlling pests, e.g. biocontrol and large-scale permanent trap networks.

Biocontrol on the weed Tradescantia (Tradescantia fluminensis)

Opportunities in Taiao (and monitoring)

Investigate hosting a digital platform for community groups to manage their funding, labour and work programmes around pest management, plantings, and maintenance. This could be replicated for multiple groups across the District. WDC is investigating the Conservation Activity Management System (CAMS)[8] and whether it could be applied to new and existing groups. Current pest control uses scientific and Mātauranga Māori monitoring (what works) and citizen science opportunities to improve Taiao.

LTP – Funding, broader community funding and community initiatives; Some conservation funding left (not to be topped up); investigate funding from external providers, can Council facilitate

The conservation fund transfers to the Blueprint Community fund. Conservation funding is still supported, with less emphasis on individual landowners (unless they provide public or ecological access) to more community initiatives that support employment and community health. Fencing bush blocks, bush remnants and pest control are still supported in the Blueprint Community fund. By 2022-25 community groups have the information that lets them be appropriately resourced, growing, connected, and coordinated: access knowledge, expertise, and information to progress their projects supporting Taiao in the Waikato.

[8] https://econet.nz/our-projects/

Policy and Planning – Policies supporting Taiao in the Waikato

Be at the "cutting-edge" of indigenous biodiversity management, enhancing it and restoring ecosystem processes in agricultural and urban landscapes. This is particularly relevant in the Waikato Region, where agricultural development has led to extensive habitat loss and modification. Taiao management is a multi-faceted undertaking and is the responsibility of many public agencies, private landowners, and business/sector groups. While co-operative approaches involving key stakeholders offer meaningful opportunities, facilitating and coordinating collaborative efforts also present significant challenges.
The National Policy Statement – Indigenous Biodiversity[9] Exposure Draft indicates some critical areas of focus:

- Provisions to protect, maintain and enhance indigenous biodiversity
- An enhanced role for Tangata whenua in decision-making regarding indigenous biodiversity and identifying significant natural areas (SNA). This includes managing indigenous biodiversity in a way that gives effect to the new concept of Te Rito o te Harakeke
- Indigenous biodiversity must be protected and managed both within and outside SNAs. This is to include highly mobile fauna such as birds and bats.
- A nationally consistent set of assessment criteria for identifying SNAs and a requirement for local authorities to undertake assessments to identify those areas
- A policy direction that specific adverse effects on SNAs from the new subdivision, use and development are avoided. This policy direction could significantly impact developments if the listed exceptions do not apply.

Currently, Waikato Regional Council (Regional Policy Statement 1.6 Local Indigenous Biodiversity Strategies - LIBS) will assist Territorial Authorities at a district scale and collaborate with territorial authorities to develop LIBs that:

1. Use the information produced under methods 11.1.10a) and 11.2.1;
2. Establish indigenous biodiversity targets to enable local authorities to prioritise resourcing, track progress and monitor effectiveness in achieving indigenous biodiversity objectives and actions
3. Identify:

i) opportunities and priorities for re-creating habitat
ii) options and priorities for restoring, enhancing, or re-creating buffers, linkages, and corridors
iii) important threats to indigenous biodiversity
iv) minimise Plantation Forestry from taking over productive farmland and promoting localised native plantings for carbon credits.

[9] https://environment.govt.nz/assets/publications/npsib-exposure-draft-summary.pdf

4. identify areas or sites:
i) of indigenous biodiversity value
ii) that may require protection
iii) that may require enhancement

Thus the implementation model illustrated in Figure 3 is broadened to incorporate a range of resource management and strategic directions through the LIBS programme [See Figure 2]. This will be updated as part of the new NPS-IB.

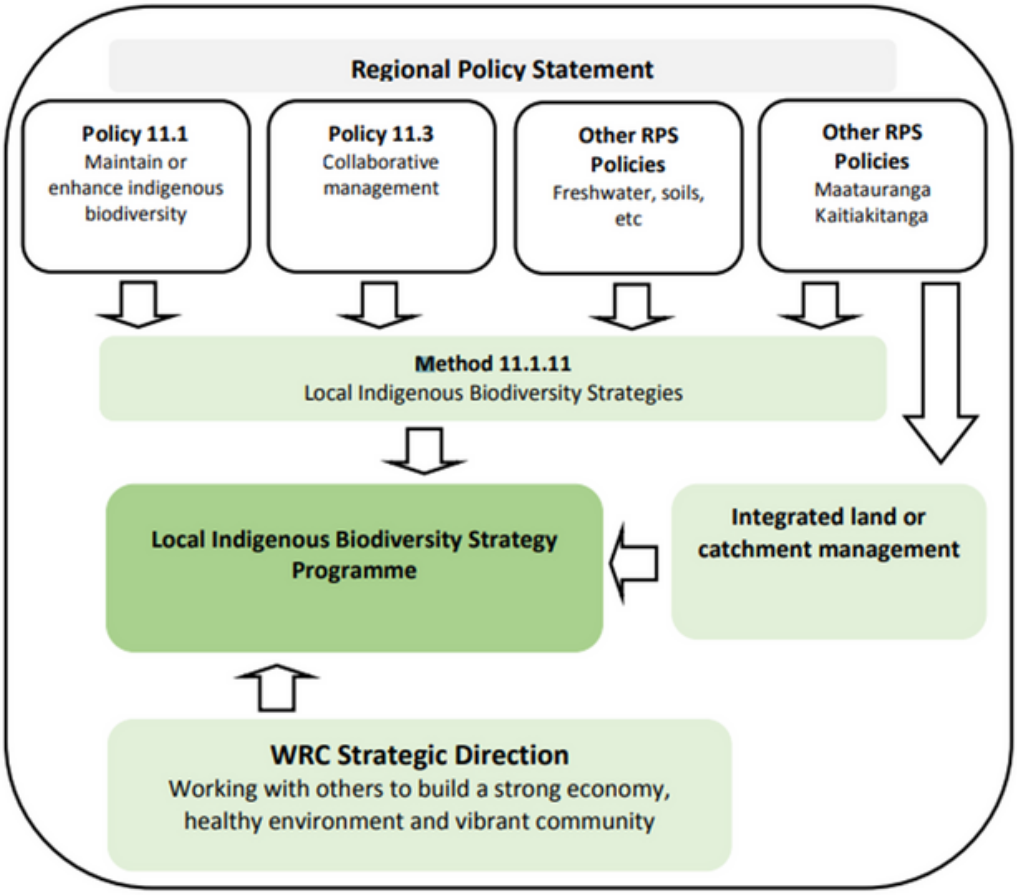


Figure 2: The Local Indigenous Biodiversity Programme

The District Plan

The District plan contains objectives, policies, and rules to protect habitats. The District Plan sets out regulatory and non-regulatory approaches to managing vegetation removal and particular species, Kauri, Cooper skinks and long-tailed Bats.

Kauri Dieback is identified as a significant issue, and this strategy references the Kauri Dieback Programme[10] and protecting kauri: A Rural Landowner's Guide[11]. Protected species, long-tailed bats and copper skinks habitats should be avoided, or an ecological assessment should be undertaken in conjunction with the Wildlife Act 1956, administered and permitted by DOC.

Reference can also be made to the Waikato Regional Council website with corresponding information[12] on a future Draft Bat Strategy to be referenced. Please note that the District Plan will be subject to a future NPSIB, which requires a Regional Biodiversity Strategy to be developed at this stage.

Communications and Engagement

Building engagement and understanding was seen by many as essential. This included: fostering collaboration, providing education, and disseminating better practices and incentives. A range of existing programmes exist. These could be used as potential building blocks, including Enviroschools, Marae-based te Taiao initiatives, DoC Programmes, Jobs for Nature, QEII covenants, River Care, Māori/Iwi land programmes etc.

The Steering Group will consider setting up a quarterly newsletter with SNA of the Month, what individual landowners are doing, and send it to media outlets. Fonterra and Dairy NZ are good at promoting these types of stories.

Connection/Collaboration/celebrating successes of improved Indigenous Biodiversity should be key actions to come out of Taiao in the Waikato. As part of the Strategy, the digital connections might include a Facebook Subgroup to help connect different parts of the community with Taiao knowledge and resources (plants, pest control) with those seeking it. The strategy's actions will better investigate access to CAMMs or apps to track resources and labour for community projects.

[10] https://www.kauriprotection.co.nz/how-to-guides/
[11] https://www.kauriprotection.co.nz/media/2050/6617-kauri-dieback-guide-booklet-a5_3_wr_final.pdf
[12] https://www.waikatoregion.govt.nz/environment/biodiversity/bats/

Snapshot of Goals – maintain and improve ecological corridors, stock-proof natural areas, promote weed and pest-free

Many methods were proposed to support indigenous biodiversity and biosecurity action. These included:

- Research and monitor indigenous biodiversity, native plants, animals and other organisms and the ecosystems that sustain them
- Funding – multiple streams
- Cultural – sites containing indigenous biodiversity and taonga identification
- Wildlife corridors – between SNAs and council reserves
- Biosecurity – preventing or reducing the spread of pest plants, animals and other organisms that might work comfortably in natural ecosystems
- Protected areas – Council-owned, private covenants, DOC, iwi and hapū
- New technologies – satellites, network traps, IoT sensors and cameras
- Adjacent to Regional Riparian protection
- Land acquisition and bequeaths
- Soft technology
- Integrated planning – opportunities to enhance Taiao and manage land
- Enabling landowners – knowledge and understanding of the benefits of Taiao and how to get started
- Education – teaching our communities and young people the benefits of Taiao
- Resource Management Act tools – investigate the simplified version of protection covenants
- New indigenous biodiversity initiatives

Digital layers available for Council and landowners

Councils maintain GIS layers to include SNAs, Conservation Covenants and Open space. Consider hosting a platform like Econet[13] or Restor[14] for community groups throughout the Waikato District. Alternatively, work with WRC to promote their app if it can achieve improvements in Taiao. WDC support all efforts in tracking, maintaining, monitoring, and restoring Taiao.

Ideas for funding:

- Local offsetting by business, developers (connecting them with landowners)
- Secondary CO2 offset – collective view of the District or within catchments
- 1 ha – 3,000 plants, 5m in height

[13] https://econet.nz/our-projects/
[14] https://restor.eco

- National – Register and apply for funding with Central Government funding; alternative funding, businesses, Lotteries etc
- Waikato Regional Council - Funding
- WDC – Funding and Partnership opportunities (shifting from private landowner assistance to a community group funding approach)
- This Council supports other ecological partners for funding and grants rather than applying ourselves.

Council and Crown Reserve/Land (SNA's) showcase best practice
The Council will showcase best practices in maintaining, managing, monitoring, and restoring Taiao in the Waikato. Where possible, these areas will also be used for education and research to enhance Taiao.

We need to embrace and create more of the stories in our district like C/O Pukemokemoke Bush Trust:

The most recently planted area seems to be doing incredibly well, although the recent drought has taken out a few species, particularly perhaps akeake and maybe mahoe, and they'll need to be replaced, but otherwise, this area is doing very well.

The next area is a very wet area and was planted in flax some three years ago and could well do with interplanting with particularly kind kahikatea and pukatea, again the two well-established wetland plants of the area.

Private landowner example (QEII covenant, Mt Karioi area) showcasing best practice July 2022:

We are very encouraged by the regeneration in the covenants on the farm. White maire is coming up along one of the ridges, and also Puriri, which is great because Wayne is finding them difficult from seed. Last month, Moniqua from Waikato Regional Council (WRC) walked through the areas with us and commented on the good health of the canopy.

We spotted Hinau seedlings, never seen them regenerating before; rata flowering and kohekohe fruiting in March (as above on page 24). Over the summer, we picked up the sound of a bat at dusk. Moniqua pointed out that the mature Puriri would be good bat roosts, so we are trying to trap and bait near those trees. WRC are contributing towards the plants, and our problem is getting enough plants. Waikato District Could contributed towards the planting preparation. In the open areas at the edges of the forest, we sprayed or cut down kikuyu grass to make planting plots.

ACHIEVING OUR VISION AND GOALS

Targets and tools

Goals

- Maintain, improve, and promote a full range of natural habitats and ecosystems to a healthy functioning state across their natural range and genetic diversity.
- Support actions to conserve, maintain and improve a healthy ecosystem's ecological linkages and promote sustainable natural resource use and emissions reduction.
- Seek collaboration opportunities to work with others, including mana whenua, to achieve Taiao in the Waikato vision.
- Unlock native bush and esplanade areas through access agreements and landowner support to provide for walking and cycling.

Focus Areas -– Timeframes (–Short-Term / –Medium-Term / Long-Term)
Actions (Maintain; Improve; Promote, e.g. 1.1 Maintain, Improve and Promote

- Consider areas of farmland for retirement – Carbon Credits, Rates relief, funding
- Identify significant pockets (SNAs, plus conservation covenants)
- Linkage between Pockets (Ecological Corridors)
- Prioritise areas of indigenous biodiversity
- Funding; Education links into WRC (Enviroschools); DOC and QEII (massive scope for improvement)
- Local community Nursery set up: Social Benefits, Training, Skills (Kimihia Lakes Project)
- App to track data – WRC app; Restor and Econet

Focus Area 1

Natural habitats and ecosystems are healthy functioning states.
This focus area is about WDC stepping up its support and actively managing indigenous biodiversity at a district level. WDC will work with the Regional Council, iwi, hapū and communities to ensure that ecological programmes can be rolled out.

Maintain, restore, and improve a range of natural habitats and ecosystems to a healthy functioning state in public spaces.	**Lead**	**Timing**	**Goal Alignment**	**State of Environment**
Action 1.1 – Illustrate Best Practice WDC, through this strategy, seeks to integrate statutory and non-statutory indigenous biodiversity functions such as monitoring, research and collaborative action and showcase this on land owned and administered by the Council. This includes planting a range of indigenous natives (preferably Eco sourced) on public reserves, e.g., passive areas, pocket areas adjacent to waterways, and within Esplanades, maintaining appropriate levels of pest control (weed and animal species) across the council reserves and helping adjacent landowners with native bush areas.	WDC	2022-2052 Short term to long term	1, 2	Maintain, Improve and Promote Linkages, Education and App
Action 1.2 – Linking Taiao areas to multiple indigenous biodiversity impacts An essential action underpinning this strategy is to develop a district-wide prioritisation of terrestrial and freshwater ecosystems. Identify key areas as a mapped layer for future ground-truthing. Tie in with Waikato Tainui principles of Te Ture Whaimana and broader Mātauranga Māori principles. These areas have the potential to enhance existing ecosystems. Places with the potential to enhance existing ecosystems as a corridor link to multiple SNA areas in proximity and identify where the gaps might be for future expansion. Map iwi, DOC and community indigenous biodiversity initiatives that support indigenous biodiversity across the Waikato. The benefit of this exercise is valuable in aligning and coordinating operational work and sharing resources across all parties.	WRC, WDC and Iwi, hapū and Land owners	2022-2052 Short term to long term	1, 2, 3	Maintain, Improve and Promote Identify
Action 1.3 - Identifying those areas of highest priority (remnant areas not well represented). Prioritisation Once areas (ecosystems) are mapped, they can be prioritised for restoration and active management. This includes existing and threatened conditions like weeds and pests, current control, and restoration initiatives.	WRC, WDC and Iwi, hapū and Land owners	2022-2052 Short term to long term	1, 2, 3	Maintain, Improve and Promote Prioritise
Action 1.4 - Catchment and Area Planning (ICMP) Adopt H2A principles, e.g. Low Impact Design (LID) standards for stormwater; the road network incorporates ecological links and minimises corridors acting as barriers to ecology	WDC	2022-2032 Medium term	1, 2	Improve and Promote Consider and Prioritise

Focus Area 2

Support actions to conserve, maintain and improve a healthy ecosystem's ecological linkages and promote sustainable natural resource use and greenhouse gas emissions (reduction).

Support actions to conserve, maintain and improve a healthy ecosystem's ecological linkages and promote sustainable natural resource use and greenhouse gas emissions (reduction).	**Lead**	**Timing**	**Goal Alignment**	**State of Environment**
Action 2.1 – Promote Local Nurseries set up: Social benefits, Training skills (e.g. Kimihia lakes Project) Investigate the development of a programme to support and advise people managing land with better indigenous biodiversity values. Set up a database with all projects and investigate the use of blockchain to secure the information for individual landowners. This can be based on the current WDC projects and identifying willing landowners initially. Advice and access to resources will include management and legal options that would be most useful to maintain or enhance indigenous biodiversity on properties. Display the information as a dashboard. Create a database of the existing nurseries and their capacity for people to contact and purchase plants. See if there is potential to increase capacity and scale up native propagation with current nursery providers and the capability for community groups to maintain their growing programmes and enlist schools.	WDC, Iwi/ hapū and local providers	2022 - 2025 Short term	1, 3	Improve and Promote Funding and Education
Action 2.2– Identify pockets of Significant Natural Areas (SNAs), Conservation Covenants and Esplanade opportunities Link good ground-truthed SNAs and conservation covenants to A1.2 and A1.3 to existing information. Managed areas could be complemented voluntarily with legal protection through other mechanisms such as covenants or designations. Include unique linkage to other funders, including Waikato Regional Council, QE II Trust, and Waikato River Authority. Explore a programme to identify key native areas (logged over time) and how these could be captured, logged, and monitored over time.	WDC, WRC, DOC and MfE	2022-2032 short term - medium term	1, 2, 3	Maintain, Improve Consider, Identify and linkage

Action 2.3 – Submit relevant government legislation to promote sustainable natural resource use, reduce emissions and support our rural communities (Update with changing legislation) Identify key principles to direct submissions on future legislation, including Te ture Whaimana and Mātauranga Maaori. • Ministry of Primary Industries – Afforestation incentives in the Emissions Trading Scheme (ETS) • RMA reforms – Natural Built Environment Act, Spatial Planning Act and Climate Change Adaptation Act • National Policy Statement – Indigenous Biodiversity Exposure Draft; • Waikato Regional Coastal Plan • Regional Pest Management Plan (WRC) • National Policy Statement – High-Quality Soils • National Pest Management Plan for kauri protection • Te Mana o te Taiao – Aotearoa New Zealand Biodiversity Strategy Implementation Plan All focus areas and actions must consider the strategy's vision, goals, and our partnerships with Tangata Whenua.	WDC, Iwi/ hapū and local providers	2022 - 2025 Short term	1	Maintain, Identify
Action 2.4 - Support Walking Access to our native environments utilising Esplanade Reserves and Access strips, with community groups and willing landowners Work with community groups and landowners to promote walking access (use existing Esplanade Reserves, Strips) and help engage with private landowners to complete access (access strips) as required.	WDC, Community Groups, Private Landowners, New Zealand Walking, Access Commission	2022-2052 short term - long term	2, 3	Promote Funding and Education

Focus Area 3

Seek collaboration opportunities: Central and local government, mana whenua, businesses, and communities.

Seek collaboration opportunities to work with others, including mana whenua, to achieve the Conservation Strategy vision.	Lead	Timing	Goal Alignment	State of Environment
Action 3.1 – Investigate Applications and Platforms to track ecological data (plantings, pest and weed control) for conservation projects WRC app/software, Restor, Econet or solutions could help manage and maintain conservation projects. There is potential for community groups to run and support conservation projects. The Council will explore hosting and supplying the app, run a CAM Weeds pilot using ArcGIS, and develop a CAMS CRM for plantings. See whether a local community group could utilise a digital solution and WDC host it.	WDC or provider, e.g. WRC App, Econet or Restor	2022-2025 short term	2, 3	Improve and Promote Consider and Prioritise
Action 3.2 – Consider Funding education links into WRC (Enviroschools); DOC, and QEII opportunities (Scope to improve) Helping, funding or non-financial opportunities for community groups: - Availability of expertise, resources, and space to help groups carry out their work planning and operational work. Connecting the relevant parties to funding streams - Help community groups with Health and Safety support (councils systems and processes - Identify land and retirement and incentives	DOC, WRC, WDC	2022 - 2025 short term	2, 3	Maintain, Identify
Action 3.3 - Identify areas of farmland for retirement – Carbon Credits, Rates relief, funding Investigate key land areas that could be retired and explored for restoration and the potential benefits to the Council and the wider community.	WDC, Community Groups, Private Land owners	2022-2032 medium term	1, 2, 3	Improve, Consider

Focus Area 4

Policy, rules and regulation

Policy, rules and regulation	Lead	Timing	Goal Alignment	State of Environment
Action 4.1 – Implement the Regional Pest Management Plan Review and implement the Regional Pest Management Plan, provide operational feedback on the National Pest Management Plan for kauri protection; Draft Waikato Bat Strategy	WRC, WDC	2022-2025 short term	1, 3	Maintain, Identify
Action 4.2 – Strengthen provisions to enhance indigenous biodiversity in reviews of National, Regional and District strategies and plans Seek to enhance indigenous biodiversity in other legislation, National and Regional strategies, plans and policies with on-the-ground skills, knowledge, and experience. ·Maintain contacts with WRC – Natural Heritage and Strategic and Spatial Planning Make submissions on draft legislation (RMA reforms, Regional Biodiversity Strategy, Waikato Coastal Plan)	WDC, Taituara, WRC	Ongoing 2022-	2	Maintain, Identify

Focus Area 5

Education and community engagement

Education and community engagement	Lead	Timing	Goal Alignment	State of Environment
Action 5.1 – Develop in consultation with WRC advice and management around best practices for Taiao Advice and management of indigenous biodiversity. Through education: current examples include Enviroschools[1]. Ka mihi ki a Ranginui, ki a Papatūānuku, ka mihi ki te ngao o te wheiao. Connect with the Waikato Enviroschools programme to support and expand the education profile for early childhood centres. Schools commit to a long-term sustainability journey, where tamariki/students connect with and explore the environment. Then plan, design and take action in their local places in collaboration with their communities, particularly active community Groups. Augment the Enviroschools tools with Council information and support to utilise student skills better and collaboratively plan, design, and take action on the issues they are passionate about. Information for landowners on what they can do, where to plant, what to grow and how to maintain those areas. [1] https://enviroschools.org.nz/	WRC, WDC, Biodiversity Forum	2022 - 2032 Medium term	2	Promote Funding, Education and App
Action 5.2 – Support community groups working to enhance indigenous biodiversity by providing advice, connections, and funding Community group advice and guidance • Connect volunteers with community groups for planting days • Donations and sponsorship • Facilitate applications for funding of group projects • Provide or link ecologically sourced native plants when resources are available • Planning and technical advice (weeding, land preparation, types of plants and season/timing of planting, maintenance and pest management till the plants are established) • Plants for residents adjacent to parks, reserves, and esplanades when resources are available • Check with Hamilton City Nursery if any unallocated plants are known for restoration projects • Concerning 5.1, see whether any school horticultural programmes have propagated plants that could be utilised.	WDC, HCC, WRC	2022 -2032 and ongoing	1, 2, 3	Maintain, Improve, Promote Identify Local Community Nursery and App

Current projects and websites

Enviroschools

Biodiversity Waikato

Go Eco

Establishing a Nursery

Waikato Regional Council – Planting guides

Trees for Survival

MONITORING AND REVIEW

This Strategy will guide staff with day-to-day decisions relating to Taiao in the Waikato and offer guidance to the community. The strategy will be reviewed every three years in advance of the Waikato District Long Term Council Community Plan to remain current and relevant.

A future Steering group will monitor progress at three levels:
1. Focus Areas
2. Actions/Who is doing the work
3. Outcomes/results

The future Steering Group will periodically report progress on actions to the Council and partners that will be determined as contributing to or leading each step. Progress on each Action will be reviewed by the future Steering group once a year. Taiao in the Waikato Strategy will be reviewed every three years. An integrated approach will be used to report while building a comprehensive framework in which decisions can be made on investment, monitoring, and reporting on indigenous biodiversity.

This task will require a commitment of resources by the council and partner organisations once the framework is established and populated by the Council and partners. Appropriate investment priorities can be set, with the gathering and collating data to track progress on outcomes can be finalised.
A template could be used for the Standard Report Card on each outcome as set out below. Each steering group meeting will focus on one outcome in a sequence, which means all outcomes could be addressed over three years.

The Report Card example template is illustrated for Outcome 1 below:

<table>
<tr><th colspan="2">Illustrate Best Practice</th></tr>
<tr><td colspan="2">Narrative Context: How does this fit into the regional and broader Waikato District context</td></tr>
<tr><td colspan="2">State: Increase native plantings (indigenous biodiversity) within Council Reserves. Log the number of trees planted, area and Survival per annum
Pressure: Funding for new plants, impacts on mortality of plants (climate, disease, pests, human)</td></tr>
<tr><td>Intermediate
Outcome: Plantings occur in less frequently used reserve areas (esplanades)</td><td>Indicators: Increase in vegetation coverage (natives) on Council Reserves, corresponding increases in native fauna (birds, reptiles, and insects</td></tr>
<tr><td>Intermediate
Outcome: Community groups help contribute to council reserve plantings and
incorporate their areas into council reserves (Tamahere Gully system)</td><td>Indicator: More groups working and recreating in native areas</td></tr>
<tr><td colspan="2">Analysis and recommendations</td></tr>
</table>

Starting in 2023, each outcome will form the focus of a Steering Group meeting

APPENDIX

Appendix A – From Sustainable Development Goal 15 "Life on Land" to the RMA, NPS, WRPS; PDP and the Aotearoa New Zealand Biodiversity Strategy

GLOSSARY

Bioveg2

Is an example of the Waikato Regional Council's initial satellite imagery-based layer identifying Indigenous Forest remnants.

Carbon Sequestration

Carbon sequestration is the process by which carbon dioxide is absorbed during photosynthesis and is stored as carbon in biomass (trunks, branches, foliage, and roots).

Engineering with Nature (Native Engineering)

Engineering With Nature is defined as the intentional alignment of natural and engineering processes to deliver economic, environmental, and social benefits efficiently and sustainably through collaborative processes.

Rewilding

Rewilding is a progressive approach to conservation. It's about letting nature take care of itself, enabling natural processes to shape land and sea, repair damaged ecosystems and restore degraded landscapes. Through rewilding, wildlife's natural rhythms create wilder, more biodiverse habitats23

Significant Natural Areas (SNAs)

Any area that, on the commencement date, is identified in a policy statement or plan as an area of significant indigenous vegetation or significant habitat of indigenous fauna (regardless of how it is described)

State of the Environment (SOE)

State of the Environment monitoring helps with policy development and informs decision-makers of the consequences of actions and changes in the environment. It involves setting targets, monitoring, analysing, and interpreting data, then reporting findings, and continuing this process over time

Taiao

Is Māori for Nature, consisting of natural resources; it speaks to the natural environment that contains and surrounds us it encompasses all of the environment and its offspring.

APPENDIX

A: From Sustainable Development Goal 15 "Life on Land" to the RMA, NPS, WRPS, PDP and the Aotearoa New Zealand Biodiversity Strategy.

Sustainable Development Goals (SDGs)

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity. The 17 SDGs are integrated—they recognize that action in one area will affect outcomes in others and that development must balance social, economic and environmental sustainability. United Nations – Sustainable Development Goals (SDG) 15 – "Life on the Land" sets out the importance of plant life on land.

"Human life depends on the earth as much as the ocean for our sustenance and livelihoods. Plant life provides 80 percent of the human diet, and we rely on agriculture as an important economic resource. Forests cover 30 percent of the Earth's surface, provide vital habitats for millions of species and are important sources for clean air and water, as well as being crucial for combating climate change".

Figure 1: A nature-positive goal recognises that all SDG's can only be realised if the Biosphere related goals are met (care of the United Nations).

Resource Management Act 1991 (RMA)

The maintenance of indigenous biodiversity and ecosystems is critical in achieving the purpose and principles of the Resource Management Act 1991. Section 5(2)(b) refers to safeguarding the life-supporting capacity of ecosystems. Biodiversity is a component of ecosystems, and maintaining and enhancing it is one means of achieving the direction of Section 5(2)(b). Biodiversity provides for elements of indigenous natural character which need to be preserved as part of Section 6(a).

Section 6(c) requires the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. Indigenous biodiversity has important cultural values reflected in Section 7(a) regarding kaitiakitanga and Section 8. Section 7(d) requires particular regard for the intrinsic values of ecosystems. Maintaining and enhancing biodiversity will contribute to achieving the directions of the RMA.

National Policy Statements (NPS)

National Policy Statements (NPS) are instruments used under section 52(2) of the RMA. An NPS states objectives and policies for matters of national significance, which Councils must have regard for when developing the regional policy statements and District Plans. Under section 58B of the RMA, the purpose of national planning standards is to assist in achieving this Act's goal; and the requirements or other provisions relating to any aspect of the structure, format, or content of regional policy statements and plans.

National Policy Statement for Indigenous Biodiversity (NPSIB) - Draft

The Draft NPSIB documents including the exposure draft and statement aim to protect and restore indigenous biodiversity to Aotearoa. This decision-making can be in the form of specific plan changes requiring the protection of certain areas of native vegetation, which are significant and may be important habitats for species, e.g., pekapeka (long-tailed bats). They can influence designations and resource consents. The Central Government's focus in the NPSIB is to halt the decline in indigenous biodiversity and help to restore and enhance it.

The Draft NPSIB received 7305 submissions and recently an Exposure Draft focused on implementation was released in June 2022. The proposed NPSIB sets out the objectives and policies to identify, manage, protect, and restore indigenous biodiversity under the RMA. From Waikato District Council's view most of the costs generated by the requirements in the Draft NPSIB are likely to fall on local councils (regional and district) to implement the proposed objective and policies. The central government and Tangata whenua will also be involved to a lesser extent.

Regional Policy Statement

Under the RMA and NPS, the Waikato Regional Council has a role in terms of maintaining indigenous biodiversity (Section 30(1)(ga)) and the maintenance and enhancement of ecosystems in water bodies and coastal water (Section 30(1)(c)(iiia)). District Councils have a similar function to maintain indigenous biodiversity under Section 31(1)(b). The Waikato Regional Policy Statement under section 11 includes a chapter specifically on managing indigenous biodiversity. District councils must give effect to the Regional Policy Statement.

The RMA biodiversity function (as amended in 2003) includes an objective within the process itself. Not only do local authorities have to manage natural resources to avoid, remedy or mitigate adverse effects on biodiversity, but they must also maintain biodiversity.
This is a significant task for the following two reasons:

1. Maintaining biodiversity in the face of various threats will likely require more than managing the adverse effects of resource use. It will require active interventions by councils, other agencies, or both.
2. Whether biodiversity is maintained will depend on a range of parties and actions outside of a local authority's control (including, for example, how well the Department of Conservation (DOC) manages its estate and species recovery programmes).

There has also been a tendency for discussion about biodiversity to revolve around protecting Significant Natural Areas (SNA) (as dictated by S6 RMA). But rather than about how to maintain biodiversity across the landscape. While these sites are critical dimensions in biodiversity management, ecosystems support biodiversity across the landscape, and sites seldom operate in isolation from their surrounding environment (biota moves in and out of such areas, while water, nutrients, and energy flow through sites).

Local Indigenous Biodiversity Strategy (Waikato Regional Council)

Managing biodiversity is not simply about managing defined areas of vegetation in isolation from their surrounding context. To maintain biodiversity, we need to partner with others to manage ecological networks at district and regional levels. Local Indigenous Biodiversity Strategy (LIBS) programme by Waikato Regional Council is a community-led and values-based project. The project will strongly focus on engagement and implementation at the flax roots (hapū/marae) and grassroots (landowners/land managers) levels. The LIBS framework envisages biodiversity integration into production lands (e.g., forestry, farming) and urban environments.

An identified ecological network will also provide a coherent picture to pull together a range of existing projects (including those undertaken by WRC) and give them a clearer focus. The LIBS programme will also encapsulate a strong Mātauranga Māori and kaitiakitanga component based on engagement with mana whenua at the marae level.
Ecological protection and restoration of indigenous biodiversity as part of land development options for multiple-owned Māori Land can provide social, cultural, economic, and environmental benefits, for example, through:

- contributing to marae and whanau wellbeing through sustainable ecologically based business development, including the incorporation of cultural/eco-tourism
- improving indigenous health using traditional resources (Rongoa Māori)
- education and training for rangatahi in ecological restoration, and engaging them in the land development programme.

Thus, the implementation model for the LIBS Programme is shown in the Draft Taiao in the Waikato Strategy and it incorporates a range of resource management and strategic directions to be achieved through the LIBS programme.

Significant Natural Areas (SNAs)

Councils must carry out extensive, resource-intensive, costly processes to identify and map SNAs, including conducting practicable physical inspections and engaging with landowners. Regional Council's would also need to undertake extensive work to identify possible habitats of highly mobile fauna, taonga species, degraded and depleted environments, and areas targeted for restoration and enhancement.

Giving effect to the NPSIB may also require councils to develop new/revised provisions to manage indigenous biodiversity and progress these changes to regional policy statements and district plans through the Schedule 1 process (including engagement, notification, public submissions, hearings and potential litigation and appeals). Tangata whenua and other stakeholders will face costs (time and financial) to resource their involvement in these processes. However, this may be supported by councils and central government.

Landowners and infrastructure providers may face increased costs to manage the effects of their activities on indigenous biodiversity as well as opportunity costs associated with subdivision, use and development of land (over and above the status quo). There is a management hierarchy to ensure that certain adverse effects on High value SNAs are avoided in the first place, and they if they can't be avoided, remedied or mitigated, offsetting may be an option.

Implementation costs for councils and (to a lesser extent) central government are a key consequence of the NPSIB provisions. Many of the NPSIB provisions require specific changes to be made to regional policy statements and district plans, and councils will need to prepare these changes and progress the proposed provisions through the Schedule 1 process to "give effect to" the NPSIB. Waikato District Council consider that their objectives, policies and rules are on track and consistent to a point with the National Legislation. However, more work will need to be done around highly mobile fauna and spatially mapping these sites.

Some of the research has indicated that a very small share of properties containing an area of defined (or indicative) SNA have a high risk of precluding new subdivisions, use and development. Councils will have to be careful around interpreting the requirement to "avoid" certain adverse effects on SNAs in the NPSIB (i.e., smaller properties with widespread High SNA coverage).

Conservation and Collaboration

Weaving conservation principles into sustainable land management practices will rely on strong alignment with existing initiatives. This includes Forest Stewardship Certification, Sustainable Dairying Water Accord, local initiatives such as the Upper Waikato Sustainable Milk Project and exploration of new options, including greenways, carbon sequestration farming, and honey production.

Building engagement and understanding was seen as essential. This included: fostering collaboration, providing education, and disseminating better practices and incentives. A range of existing programmes exist.

These could be used as potential building blocks, including Enviroschools, Marae-based te Taiao initiatives, DoC Programmes, Jobs for Nature, QEII covenants, River Care, Māori/Iwi land programmes etc.

The Waikato District Council Conservation Steering Group

As part of the Draft Taiao in the Waikato Strategy, Waikato District Council will retain a Steering Group to maintain momentum on the proposed Actions. It will also consider setting up a quarterly newsletter with SNA of the Month. Promote what individual landowners are doing and send it to media outlets. QEII, Fonterra, Dairy NZ and NZ Beef and Lamb are good at promoting these stories for their landowners e.g., the Balance Farm awards promote best farming practices. Waikato District would like to follow suit and highlight community and individual landowner best practices for the protection of indigenous biodiversity.

Connection/Collaboration/celebrating successes of improved Indigenous Biodiversity should be key actions to come out of the Draft Taiao in the Waikato Strategy. As part of the Strategy, the digital connections might include a Facebook Subgroup to help connect different parts of the community with Taiao knowledge and resources (plants, pest control) with those seeking it. The Draft Taiao in the Waikato Strategy's actions will better investigate access to CAMMs or apps to help the Council and Community Groups to track conservation resources and labour for Council and community projects.