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Managing native vegetation clearance in the Waikato region - case for change and options analysis

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A draft of this report was also formally reviewed by a number of other stakeholders who also provided valuable comments. Those reviewers were:

Waikato Regional Council – Mark Tamura; Matthew Vare.

Contents

1 Executive Summary

In the course of gathering baseline information on ecosystem type and extent[1], Waikato Regional Council (WRC or 'the Regional Council') has found that the region is continuing to lose areas of indigenous vegetation and habitat to land clearance activities. This runs contrary to the objectives and policies contained in the Waikato Regional Policy Statement (WRPS) which seek the maintenance and enhancement of indigenous biodiversity throughout the region and undermines work by WRC (and others) to restore, maintain and enhance biodiversity.

The drivers of indigenous vegetation clearance activities are many and intertwined. There are 11 district councils in the region, all tasked with managing the effects of land use activities on significant indigenous vegetation and significant habitats of indigenous fauna. The Regional Council is also required to maintain indigenous biodiversity, alongside other agencies like the Department of Conservation (DOC) who also have a role. With no comprehensive national direction or system for biodiversity management, there is an opportunity to review or overhaul the regional biodiversity system to get better outcomes for biodiversity in the Waikato region.

A strong case for change has been found for Waikato, with key themes around working together with other agencies, supporting the Territorial Local Authorities (TLAs) and internal staff with improved access to expertise in biodiversity, improvements to regulatory plans and policies, and the potential for Waikato Regional Council to take more visible leadership.

A long list of options is presented for consideration by WRC and with stakeholders as the options are narrowed. These need to be assessed against defined investment objectives and critical success factors as the next steps to reaching preferred options.

[1] The Catalyst Group. (2019). Interim draft findings: Diagnostic of provisions for vegetation protection in planning documents within the Waikato Region. (Unpublished Report).

2 Introduction and Purpose

Place Group Limited has been engaged by WRC to analyse the key issues associated with managing native vegetation clearance activities in the Waikato region and to explore potential options for addressing these issues.

This report includes analysis of:

- Key problems associated with native vegetation clearance in the Waikato.
- The current management system (regulatory and non-regulatory) for controlling native vegetation clearance and incentivising restoration and enhancement within the Waikato region, including analysis of areas where the system is not delivering on key biodiversity outcomes.
- The options proposed for addressing deficiencies in managing native vegetation clearance to reduce and ultimately prevent ongoing losses of biodiversity within the Waikato region.

It is anticipated that the list of options identified within this report will provide a foundation for further discussion with wider stakeholders including the Territorial Local Authorities (TLAs), with a view to arriving at a preferred management option.

Methodology

The development of this report has been guided by the Treasury Better Business Case (BBC) model (Figure 1) – in particular setting out whether there is a case for change (strategic case) and identifying and analysing options to address deficiencies in the current management system (partial economic case). These two cases have been developed in close collaboration with WRC staff and with advice from a sample of TLAs.

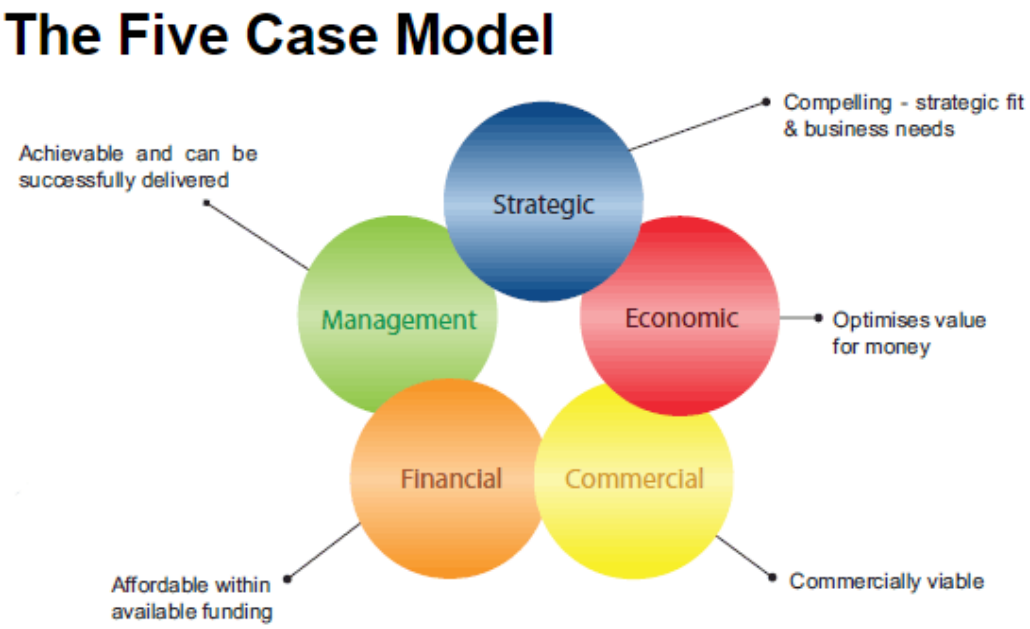

Figure 1: Five-Case Better Business Case Model. Source: The Treasury

To complete this analysis, we undertook the following methodology:

- Comprehensive literature review and analysis of;
    - An initial set of problem statements developed by WRC staff
    - Current state background documents and information base
    - Existing regulatory and non-regulatory approaches to the key issues
    - Options being successfully implemented elsewhere.
- Interviews with staff from a range of directorates and teams within WRC involved in some way with vegetation clearance issues and/or biodiversity management.
- Interviews with staff from Waitomo and Taupō District Councils, and completion of the question sheet by Thames-Coromandel District Councils and Hamilton City Council.
- Analysis and discussion of the outcomes of those interviews and the degree to which they aligned with, clarified, or added new perspectives to the original problem statements.
- Identification of potential options based on key findings to address gaps in the management of native vegetation.

Scope

Indigenous vegetation clearance and biodiversity loss are inextricably linked, and vegetation loss and biodiversity loss are one and the same. Indigenous vegetation clearance directly impacts on the maintenance of indigenous biodiversity. Addressing indigenous vegetation loss addresses wider biodiversity linkages to that issue and vice versa, and the two cannot be separated in most contexts. This report frequently refers to biodiversity and/or indigenous vegetation clearance interchangeably and should be read with that inseparable link in mind.

Analysing whether there is a case for change in the way native vegetation clearance is managed, and identification of a list of potential options to address key issues associated with the management system for vegetation clearance within the Waikato region are within the scope of this report. The listed options identified are grounded in evidence, and are in our opinion, cost effective and implementable. It is anticipated that these options will be further socialised with the key agencies responsible for the management of native vegetation clearance to arrive at a preferred option to take forward.

The final 3 cases of the BBC model, plotting the delivery of preferred options through the development of commercial, financial and management cases, are outside the scope of this analysis and it is recommended that these cases are explored as a subsequent stage to this project.

Structure

This report is structured as follows:

- Section 3 sets out a short history and key impacts of native vegetation clearance in the Waikato region.
- Section 4 sets out the current system for managing native vegetation clearance and incentivising restoration and enhancement, including an analysis of the issues/deficiencies with the current system (status quo assessment).
- Section 5 outlines the case for change.
- Section 6 outlines what is required to address the problem.

- Section 7 lists options to address the case for change, examines the strategic alignment of options and summarises the expected benefits of changes.
- Section 8 proposes next steps, potential investment objectives and critical success factors to identify a preferred option and move through the final three cases of the BBC model.

3 Native vegetation clearance

A short history of native vegetation clearance in the Waikato region

Significant environmental changes have occurred in New Zealand because of human (especially European) settlement, with extensive clearance of vegetation, habitats, and ecosystems to make way for productive land use, infrastructure, and urban development. Since Europeans settled in New Zealand, approximately 75% of the Waikato region's original indigenous vegetation and ecosystems have been cleared[2] and some ecosystem types have less than 5% of their original extent remaining today. Despite a range of tools that aim to protect indigenous biodiversity and control or prevent vegetation clearance, this continues to be an ongoing national issue.

Over the period of 2014 – 2017, the regional council sector commissioned Gerard Willis of Enfocus Ltd to prepare a series of reports exploring regional councils' roles in biodiversity management and the future of biodiversity management. These reports are known as 'The Willis Reports' (2014 and 2017), and they set out the statutory and non-statutory roles and responsibilities of regional councils in addressing biodiversity decline and identify five key shifts that would assist regional councils in addressing this decline.

The Willis Reports note that between 2006 and 2012 New Zealand lost around 1,500 ha per year of indigenous forest, and around 1,000 ha per year of regenerating forest. Local monitoring in the Waikato region has identified a loss of 7,576 ha of indigenous vegetation between 2002 and 2017 across 1149 discrete events (Catalyst Group, 2019). These examples highlight the urgent need to address biodiversity loss not only within the Waikato region but also at a national level.

Key impacts of native vegetation clearance

Clearance of indigenous vegetation results in the loss of indigenous biodiversity.

Whilst biodiversity loss is a global problem, New Zealand is known internationally for its unusual plants and animals, many of which are found nowhere else in the world. If these are lost to New Zealand they are lost to the world (Brown *et al*, 2015). Although about a third of New Zealand's land area is held primarily for conservation, protected conservation lands do not protect the full range of ecosystems and habitats in New Zealand, and it is critical that biodiversity on private land is also protected to maintain that full suite.

Individually, small areas of lost indigenous vegetation may not appear to have a significant impact, however the cumulative effects of ongoing vegetation clearance ultimately do affect the ability to maintain biodiversity as a feature of New Zealand's landscape. Continual erosion of the margins of

[2] Baseline is considered to be 1840s.

biodiversity sites, fragmentation, pressure from browsers, including feral animals and domestic stock, and outright clearance of sites, open our biodiversity areas to increasing external pressures, affecting the structure and composition (flora and fauna) and the ability of these areas to be maintained as a relatively closed system. The "death by a thousand cuts" phenomenon is real.

Biodiversity and the healthy ecosystem services that it provides underpins human prosperity (Brown *et al*, 2015). Climate regulation and pollination, soil and water conservation, and cultural or spiritual fulfillment are some of the key services that benefit New Zealanders, and these become compelling reasons for working towards a more sustainable relationship between biodiversity and the way that humans live and operate within the landscape. There is a need to move away from adversarial thinking around the trade-off between biodiversity or production and development, to thinking about biodiversity and production/development.

4 Current state analysis

Of importance to note in the current state analysis that follows is that the link between native vegetation clearance and biodiversity loss is not separated. This is due to the interwoven nature of the regulatory and non-regulatory frameworks and tools for managing vegetation clearance being the same frameworks that aim to protect indigenous biodiversity. The terms vegetation clearance and indigenous biodiversity loss are therefore used interchangeably.

Regulatory framework for managing native vegetation clearance

Biodiversity is protected in legislation and recognised in several strategic documents including the Council's own Strategic Direction. A summary of the key legislation mandating the requirement to protect, maintain and enhance biodiversity is provided below for regional councils (Table 1) and for other agencies (Table 2).

Willis notes in his 2017 report that biodiversity management is *"often more accurately described as management of the threats to biodiversity, and indigenous vegetation clearance is one of the more obvious threats to maintaining indigenous biodiversity. Different agencies play different roles in contributing to biodiversity threat management, and this often depends on the land tenure of where the threat is occurring. Thinking about agencies' roles as being differentiated according to the threat being addressed is also one of the most useful ways to rationalise what is a very complex picture of agencies' respective responsibilities."* The scope of what public sector agencies do in managing threats to biodiversity was discussed in the Stage 1 Willis Report (2014) and is further reviewed and evaluated in Appendix 1 of the Stage 2 report (2017) which can be accessed here http://www.lgnz.co.nz/our-work/our-policy-priorities/3-environment/biodiversity/.[3]

In respect to regional councils' roles in biodiversity management, Willis notes:

"In terms of regional councils' roles, these are perhaps best characterised by considering the legislation from which the functions or powers derive. In that regard regional councils: Have a general function to maintain biodiversity under the Resource Management Act (RMA) and accompanying powers to

[3] Enfocus Limited. (2017). Addressing New Zealand's Biodiversity Challenge - A Regional Council think piece on the future of biodiversity management in New Zealand. Auckland, New Zealand: Gerard Willis.

regulate land use, the discharge of contaminants to land and water, the damming, diversion and abstraction of water along with the discharges to and occupation to the coastal marine area.

Powers under the Biosecurity Act (BSA) to regulate and/or carry out operations (pest management) to achieve biodiversity outcomes through plans prepared under that Act can secure a mandate through the Local Government Act (LGA) to expend financial resources to carry out pest management operations or other non-regulatory methods (regardless of whether a pest or project is provided for under a plan prepared under the BSA).

In practice, few regional councils regulate land use for biodiversity. Regulation in the name of water management, though undertaken for multiple purposes, is a major contributor to freshwater biodiversity. Almost all regions intervene through operational pest management programmes, either focused on key sites/habitats or broad scale (landscape wide) efforts against a single pest (typically possums) with multiple objectives. This type of activity is very effective but resource-constrained and requires on-going investment to maintain gains."

This interpretation of regional councils' ability to regulate land use generated some disagreement, however it is also noted that the Horizons One Plan does just that. Horizons assumes responsibility for biodiversity, including "by regulating activities through its regional plan and through decisions on resource consents"[4]. This approach was further upheld by the Environment Court decision on appeals[5] as a valid approach that is not precluded by the Resource Management Act 1991 (RMA), further confirming the ability of regional councils to regulate land use activities for the purposes of protecting indigenous biodiversity.

It should also be noted that case law continues to inform regional councils' role. For example, despite the apparent overlap with the Fisheries Act 1986 (Fisheries Act), the Court of Appeal recently ruled that regional councils have the power under the RMA to control fisheries activities for the benefit of indigenous biodiversity.[6]

Table 1: Regulatory framework for managing native vegetation clearance for WRC. More information is provided in Appendix 2.

Legislation	Description
Resource Management Act 1991	Primarily governs the requirement for regional councils to maintain biodiversity. Key elements include: ● Providing protective provisions in plans ● Creating esplanade reserves and strips ● Requiring financial contributions ● Environmental compensation and biodiversity offsets
Local Government Act 2002	This Act requires councils to prepare Long Term Plans and Annual Plans to state a community's long-term goals and priorities and key performance targets. Long Term and Annual Plans also outline how much the plan will cost to

[4] See Horizons One Plan Chapters 6 and 13

http://www.horizons.govt.nz/CMSPages/GetFile.aspx?guid=ad4efdf3-9447-45a3-93ca-951136c7f3b3

[5] LWRP Hearing Evidence Andrew Day and other Appellants v Manawatu-Wanganui Regional Council – Decision issued 31 August 2012. Paragraphs 3-98 to 3-104.

[6] *Attorney-General v the Trustees of the Motiti Rohe Moana Trust & Ors* [2019] NZCA 532.

	implement and how this will be funded. Key elements relating to biodiversity include: ● Funding local government activities ● Charging development contributions
Draft National Policy Statement for Indigenous Biodiversity (NPSIB) **[Due for release April 2021]**	The draft NPSIB states objectives and policies for indigenous biodiversity. Once in force, regional and territorial authorities must amend regional policy statements and regional/district plans to give effect to the objectives and policies set out in the NPSIB.
New Zealand Coastal Policy Statement (NZCPS) 2010	The NZCPS states policies in order to achieve the purposes of the RMA in relation to the coastal environment. The requirements of the NZCPS 2010 for biodiversity are more stringent than the basic requirements of the RMA.
Waikato Regional Policy Statement	The purpose of the WRPS is to achieve the purpose of the RMA by providing objectives, policies and methods to achieve integrated management of the natural and physical resource of the region. Regional and district Plans are required to give effect to the WRPS.
Waikato Regional Plan and Coastal Plan	These plans govern activities in the region and set out objectives policies and methods to manage the natural and physical resources of the Waikato region.

Table 2: Biodiversity legislation administered by other agencies[7].

Legislation	Admininstered By	Key Elements
Conservation Act 1987	Department of Conservation	● Establishment of conservation areas ● Preparation of statements of general policy, conservation management strategies and conservation management plans ● Creation of marginal strips on sale or deposition of Crown land ● Granting of concessions in conservation areas ● Management of indigenous freshwater fisheries, including the whitebait fishery ● Management agreements ● Conservation agreements
National Parks Act 1980	Department of Conservation	● Establishment and management of national parks
Reserves Act 1977	Department of Conservation	● Establishment and management of land-based reserves ● Conservation covenants
Crown Pastoral Land Act 1998	Land Information New Zealand	● Control of activities on high country leasehold land ● Tenure review and transfer of land into freehold and conservation land, including provisions for protective mechanisms on freehold land

[7] Source: http://www.environmentguide.org.nz/issues/biodiversity/im:2506/legislation/ accessed 28 July 2020.

Queen Elizabeth the Second National Trust Act 1977	Queen Elizabeth the Second National Trust	• Creation and administration of open space covenants on privately-owned land
Forests Act 1949	Ministry for Primary Industries	• Control of logging, milling and export of indigenous timber • Providing standards for sustainable logging • Granting sustainable forest management plans and permits
Overseas Investment Act 2005	Overseas Investment Office	• Consideration of whether there will be adequate mechanisms in place for protecting or enhancing existing areas during sale of New Zealand land to overseas investors
Wildlife Act 1953	Department of Conservation	• Protecting a range of identified wildlife • Establishing wildlife sanctuaries, refuges and management reserves • Providing for population management plans to address fishing-related mortality
Trade in Endangered Species Act 1989	Department of Conservation	• Requiring permits for import and export of endangered species
Native Plants Protection Act 1934	Department of Conservation	• Enabling native plant species to be protected

Non-regulatory framework for managing native vegetation clearance

There are a range of non-regulatory tools that local authorities can use to manage native vegetation clearance and promote the maintenance and enhancement of indigenous biodiversity. These tools are able to be used at a regional council's discretion and some of these tools have become largely accepted as being the regional council's role, and some of these non-regulatory options are the basis of methodology to give effect to mandatory roles and functions in the RMA. In some cases these discretionary tools have provided a vehicle in some regions for larger scale projects including species recovery, in partnership programmes with other agencies and community groups, achieving significant outcomes for biodiversity at sub-regional or local scales. The non-regulatory framework can use a range of tools which may include all or some of the broad options listed below. More information is provided in Appendix 3.

1. Biodiversity strategies and action plans for a region or district. These help to align priorities and coordinate resources and actions towards achieving regional or sub-regional goals and objectives.
2. Information, education, awareness, and guidance for the general community or directly with landowners.
3. Employing staff with biodiversity related expertise – this facilitates the integration of biodiversity perspectives into other functions and roles within a regional council.

4. Economic instruments such as financial incentives and funding support to landowners and community groups.

Drivers for ongoing biodiversity losses - vegetation clearance is a wicked problem

The drivers for these ongoing losses are not unique to the Waikato region, and biodiversity is frequently referred to as a wicked problem (Willis, 2017):

- It is complex, poorly understood and resists clear definition.
- It has many causes (ie; multiple threats) meaning there is no single solution, but rather multiple types of intervention are required.
- It probably cannot be solved by existing means, meaning that new tools are required (including both technological tools and policy mechanisms).
- It is challenging because it requires changes in behaviour and attitudes across a range of agencies, communities and individuals.
- Some interventions can cause perverse or unwanted outcomes. This can be the case as a result of both regulatory and non-regulatory intervention.
- Unwanted actions by individuals are often a result of economically rational decision-making (when considered at the level of the individual) because costs are not borne solely by the individual undertaking the action.
- It involves many stakeholders across the public and private sector and communities and individuals with very different priorities and values.

In addition, there has been no National Policy Statement for biodiversity to provide direction at a national level, and the TLAs are reliant on regional leadership and direction provided by WRC.

As part of the brief for this project, WRC has provided several 'Problem Statements' which highlight some of the key issues with the management system for native vegetation clearance and aim to articulate factors that are drivers of vegetation clearance and biodiversity loss in the region. These form part of the 'Current State Analysis' and a full copy of these problem statements is provided in Appendix 1.

In the sections to follow, under each problem statement heading, the current state (status quo) is described and discussed, including findings from the interviews with WRC and TLA staff. The problem statements were considered and tested against our knowledge and experiences, literature review, and through the interview process which aimed to test the level to which interviewees' knowledge, experience and perceptions aligned and/or added to the initial problem statements. The interview findings are largely incorporated into each of the problem sections, although they are not always explicitly stated as such. Of importance to note is that some individuals put forward views that may not be the organisational standpoint, and TLA representatives were generally planning staff with their perspectives offered being largely connected to the regulatory framework.

The status quo and discussion are largely grouped under the problem headings; however, they are often linked, and similar factors can apply to more than one problem statement. For example, poorly aligned policy and rules can be connected to a lack of clarity in roles and responsibilities between the

regional council and the TLAs, and this greatly reduces the ability of TLAs and the regional council to support each other in compliance responses. Lack of specialist expertise in consenting, and for TLAs in terms of compliance and policy development contributes to other problems around the adequacy and alignment of policy, and identifying key issues that require tight consent conditions or a compliance response. Lack of clear information about biodiversity and priorities for protection at a regional level exacerbates the inconsistency of policy and rules and can leave high priority sites vulnerable under rules that are not necessarily appropriate for highly threatened ecosystem types.

Problem: Inconsistent and poorly aligned policy and rules

Current state:

There are 11 TLAs[8] in the Waikato region, some with district plans that pre-date the Waikato Regional Policy Statement. Some of the TLAs take a rolling review approach to the different parts of their district plans, however the operative biodiversity provisions have not necessarily been updated to meet requirements from the Waikato Regional Policy Statement (WRPS) (2016).

While the Regional Council has set strong priorities through the WRPS and the 2020-2023 Strategic Direction, TLAs are frequently struggling with the ability to do more than the minimum required of them through the RMA. There is an inherent lag time between the WRPS provisions becoming operative and the time it takes for the Waikato Regional Plan and TLAs to implement the requirements through a plan change or review process.

Each TLA approaches their requirements slightly differently, responding to their district context and community. Interviewees confirmed this with some noting that the minimum requirements were met, while others were considering improvements to their provisions, alignment with a regional picture for biodiversity, and non-regulatory options to improve biodiversity management within their region, such as incorporating more biodiversity outcomes into reserves management activities. Each TLA has a different capability and capacity to implement and enforce regulatory provisions, and few are able to implement additional non-regulatory tools to support the maintenance and enhancement of biodiversity. Expertise around biodiversity that needs to be applied to policy development is mostly held at the Regional Council and relationships and processes for the TLAs do not promote access to this expertise.

Whilst direction around implementation of the policies includes the Waikato Regional Plan and district plans, the Waikato Regional Plan has yet to give effect to the 2016 WRPS, and has no provisions or rules that provide for the protection of biodiversity for biodiversity's sake. Any rules that may provide a level of protection are primarily directed at soil and water conservation. The RMA includes a role for regional councils in developing objectives, policies and methods to provide for indigenous biodiversity, which enables the Regional Council to make its own provisions for biodiversity in the Waikato Regional Plan, including the use of rules.

The Catalyst Group report (2019) summarises the WRPS objectives that directly or indirectly relate to indigenous biodiversity and provides an assessment of the level to which district plans give effect to those provisions, focussing on the key policies 11.1 and 11.2. These policies are directly concerned with the maintenance and enhancement of indigenous biodiversity and the protection of significant

[8] Territorial Authority = District and City Councils; Local Authority = District and City Councils and Regional Council.

indigenous vegetation and significant habitats of indigenous fauna and provide the direction to the district councils to provide for these matters in their district plans.

Catalyst Group (2019) considered that the districts had done a reasonable job of meeting their obligations, however a broader conclusion was that the provisions within district plans were too permissive, failed to consider indigenous vegetation outside of identified Significant Natural Areas (SNAs) and that the WRPS and WRC is not providing strong enough direction and leadership (respectively) to encourage and require stronger provisions. They concluded that the "permitted envelope" is too large for indigenous vegetation that is not identified as an SNA and falls outside WRC and TLA provisions, and will not give effect to the WRPS.

Their full analysis is not repeated here however there is general agreement with the key findings of that report, particularly with regard to:

- Permissiveness of regulatory provisions;
- Lack of protection for areas not identified as SNAs;
- Lack of rules in the Waikato Regional Plan directed at preventing vegetation clearance for the protection of biodiversity - rules for vegetation clearance are directed at soil and water conservation in areas of erosion risk and are often triggered by slope;
- A need to strengthen the direction from the WRPS for tighter permitted activity baselines and performance standards; and
- A need for WRC to provide a greater degree of regional leadership around biodiversity.

Discussion:

Variable rules and levels of protection from one district to another are problematic, particularly where they rely on those wanting to clear vegetation to assess the significance of a site and the rules that apply. Variation across the TLAs is not unexpected however. Policy and rules at district level will always be tailored to fit the community, location and context of biodiversity in that district and variation is unavoidable as the TLA responds to the community reaction to proposed district plans. This is compounded by the largely unavoidable lag time between provisions in the WRPS and the time it takes for TLAs to go through plan change processes to give effect to the WRPS. Those TLA staff interviewed also noted the challenges in terms of resourcing and expertise in building their district plan provisions.

Policy and regulatory provisions have all been developed largely in isolation, with little coordination between TLAs and Regional Council. In the case of biodiversity provisions, there is no regional picture to work to, and districts have no way of knowing how they fit the regional picture in terms of biodiversity values and priorities. A policy guidance document has been developed by WRC for use by the TLAs, with input from some districts, and this could be further developed and more widely circulated and communicated out to the TLAs, particularly where district plan biodiversity provisions are being reviewed. For biodiversity, a regionally coordinated approach would be underpinned by a regional biodiversity inventory with identified priorities for protection, and this is not currently in place or available.

A key finding from the interview process with the TLA representatives was less about inconsistency and more about the need for the WRPS, the Waikato Regional Plan, and the Regional Council, to provide backing for the TLAs when it comes to the prevention of vegetation clearance. There was significant frustration expressed around the inability of the Regional Council to join with TLAs in compliance and enforcement action because the Waikato Regional Plan rules only apply when

vegetation clearance adversely affects soil and water conservation values and triggers rules aimed at soil and water conservation. While the Waikato Regional Plan Policy 5.1.3 – 1[9] lists adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna, there is nothing in the rules that actually provides for compliance on the basis of effects on biodiversity. This also feeds the perception that a lack of rules and response from the Regional Council means there is no issue and the TLAs have no need to follow up.

The soil and water conservation provisions in the Waikato Regional Plan tend to relate to a slope trigger point, and/or distance from waterways for vegetation clearance. While this might provide a level of protection for indigenous vegetation alongside waterways and in steeper high risk erosion areas, it does not protect indigenous vegetation on flatter land. Lowlands and flatter land areas tend to be the areas where indigenous vegetation and biodiversity in general is already significantly reduced, and is still cleared or under pressure from land use change or intensification.

Activity status is also problematic, with high levels of permissiveness for areas of clearance within SNAs. Permitted activities are generally not monitored and are often a key source of small clearances. Individually these are seemingly insignificant in their effects, however cumulatively they serve to erode significant natural areas, reduce core areas (where the ecosystem functions and processes are dominated by the ecosystem and not the matrix), and increasingly expose the site to the adjacent 'external' pressures and threats. Over time an annual clearance allowance can result in the complete removal of a site.

The TLAs were universally seeking more support from the Regional Council. All TLA staff interviewed noted the need for the Regional Council to provide them with clear guidance and support around the identification of significant natural areas and the priorities for biodiversity protection regionally, to guide their policy and rule development, enable some targeting of resources and to strengthen controls for high priorities. TLAs also wanted the Regional Council to update their Regional Plan to include rules that could complement their own provisions and enable the Regional Council to stand alongside them in compliance issues for the sake of biodiversity. One TLA suggested that their district would benefit from the Regional Council taking the responsibility for biodiversity into their Regional Plan, rather than leaving it with the district.

Problem: Lack of clarity in roles, responsibilities and the nature of the relationship between WRC and the TLAs.

Current state:

The RMA lays out the functions of regional councils and TLAs under s30 and s31 respectively. The TLAs that were spoken to were all fairly clear on their minimum requirements to provide for biodiversity within their district planning framework from the RMA. Those that were more proactive were also aware of other options outside of the regulatory frameworks, from providing advice and support to changing the management of their own reserves to improve outcomes for biodiversity.

It is acknowledged nationally that there is significant overlap between the functions of the local authorities, although the Willis Report (2014) notes that the TLA role is narrower and more specific,

9 https://www.waikatoregion.govt.nz/Council/Policy-and-plans/Rules-and-regulation/Regional-Plan/Waikato-Regional-Plan/5-Land-and-Soil-Module/51-Accelerated-Erosion/513-Policies/

and applies only to control the effects of land use. Broadly this has been applied by the TLAs in provisions that control the clearance of indigenous vegetation and/or protect significant indigenous vegetation and significant habitats of indigenous fauna (Willis, 2014), frequently as scheduled SNAs. Rules are often confined to listed/scheduled/mapped SNAs, while anything outside of those areas is often able to be cleared, at least to some extent, as a permitted activity. A failing of this approach is the fact that a challenge from a landowner can result in a biodiversity site being removed from the plan schedule and maps even though it may be of high value and meet the criteria for significance under the RMA. It also enables the clearance of any non-SNA sites, regardless of their potential irreplaceability, and/or potential for restoration.

The RMA also requires regional policy statements to specify which local authority is responsible for controlling the use of land to maintain indigenous biodiversity (s62 (1) (i) (iii)). Accordingly, the Waikato Regional Policy Statement (Chapter 4.2.11) states the roles and responsibilities for district and regional councils, aligning with the functions in the RMA:

> *4.2.11 Indigenous biodiversity: In carrying out their resource management functions, local authorities shall maintain or enhance indigenous biodiversity. Territorial authorities shall be responsible for the control of the use of land to maintain indigenous biodiversity, excluding land in the coastal marine area and the beds of lakes and rivers, which shall be the responsibility of the Waikato Regional Council.*

It does not further divide responsibilities and retains the overlap inherent in the RMA.

In Chapter 11, the WRPS identifies some specific elements or tasks that the Regional Council will provide, including the identification of significant indigenous vegetation and significant habitats of indigenous fauna, making that information available to the TLAs, identifying threats to those areas and working with agencies and landowners in managing those threats. Other areas that the WRC will provide include information gathering (11.1.5) and a biodiversity inventory (11.1.6). This is clearly stated. Internal and external feedback noted that the inventory work had yet to be delivered, and that funding was problematic in implementing these requirements. The implications of this will be further discussed under Problem 7, which relates specifically to information around biodiversity. It does leave a gap in the ability for all the local authorities to be referring to the same song sheet in terms of biodiversity values across the region and what is most important to protect regionally and locally.

There are several requirements that apply to both the Waikato Regional Plan and district plans. Provisions or requirements in the WRPS for both regional and district plans (eg; 11.1.1 to 11.1.4 inclusive) have the advantage of enabling the Waikato Regional Plan to include provisions for biodiversity. The disadvantage is that it also perpetuates the lack of clarity around who will do what. The coordination between TLAs and the Regional Council, with agreement around the elements on which each of the organisations will focus, could develop a powerful combination of regional and district plan provisions. This relies on active discussion and collaboration, and the development and maintenance of strong working relationships with the TLAs.

WRPS Method 11.1.5 a) states that WRC will undertake monitoring ("collect, analyse … information"), however the language in 11.1.5 b) and c) becomes less clear. It says that WRC will "facilitate the establishment of baselines…" and "utilise monitoring information…". These suggest that WRC might assist, but not necessarily do or lead. This again reduces clarity over who will do what by leaving the

WRPS open to interpretation. It can be argued that the baselines, indicators and monitoring information will fall out of 11.1.5 a), but the language is not a match.

Other vehicles to improve coordination and actively work together with TLAs and other organisations with roles in biodiversity management have not yet been applied at the regional scale, although it is noted that the Local Indigenous Biodiversity Strategy pilot projects identified a range of key lessons, with a potential framework and toolbox to be considered in terms of wider application in the region.

Discussion:

In the absence of ongoing conversation and good working relationships, there is no way to clarify roles or develop complementary and well aligned policies and rules if the WRPS is not crystal clear in assigning those roles and responsibilities. While the monitoring item is a very specific example, it demonstrates that wording can make a difference in the interpretation of the provisions and leave parties with no clear expectations or taskings.

Where ongoing, active collaboration and coordination are occurring, tasks can be discussed and assigned by agreement and this is where developing relationships between the TLAs and the Regional Council becomes an important requirement for effective implementation. None of the feedback internally or externally suggested that this type of collaboration and cooperation are occurring to a great degree at this point in time, and it was noted that relationships with some of the TLAs are strained and unhelpful.

The LIBS pilot projects identified a potential Collective Impact Framework (CIF) and toolbox that could be applied across the region, although this is still in its early developmental stages. The CIF would establish how different agencies can work together and coordinate their efforts, and coordinate funding. The intent would be for each party to have their own part to play in this framework, with roles and responsibilities defined. Each party delivers to their agreed roles and responsibilities, reporting back into the CIF on their progress towards a regional vision. Within the CIF, WRC would also have defined roles and responsibilities, and would clearly identify and define what WRC could contribute to Collective Impact and how.

Relationships between Regional Council and the TLAs currently tends to rely on individual personnel connecting between organisations for a limited purpose, but does not appear to be carried through as an organisational relationship or approach that filters through all levels. This was noted by interviewees from both TLAs and WRC. It is certainly not strong or widespread enough, or at the right organisation levels, to facilitate ongoing conversations and a collaborative approach to protecting and maintaining biodiversity.

Coordination and working together around compliance and enforcement was noted by interviewees as an issue. TLAs perceive that they are left to their own devices for this function, and the ability for the Regional Council to support is limited because it has no rules that apply to biodiversity for biodiversity's sake. The TLAs look to the Regional Council to help with enforcement, or to lead, while the Regional Council in turn looks to the TLAs who do not have the resources.

The lack of non-regulatory vehicles for improving collaboration, like a regional strategy for all agencies, or an internal strategy to develop a work programme for WRC to proactively engage with the TLAs, amongst others, does not help matters.

Problem: A lack of knowledge about the rules.

Current state:

There is certainly a perception amongst those interviewed that landowners are not necessarily aware of the requirements to comply with rules or obtain resource consents for a range of activities, including the clearance of indigenous vegetation. One WRC interviewee noted that although there have been dairy shed effluent rules for around 20 years, many landowners were apparently still unaware of many of those rules. The level of knowledge was not investigated further outside of the interview process with regional and district council staff and the understanding of the current status of knowledge is limited and anecdotal. Literature searches did not provide information in this regard, and it may be that it is as much about some of the other drivers for vegetation clearance (eg; productivity, value placed on the site or vegetation) as it is about knowledge of rules.

Discussion:

It is increasingly a given that many activities require consent and that the rules should be investigated, however this can be a discouraging process for landowners that costs, and with a low likelihood of consequences, many will opt for ignoring the requirement and will clear vegetation and biodiversity without consent. It can also be less about a lack of knowledge about the rules, and more a lack of knowledge that a biodiversity area is of value and would be subject to rules.

For a landowner, the entire process of identifying whether or not the activity requires a resource consent, and then working through investigating the requirements and processes can be a significant barrier. An AgResearch project looking at barriers for landowners to develop farm plans with Horizons Regional Council noted that some respondents interviewed after the floods in 2004 complained of the bureaucracy and four pages of paperwork involved to access, in some cases, hundreds of thousands of dollars of relief from Ministry of Agriculture and Forestry (now Ministry for Primary Industries). The plans required were considered too bureaucratic, too much paperwork, too time-consuming and the plans generated were too complex. Landowners who consider four pages too onerous to access significant funding are unlikely to consider the resource consent process easy and worthwhile.

The ability to navigate a district plan to identify the key rules is rarely straightforward. It can be challenging to locate key information such as the relevant rules and the appropriate forms on local authority websites, and to follow through the cross referencing to other areas of a district plan or standards to be met. Having accomplished that, a landowner is then required to interpret the rules and determine whether their biodiversity site is an SNA.

This entire process can be challenging at the best of times and local authorities could gain significant value in presenting their rules with better clarity and readability for a lay person, although it must be noted that all the websites touched upon included the availability of pre-application advice from staff. The level and tone of the local authority response is critical in encouraging landowners to follow through. Landowners may simply not bother after encountering the first hurdle, and/or gamble on getting away with it.

With regard to biodiversity this can also relate to the relative values that individuals place on biodiversity and vegetation. Many landowners do not perceive the same level of value that an agency staff member with biodiversity awareness or expertise will apply. Regenerating scrub, swamp and seep wetlands are frequently seen simply as non-productive land and therefore would not qualify for a rule, although more mature forest seems to be more likely to be maintained and considered of value. Therefore, something perceived to be a low value wasteland is less likely to be thought to require a consent. Even where the value is known, it may be overridden by another goal, with interviewees considering this to be largely financially driven, and that the indigenous vegetation or biodiversity site is simply in the way. It has been our direct experience to encounter landowners who are already aware, or are made aware, of the need for a resource consent or other regulatory process around the modification and destruction of wetland areas, or removal of a locally endemic species from a legally covenanted area to establish an accessway. In both these instances the landowners were aware of the protection mechanisms and rules, undertook the work in breach of those requirements, and were not prosecuted despite compliance and enforcement investigations into both these examples.

Private property rights also play in this, with any regulatory protection of biodiversity on private land being considered an interference with a landowner's right to manage their land as they see fit. TLAs noted in the interviews that scheduling sites in district plans is not popular with the community. The landowner knowledge element is worth further investigation so that local authorities can consider their approach to improving public awareness and engagement through the most appropriate communication channels and tactics.

Problem: Biodiversity is being under-valued

Current state:

Despite claims by some that landowner attitudes of stewardship and general care for their land have and will continue to maintain indigenous biodiversity, it is clear that this:

- Is not universal.
- Is not protecting indigenous biodiversity or reducing or preventing ongoing and sometimes extensive losses.
- Varies in the nature of 'protection' and this might not always meet the needs for truly maintaining biodiversity in terms of ecological integrity. For example, grazing wetlands during a dry summer or opening forest remnants for stock shelter, while protecting them for the rest of the year might be considered protection by a landowner, but is known to have negative impacts on biodiversity values in those ecosystems.
- Varies in the value ascribed to a biodiversity site by the landowner. This value in turn varies from the values that an ecologist would place on a biodiversity site.
- Varies across ecosystem types – eg; swamp vs mature forest with large podocarps – so that a full range of ecosystem types is not being maintained.
- Can depend on the level of resistance towards regulatory bodies and strength of belief in private property rights being sacrosanct.
- Depends on beliefs about doing something for the greater good.
- Depends on whether the greater good is something an individual believes they should be paying for, with or without additional funding from agencies.
- Tends to be about the economics or maintenance (eg; grazing wetlands during feed shortages) of the farming operation more so than anything else. It will only be protected if it can be done cheaply and easily, but if there is no 'disposable' budget for what is often seen as 'nice to do'

(not need to do) then it will be the first thing to be dropped out of the budget and work programme.
- Is influenced by the continuing attitude that if an area is not producing then it is of lesser value to the farm, reinforced by the term non-productive land.
- Can be because there is no demonstrated benefit to the farming operation.
- Can be because landowners lack the knowledge of what and how to restore biodiversity sites, and may not have access to, or know where to find help and guidance.

This is evidenced by the ongoing losses of indigenous vegetation and biodiversity in general, and the list above is both derived from, and supported by the collective perceptions and knowledge of interviewees through their respective roles, and our direct experience.

In contrast to the above, at least one district in the region has experienced a slight overall gain in indigenous vegetation. These gains occurred on private and public land as a result of soil conservation activities, wetland restoration, riparian planting, mitigation for subdivisions, planting and enhancement of gully systems and district council land developments.

Discussion:

Biodiversity lacks relevance for many landowners, and convincing them that there is value in biodiversity has yet to find a successful formula. Landowners are a wicked problem of their own when it comes to valuing and protecting biodiversity and indigenous vegetation, and building it into the farming operation. There are so many influences on landowners and their attitudes towards biodiversity and indigenous vegetation in the context of their farming operation with its industry and financial pressures, that it is impossible to unravel or separate one from another and tap into any deeper motivations for them to protect biodiversity. No agency or organisation has been able to convince a significant proportion of landowners of the values of biodiversity to their farming operation, to their greater wellbeing and resilience, for the greater good, or simply for its own sake. Establishing the 'what's in it for me' for the landowner is still eluding all those who attempt it.

At present, rural and urban communities generally appear to have a poor understanding of biodiversity, and the potential values it adds to their property and general community and landscape wellbeing through ecosystem services. Our public conservation lands may give the impression that biodiversity is well protected, but what is less well understood is the fact that our public conservation lands are mostly confined to the steeper hill country and mountains, or other areas that are not well suited to agriculture, and do not represent the full range of ecosystem types and biodiversity in New Zealand. In addition, the ability to resource active management of all public conservation land (PCL) leaves much of it suffering from benign neglect and the impacts of predators and browsers. This also adds a perception that if our primary biodiversity management organisation does not feel the need to actively manage their lands, then why would a private landowner do so for biodiversity benefit.

In order to protect the full range of ecosystem types, biodiversity on private land will need to be protected and/or restored. The identification, prioritising and scheduling of significant natural areas can help to raise a level of awareness of what is important, but can also have perverse outcomes. A site that is not scheduled may be seen to have no value and is expendable. There are often few rules to prevent the clearance of these areas. If all biodiversity sites in a district are identified, that can reduce the perceived value of all the scheduled sites.

Development opportunities that generate economic gain will frequently override biodiversity values at local levels. Drivers of biodiversity loss on private land include economics and the need for a

farming operation to be a viable business, and biodiversity sites are rarely seen as an added value or an opportunity to diversify land use and the income base. They are more frequently seen as an inconvenience and a cost to the business, and profits continue to be made from biodiversity decline both in rural and urban settings. While this may be driven by external factors such as industry demand, regulatory requirements, the need to service debt, uncertainty as to how to begin, or the capacity of a landowner to undertake the work themselves or cover the costs, biodiversity does not appear to be a top priority for many landowners and developers.

As noted by an interviewee, in urban or suburban and subdivision settings, the cost of environmental degradation is external to the cost of development, making it more cost effective to clear a site and start with a clean canvas. With weak disincentives through prosecution, it can be cheaper for a developer to destroy a site and pay a small fine than to go through the process of consenting or working a biodiversity site in as a feature of their development.

With regard to biodiversity these factors can also relate to the relative values that individuals place on biodiversity and vegetation. One example that demonstrates this repeatedly is a (broadly generalised) attitude that what an ecologist considers a valuable wetland, or wetland with restoration potential is considered by a landowner to be a swampy wasteland or boggy paddock that must be drained and dried out. Regenerating scrub is another example that landowners tend to seek to clear, although it has a key role at a landscape level. This is a simple lack of understanding, but also not helped by a range of such perceptions encountered over time. Mature forest tends to be more valued, regenerating scrub and wetlands (especially swamps and seeps) are not valued. SNAs might be of value. A non-SNA is not and can be cleared with no concerns. Some landowners are simply applying the productive/non-productive comparison.

Management of biodiversity sites can actually become a liability and a chore for rural landowners, especially if it is not done well. For example, planting a riparian margin can have a number of negative outcomes, some temporary and others more ongoing. Weeds need to be controlled and this becomes more difficult at various stages of growth of the planting. Streams that have been stabilised by the grass sward become less stable as the planting shades the grasses out, and a poorly planned planting with trees or flaxes too close to the edge of the stream then becomes a stream bank erosion issue until a new equilibrium is reached. This is particularly problematic where a river or stream is incised with steep banks to start with. Fencing a wetland or bush remnant is not where the work and costs end. Landowners are not always aware of the need to actively manage the area over time and find later that there is considerable ongoing work. This needs to be recognised in incentive programmes, with continued support until the maintenance costs are very low. Greater emphasis on supporting landowners in biodiversity management is needed.

One of the lessons learned from the Source to Sea pilot project was around undertaking farm planning in a way that integrates biodiversity with water, soil and farm profitability, using a whole farm management planning approach with land management units as the basis for planning. Community engagement for that project also noted that funding can act as a catalyst for on-farm biodiversity enhancement, and there is a gap around covering the landowner's time and the ongoing costs of maintenance. This is something that could be factored into costings and programmes. This ongoing and additive cost factor can be a barrier for regional councils, where the preference is to provide funding to support works within a finite time-frame and then pass on responsibility for maintenance to the landowners. Experience with funding works does indicate a point at which the administrative

burden on councils becomes more costly than the funding provided, however this is something that can be streamlined and worked through with simplified agreements at that point. The value gained by the council from providing ongoing support can be significant, and the goodwill generated in the community should not be underestimated.

The proposed Collective Impact model which has emerged from the LIBS pilot projects could provide the vehicle for this kind of ongoing support, facilitating access to supplies of pest animal toxins, traps and replacement bait stations, for example. Materials that can be purchased in bulk and then accessed by landowners needing ongoing small quantities from a central point at minimal cost and with minimal effort would support their ability to continue their work into the ongoing maintenance phase. The Collective Impact initiative has the potential to facilitate economies of scale, to improve awareness for landowners and for advice to be coming from the community, to the community. Although it may be funded by regulatory organisations like the regional council, the distancing for landowners from the regulatory body could provide a neutral point of contact where landowners do not feel threatened or defensive.

A key issue for bringing landowners on board is the need to change deep seated attitudes, 'changing hearts and minds', something that has not successfully been achieved to any large extent. With regard to gains made by one of the districts, it could be a useful and informative exercise to further investigate the drivers of these gains and how these can be further encouraged in operational and policy planning.

Problem: A lack of compliance monitoring and enforcement

Current state:

There are several likely reasons for a general lack of compliance monitoring and enforcement (CME) with regard to the clearance of indigenous vegetation, both in our experience and from interview responses.

- Permitted activities are generally not monitored and rely on reports of potential breaches for a council, regional or district, to take notice and investigate.
    - The status of vegetation clearance in the district plans frequently allows for small areas to be cleared in a 12 month period, so small clearances would not trigger any form of response.
    - Permitted activities do not tend to build knowledge with landowners and do not provide the opportunity for one to one engagement.
- The TLAs do not have the resources to undertake proper compliance and law enforcement and biodiversity is not on the radar in this respect. All TLA interviewees noted this as an issue, with some having no compliance staff at all.
- Neither the Regional Council nor the TLAs have the ability to constantly monitor their geographical jurisdiction for vegetation losses to stimulate a timely response.
- TLAs generally lack the expertise to recognise whether a vegetation clearance incident has adverse effects on a biodiversity site significant enough to warrant the investment in taking compliance action.
- CME staff at the Regional Council do not have significant biodiversity expertise, and there is a need for WRC to internally establish processes and channels to enable CME staff to access ecological expertise to support their work.

- Breaches of rules are prioritised against all other rule breaches. Clearance of indigenous vegetation does not tend to be considered a higher priority than other more acute issues like sediment run-off creating visible plumes in a waterway, abattoir odour, or a dairy effluent breach. This is exacerbated by the lack of biodiversity expertise within or available to the CME team.
- The onus of proof sits with the regulator and frequently requires considerable investment by the regulator to gather sufficient evidence for a successful prosecution. TLAs do not have the resources to undertake an investigation, or the expertise in biodiversity, and the Regional Council does not have a regulatory tool to apply to vegetation clearance outside of soil and water conservation rules.
- The TLAs and Regional Council are each looking to the other to lead a response, with TLAs taking a lack of response from Regional Council as an indication that there is no issue that requires a response.
- There is little appetite at political levels of the local authorities to invest resources in CME for biodiversity values, and politicised decision-making will often squash prosecution action.

Discussion:

Brown (2017) noted that nationally ten district councils had no resources for CME and over 40 have less than a single full time equivalent to do the job, alongside other tasks. She also notes that CME and prosecution is not separated from political influence and councils attempting to balance environmental concerns against economic and other community wellbeing issues. The political aspects are well captured by Brown (2017):

"Councils afford CME varying priority, and encounter two key barriers in carrying out this often adversarial function: resourcing and politics (which are, of course, interlinked). Councils are political entities, governed by a group of people elected by the local community to carry out their functions under the act and to further locally-based aspirations. Councillors sometimes take their place at the table thanks to the coordinated voting of vested interests, some of which may take umbrage at the council energetically carrying out its CME role. In the worst cases this creates an environment of politicised decision making, including the intentional underfunding of this crucial function lest it offend those who must not be offended."

Landowners who are knowingly breaching rules have a very good chance of having no enforcement action taken against them despite significant infringements on district plan rules. No action from the regional and district council simply reinforces acceptance and does not discourage those actions in the future, as well as perpetuating a community perception that there is no issue with vegetation clearance and indigenous vegetation is not of great enough value to stimulate a response.

TLA staff interviewed noted that they would appreciate some backing from the Regional Council to assist with CME, and access to expertise. The TLAs appear to be somewhat reliant on the Regional Council in this regard and while the Waikato Regional Plan lacks any rules for vegetation clearance and effects on biodiversity values, there is little ability for the Regional Council to respond. It did not appear that there is a lack of understanding from the TLAs as to what the Waikato Regional Plan rules cover, more a general frustration around a lack of assistance coming from the Regional Council in this regard. When the soil and water conservation targets of the regional rules were raised, those spoken

to appeared to be aware of this limitation, which suggests that the frustration is generally about the inability or perceived unwillingness of the Regional Council to work with them when an issue arises.

There was also an issue raised through the interviews around the TLAs being unable to access expertise through the Regional Council, with no established communication channels and no guidance or single point of contact to enable this. Points of contact were based on individual staff relationships, and no formal agreements or channels appear to be in place.

It is difficult to determine how much vegetation clearance is being consented because consent records are not easy to access, and not many districts or regions have good electronic recording and databases that allow this type of reporting. This means that the extent of vegetation clearance that is consented or not is mostly unknown.

Problem: Lack of specialist expertise being applied to resource consenting

Current state:

It was largely confirmed through the interview process that there is a lack of specialist expertise in key functional areas of WRC (eg; consents and compliance), and a lack of biodiversity expertise at the TLAs. It was also confirmed that access to biodiversity expertise is not straightforward either within WRC, or for the TLAs to access WRC staff. There is no standard process for the TLAs to submit district consent applications to WRC for expert input, for example. There does not appear to be one or more positions within WRC specifically tasked with providing technical support and advice as a service to one or more council functions, either internally or to the TLAs.

Interestingly, those holding the expertise appear somewhat reluctant to make themselves widely available for fear of being inundated with requests for support that they do not have the capacity to provide for.

The Resource Use Directorate of WRC (RUD), responsible for issuing resource consents, does not have a process or a checklist for triggers to have regional consents assessed by an ecologist, and it appears that there is no consistency in their ability to access those individuals with biodiversity expertise. This is also somewhat hindered by the lack of a completed biodiversity inventory to clearly lay out what the most important biodiversity areas are, which must be considered for regional consents. In addition, the lack of rules in the Waikato Regional Plan means that there is no regulatory tool to develop conditions to prevent indigenous vegetation clearance outside of the soil and water conservation triggers, or to avoid, remedy or mitigate effects on indigenous biodiversity aside from wetland ecosystems, for the sake of protecting biodiversity values.

Discussion:

Internally, WRC does not lack ecological expertise. It lacks the internal processes and mechanisms for the rest of the organisation to access that expertise and have it applied to regional consenting processes. It also lacks consistent and/or established channels for the TLAs to access ecological (or other) expertise that they lack, which is available at the Regional Council. In addition, there is no role within WRC assigned to the provision of a technical advisory service to either internal or external 'customers'. While the fear of inundation may be well justified, it highlights the potential demand for biodiversity expertise and it should be considered a positive in the context of biodiversity being on the

radar for a range of functions across the council, and individuals seeking that support being honest about their capability in that regard, and their need for support and advice.

This issue is linked to the dispersed nature of biodiversity work within the council. Internally biodiversity has no home and staff requiring support have no central point of contact to access advice.

A Biodiversity Advisory Group was established with an aim to alleviate some of this and could add significant value to the organisation. The membership of the group could be reviewed in light of the range of staff involved with biodiversity, noting that some had not had any involvement with the group. The purpose and operation of the group could also be reconsidered, and it could become a useful vehicle for linking relevant staff and coordinating a range of work across the Regional Council. This needs to include all levels to ensure that operational staff are connecting and are aware of the wider picture for biodiversity and how their role and function links with that, as well as generally avoiding overlap and repetition.

The type of support required around consenting requires a high level of ecological expertise coupled with the ability for the individual to clearly communicate the what and why to the layperson, and to approach the issues in a pragmatic way. Any staff member providing this service also needs the capacity to be able to provide the advice, whether it is to internal or external parties, as well as input into other council functions.

Providing comment to consents from all the TLAs in a consistent way can also help to address some of the issues around policy inconsistency across the region, by consistently raising the same issues to all districts. If rules are included in the Waikato Regional Plan to protect indigenous vegetation and indigenous biodiversity for its own sake, then awareness training and information must be made available to consents and compliance officers to ensure they are applied and to stimulate them to seek advice.

It is understood that there is already investigation into the development of some standard processes for TLAs to submit district applications to WRC for review and comment and it is highly recommended that this be pursued. The Bay of Plenty Regional Council experience has shown that triaging the consents as they come into the building, and having a coordination role to pull together a response from the regional council can facilitate a reasonably efficient process that enables the technical experts to input their advice with a minimum of effort and time requirement. BOPRC developed a set of standard responses that can be applied to the more straightforward consents, or those without major issues. These standard responses are also flexible, so that explanation can be added, and at the same time any comments are able to be applied if the technical advisor considers it necessary or useful. The standard responses address matters (under a range of subject matter not limited to biodiversity) regarding regional plan rules or considerations, and the ability to provide general comments to raise awareness (for example, the impact that pet cats and dogs can have on neighbouring biodiversity sites and fauna). The whole process also provides consistent access for the TLAs to expertise at regional council that they do not have themselves. Some 400 TLA consents were processed through this in a year, with only one ecologist available to provide the required responses (for both TLA and regional consenting processes). Some back-up to that role was added in 2018 with a contractor for support and the hiring of a Land Management Officer with an extensive biodiversity background.

A similar model could be applied to internal consenting processes, where a single point of contact or channel is provided to internal staff where biodiversity sites are affected by activities for which resource consents are being processed.

Problem: Lack of clear information about current state and trends.

Current state:

The WRPS policies relating to information, inventory and monitoring include WRC establishing a baseline and the extent of indigenous vegetation remaining from this baseline, using an 1840 (pre-European) constructed estimate and measuring change over time. There are also policies around identifying SNAs for the purposes of RMA S6 matters and providing this to the TLAs.

Internal and external feedback noted that some of this work has yet to be delivered, particularly the inventory work, and that funding was problematic in implementing these requirements within WRC. There is no region-wide inventory of currently existing biodiversity and the lack of an inventory hampers the ability to provide regional level information around priorities for protection and to enable better targeting of resources and regulatory responses. At this point, WRC has a potential ecosystems layer (Singers, 2014 and updated 2015) and has completed a prioritisation of terrestrial ecosystems, alongside lakes, rivers and streams (Leathwick, 2016). This work was aimed at providing some decision support for catchment managers to identify priorities for biodiversity and other initiatives and provides a strong base for further refinement and use. There is partial coverage of the region in terms of earlier biodiversity inventory work like SNA or Protected Natural Areas Programme (PNAP) reports, however much of the PNAP information is now becoming dated and less relevant, and SNAs do not cover all biodiversity and indigenous vegetation.

A project is underway to complete field checking of biodiversity sites to provide an accurate assessment of ecosystem types and condition out in the field. This has become a lengthy process due to lack of consistent ongoing resourcing, and is at risk of non-completion, or of being overtaken by the need to apply existing information to a range of work programme needs.

In terms of trends information, a national level project to establish a standardised monitoring framework for regional councils developed 18 measures for regional councils to adequately monitor indigenous dominance, species occupancy and environmental representation (Bellingham *et al*. 2016). This framework was designed as part of 'a national, standardised, biodiversity monitoring programme, focusing on the assessment of biodiversity outcomes, to meet regional council statutory, planning and operational requirements for sustaining terrestrial indigenous biodiversity', with the intent to use the same approach as the ecological integrity framework used by the Department of Conservation in order to develop a more comprehensive national picture for the state of biodiversity for New Zealand. DOC monitoring has a public conservation land focus, which means that biodiversity on private land is not represented in national reporting.

Many of the regional councils are struggling with the ability to implement the framework and only three measures have been reported nationally - Measures 1 'Land under indigenous vegetation', 11 'Change in temperature and precipitation', and 18 'Area and type of legal biodiversity protection' were implemented and reported for all regions in 2014 (Bellingham *et al*. 2016). WRC has yet to implement a regional level field-based monitoring programme following this framework.

Discussion:

Part of the support being sought by the TLAs, and an aspect that was raised by all the TLA staff interviewed, is the need for a regional scale inventory and prioritisation of biodiversity. An inventory and the ability to prioritise biodiversity for protection underpins a range of council functions from targeting policy and rules at district and regional level, to operational and funding priorities for work on the ground, and monitoring state and trend. The inventory identifies the full range of ecosystem types that need to be protected to maintain them as a regional feature and enables monitoring of ecosystem types to determine whether the WRPS objective is being achieved. Because there are gaps in the regional inventory from existing information, it is critical that this inventory be completed to provide full regional coverage. Internal technical staff have a process to achieve this and it is a matter of funding this to support its completion and changing it from a piecemeal process into a programme of work.

Where spatial and other information already exists, field checking can be useful to update the information, but the need for updating information for sites that have been mapped in the past is in some ways less important than simply capturing the full extent of the biodiversity that remains. A complete inventory should extend beyond the RMA measures of significance to include all biodiversity. It is timely for this to be completed in the short term and to be ready for the NPSIB requirements as they come into play.

One of the TLAs noted that the inaccuracies of the SNA mapping provided to them meant that they needed to do extensive work to correct the mapping layer, which was a costly exercise. They were frustrated by the poor quality of the mapping that WRC supplied. WRC had undertaken some work on the mapping, but was hampered by a lack of capacity and competing priorities to bring the outputs up to a higher standard. It must be noted that mapping of SNAs is rarely accurate without field checking each site, however current aerial photography is sufficient to map to higher levels of accuracy than five or ten years ago. Noting also that the intent was for WRC to share information being generated at a regional scale, and provided as provisional information that would need checking by the TLAs at the district level. The process was never formalised around the needs of the TLAs or timing, and was done in an ad hoc and reactive manner, and expectations from the respective parties appear to have differed in terms of the outputs from WRC.

Backlash from landowners was also noted, however this is not unusual and is not entirely due to lack of accuracy. Identifying and especially scheduling SNAs and putting rules against them is generally an unpopular decision for TLAs to take. However, inaccurate mapping that incorporates areas that are obviously not indigenous biodiversity areas exacerbates the already existing resistance to this type of exercise where landowners are often concerned that their private property rights are being breached. Field checking is the ideal, however not many landowners encourage this, and it needs to be balanced with the need for timely information. It is also an expensive exercise. Sharing resources and working together would help both the Regional Council and the TLAs to obtain better information for this use, and so that the time can be taken to be as accurate as possible through desk based and limited field-based site mapping. This can also create economies of scale, improving efficiencies and could be the basis for a shared services approach around this type of work.

Regional level trend information is currently using the Land Cover Database (LCDB), comparing iterations of this to provide broad indications of changes over time, and this is reinforced by its use through the national monitoring framework. Although it should not be discarded as it does provide

broad indications, the LCDB is a fairly blunt instrument, mapped at large scales. Its application at regional level should be considered with some caution and used as a broad indicator only. There are inaccuracies in the database that may provide a misleading picture for some regions without corrections being made at the regional scale. Ideally the LCDB would be backed by regional level mapping of indigenous biodiversity to a more refined level of detail in terms of ecosystem types. This can already be supported by the potential ecosystems mapping that WRC has completed, and improvements can be submitted to the national database to incorporate into updates of LCDB.

One of the difficulties with implementing the national monitoring framework (and inventorying biodiversity) is the cost to regions of implementing it to its fullest extent. Efficiencies can be gained where DOC is already monitoring PCL on the 8 km grid network, using the same field crews for improved data consistency and more efficient logistics. However the National Biodiversity Working Group has repeatedly acknowledged the high cost and the potential need for central government support to implement. Some regional councils have been implementing the grid, although not all are following the sampling regime and plot installation methods to the letter. Those councils who have implemented a variation of the methodology are compromising the integrity and versatility of the data and the ability of that data to be used to accurately integrate into the national dataset and inform the national outcomes. However, maintaining a holding pattern of 'do nothing' will leave those councils in catch-up mode, and delay the ability to provide information about the state of biodiversity in their regions. Rolling out regional level monitoring on a five year rotation basis – ie, monitoring one fifth of sampling points each year, and reporting at the end of a five year rotation – has enabled some councils to begin implementation and can be more palatable at political levels with regard to annual budget requirements. There is value in regions working together to develop strategies and approaches to enable them to achieve the implementation of the national monitoring framework, and particularly in taking a united approach to central government agencies to lobby for funding support.

The LIBS Hamilton pilot project provides a potentially pragmatic interim approach. The monitoring framework and metrics developed as part of this project (Myers, 2018) aligns with national and regional frameworks but focuses on co-ordinating the ongoing monitoring and reporting of existing biodiversity metrics across different agencies within Hamilton city. The existing measures provide the baseline against which to monitor progress. Over time the framework could be extended by adding Mātauranga Māori concepts, ecosystem services and citizen science measures. Its relevance for application at a regional scale could also be considered. The Hamilton City monitoring framework will be a useful test in terms of implementing national measures and the practicalities of that on the ground, as well as the quality, breadth and depth of information that the data yields. The consideration here is around how the sampling regime will then integrate with wider regional scale monitoring when that is implemented, and how that in turn feeds up to national scale monitoring.

5 Is there a case for change?

The WRPS notes that *"an important component of the policy direction is to work towards no net loss for all indigenous biodiversity at a regional scale".* However, despite the regulatory and non-regulatory frameworks in play, indigenous vegetation continues to be lost. This is not unique to the Waikato region.

An article by Walker *et al* (2006) used comparisons between the Land Cover Database version 1 (LCDB 1) and LCDB2 to estimate the loss of indigenous cover from 1996/97 to 2001/02. Noting that the LCDB is a somewhat blunt instrument, the authors corrected a range of classifications and noted that vegetation clearance had occurred during that period, with 49% of environments having lost indigenous cover, and the highest rates occurring where indigenous cover was already most depleted.

The New Zealand Herald published an article in March 2020 (Morton, 2020) that included aerial imagery showing vegetation clearance in three different regions (not including the Waikato) for the purposes of pasture development and quote statistics of 2304 ha of indigenous forest lost over a six-year period across New Zealand.

In the Waikato region, the Catalyst Group report notes the loss of 7,576 ha of indigenous vegetation between 2002 and 2017 across 1149 discrete events (Catalyst Group, 2019).

A Bay of Plenty Regional Council investigation noted the loss of 12% of the monoao dominant frost flats on the central plateau over a period of 7 years. These losses occurred in an ecological district with less than 5% of its indigenous vegetation remaining, and despite the main landowners being well aware of the significance and irreplaceability of that particular vegetation type.

The statistics around vegetation clearance are contrary to repeated assertions by rural industry bodies and some landowners that private landowners are the best custodians for protecting and preserving indigenous biodiversity on their land. Those assertions are not supported by observations on private land where some landowners are clearing indigenous vegetation and draining wetlands despite being told, in person, that these sites are important and that a consent is required to undertake the activity. Other landowners allow stock access to areas that are subject to protection mechanisms and/or Council funding for restoration work, and smaller landowners on lifestyle blocks will also clear indigenous vegetation to serve their purposes, regardless of consent orders, rules, or advice. Arguably these examples represent a minority of private landowners, however many landowners also operate on a level of benign neglect, neither actively abusing or nurturing biodiversity sites, with little or no thought to the consequences of grazing bush understorey or wetlands, or deepening a drain to dry out a paddock.

The current state analysis presented in the previous sections, as well as the findings presented above clearly support a case for changing the current system for managing native vegetation clearance and the maintenance, protection, and enhancement of indigenous biodiversity.

6 What is required to address the problem?

Although biodiversity is a wicked problem, there are still a range of regulatory and non-regulatory tools and approaches that can be taken to develop an improved biodiversity system at the regional level. The Regional Council is in a good position to take a visible leadership role to bring together the public and private land components of regional biodiversity.

Better Biodiversity – a roadmap for implementation delivery (the Biodiversity Roadmap), was recently developed for WRC. The roadmap identified five strategic focus areas to organise and prioritise activities and work streams for the Council. The same components are needed to address the

problems identified here with regard to preventing indigenous vegetation clearance and ongoing biodiversity loss:

- Governance – providing clear leadership and management for biodiversity delivery.
- Taking action – taking direct action to protect and enhance biodiversity.
- Plans and strategies – integrating biodiversity actions into plans and strategies, optimising regulatory and policy tools, and planning for strategic issues to deliver better biodiversity outcomes.
- Relationships and communication – developing effective relationships, raising awareness and building capacity amongst stakeholders and staff.
- Information, data and monitoring – focus on information that leads to better biodiversity outcomes.

7 Options analysis

A range of options for improving the system for managing native vegetation clearance and incentivising restoration and enhancement within the Waikato region have been explored in response to the case for change identified above. The options are set out below in Table 3 as a long list for consideration and socialisation. This is intended to facilitate assessment towards a short list and confirmation of the final preferred options.

Options and assessment

The options assessment is presented under the same component areas as listed above. There is significant overlap in the options aiming to address the management of vegetation clearance and those incorporated into the Biodiversity Roadmap to improve the regional biodiversity system.

The list of options is provided in four broad options as follows:

1. **Status quo –** Continue with the system as it is currently, no changes.
2. **Do Minimum –** A step forward from the status quo which aims to make some improvements and implement work considered, planned or required. Focus is more in-house, with few external components.
3. **Do Intermediate –** Do minimum plus additional work and improvements to address priority issues. Incorporates improvements relating to working with external agencies.
4. **Do Maximum –** A serious overhaul of the biodiversity system to move forward towards better collaboration.

The options presented are not a final list, and the table should be reviewed as a draft. Options can be shifted, altered, added or removed as part of defining a short list, as outlined in Section 8, Next Steps. While the options are generally intended for WRC to implement, some options will include the need to work with other external stakeholders and may require agreement with regard to roles and responsibilities.

Table 3: List of options.

Option	Status quo	Do Minimum	Do Intermediate	Do Maximum
Information, Data & Monitoring	• Lack of regional picture for biodiversity and priorities for protection. • Full inventory unavailable. • Waiting on a full field verified inventory is preventing progress in other areas, and this work is not resourced for completion. • No established extent and condition monitoring, or implementation of national monitoring framework beyond the use of LCDB for extent. • Considering the implementation of a new bespoke system. • No baseline information, or information is not readily available. • Potential ecosystems mapped, and zonation prioritisation completed but not operationalised or further developed. • Information about where the most important biodiversity exists is not widely available. • TLAs unable to access expertise at WRC – no established	• Support the implementation of the Hamilton City LIBS monitoring framework and work through the integration of this information into a regional monitoring framework. • Desktop improvements to SNA mapping for regulatory purposes. • Provide portal/s to the TLAs for consents to be sent to WRC at their discretion. • Desktop improvements of LCDB iterations to report on changes in extent monitoring. • Provide basic awareness training for resource consenting officers in WRC, and identify expertise that can be approached if considered necessary. • Apply compliance and enforcement where indigenous vegetation clearance breaches provisions in the Waikato Regional Plan targeting soil and water conservation. • Continue with messaging around basic biodiversity	As per do minimum and including • Operationalise the potential ecosystems and prioritisation and use it as a basis for policy development and targeted operational programmes (both regulatory and non-regulatory). • Develop an internal biodiversity strategy or work programme that brings biodiversity work together in one place, and guides the development of sub-regional and catchment based strategies. • Establish technical support and advice as a role or part of one or more roles, to service needs for ecological expertise internally and externally. • Establish single point of contact and basic criteria for TLAs to submit consents to WRC still at their discretion. • Implement biodiversity extent and condition monitoring programme at regional level sampling scale, for threatened ecosystem types (eg; wetlands, dunes, lowland and coastal	As per do intermediate and including • Field check all biodiversity sites in the region to confirm ecosystem types and prioritisation, including resourcing for the complete programme. This prioritisation must be tenure neutral to ensure all biodiversity is considered, and includes sites which are of national significance within the region. This could include restoration opportunities and provide the basis for a shared regional vision for biodiversity. • Use the priorities mapping to support regional spatial planning. • Implement the national biodiversity monitoring framework. • Develop a biodiversity research agenda. • Develop a regional biodiversity strategy that guides and directs other agencies and organisations involved in biodiversity management.

	processes or single point of contact. ● Ecological expertise not being applied to consenting processes for regional or district consent applications, or in an ad hoc way – no established process for TLAs and internal staff to access ecological expertise. ● SNA schedules can have perverse outcomes. ● Landowners are not always aware of the rules. ● Identifying need for resource consent is difficult for landowners, although it is supported by the TLAs and WRC in terms of pre-application contact and support. ● Lack of understanding about the value of biodiversity to their operation, the landscape or the wider community. ● Information about what is really important and why are not available. ● Farm planning doesn't incorporate biodiversity as an integral part of the plan.	priorities using existing information and existing frameworks (eg; Land Environments of New Zealand (LENZ); National Priorities for Biodiversity Protection on Private Land).	forest types), applying national standards.	● Establish formalised process and point of contact for TLAs to have consents assessed by WRC through Memorandum of Understanding and agreed criteria with each TLA. Include triage process at WRC and establish technical support and advice personnel and processes to provide feedback. ● Further explore barriers and drivers for landowners to develop a set of tools and approaches for working with them and messaging about what value biodiversity has for them. ● Trial alternative monitoring methods like drones to provide up to the minute, high resolution aerial photography (that can be orthorectified) to map ecosystem and vegetation types for extent monitoring and operational planning purposes. ● Implement the Biodiversity Roadmap.

Governance	• Regional leadership for biodiversity lacking outside WRPS direction. • WRPS direction does not clearly differentiate roles for TLAs and WRC – overlap is not addressed clearly, and language is open to interpretation. • WRPS requirements for WRC are not being met. • TLAs and WRC each looking to the other to lead CME. • Internally WRC's biodiversity work is dispersed across the organisation in different teams, directorates and buildings.	• Act on provisions in the WRPS that require Regional Council action when considered necessary. • Encourage biodiversity staff or staff needing biodiversity advice to connect with others. • Encourage contact with DOC staff to establish some connections. • Align Waikato Regional Plan with WRPS minimum standards.	As per do minimum and including • Establish more formal connections with the TLAs through the planning forum or other groups, with biodiversity on the agenda for discussion. • Proactively build relationships at all levels between the TLAs and the Regional Council. • Bring biodiversity staff together 3-6 monthly to discuss biodiversity work, identify cross-over and common needs and how those can be serviced. • Proactively build relationships at all levels between DOC and the Regional Council around biodiversity management in the region. • Identify opportunities with TLAs for shared services and/or transfer of powers to Regional Council for some or all biodiversity or biodiversity support functions.	As per do intermediate and including • Establish a formalised governance and communications group to share information and work collaboratively to achieve regional biodiversity goals. • A collaborative approach is agreed with the TLAs, DOC and other organisations with a role in managing biodiversity, including a common goal, and agreed roles and responsibilities. Includes regulatory and non-regulatory frameworks, and could be done through a regional biodiversity strategy. • Clearly define and agree on roles – who will do what for biodiversity in the region, with shared services or funding arrangement as required. • Establish formalised process and point of contact for TLAs to have consents assessed by WRC through Memorandum of Understanding and agreed criteria. Include triage process at WRC and establish technical support and advice personnel to provide feedback.

				• Provide higher levels of protection for indigenous vegetation and biodiversity, for the sake of biodiversity, in the Waikato Regional Plan through a plan change process. • Implement the Biodiversity Roadmap. • Take responsibility for biodiversity into the Regional Council similar to the Horizons approach, by agreement with those TLAs that would prefer this, with regional level provisions for the protection of indigenous biodiversity including SNA and non-SNA areas. Agreements can vary with different TLAs and would be articulated in the WRPS, and could use s33 of the RMA to transfer powers.
Taking Action	• Inability for WRC to provide backing to TLAs in compliance, monitoring and enforcement (CME). • Permitted activities not monitored for compliance. • Rule breaches by landowners are unlikely to result in any prosecution or compliance action from TLAs or WRC.	• Support HCC to lead the implementation of their Biodiversity Strategy as outlined in the LIBS transition plan (dated 21 October 2019). • Apply compliance and enforcement where indigenous vegetation clearance breaches provisions in the Waikato Regional Plan	As per do minimum and including • Establish more formal connections with the TLAs with regard to CME and agree roles and mechanisms where breaches are identified. • Take CME cases and prosecute on a case by case basis.	As per do intermediate and including • Identify and implement shared services options to support the TLAs in CME. • Assign one or more CME officers to assess biodiversity and vegetation clearance in a priority framework of its own (ie; separate it from the range

	• TLAs and WRC each looking to the other to lead CME. • Biodiversity does not stack up against CME priorities for more acute issues like visible sediment run-off or effluent breaches. • Lack of appetite at political levels to pursue enforcement for biodiversity or indigenous vegetation clearance. • Biodiversity has no relevance for many landowners. • Biodiversity site management is included in landowner programmes (catchment management). • Farm planning does not incorporate biodiversity as an integral part of the plan. • Private property rights mean that there is resistance to regulatory provisions that control activities on private land. • Values ascribed to biodiversity sites and/or indigenous vegetation vary with ecosystem type. • Landowners unwilling to pay in time and money for something they view as a public good, therefore should be publicly funded.	targeting soil and water conservation. • Review and improve information relating to biodiversity and the importance of biodiversity to community wellbeing. • Identify and obtain additional funding to support landowners protecting and restoring indigenous biodiversity on their land. • Support the establishment of the Collective Impact Framework.	• Support TLAs to take compliance and enforcement action and prosecutions. • Support catchment level focus groups to identify priorities for the catchment, including biodiversity. • Provide higher levels of protection for indigenous vegetation and biodiversity, for the sake of biodiversity in the Waikato Regional Plan through a plan change process. • Provide landowners with access to pest plan and pest animal control hardware and materials to support long term pest animal control. • Proactively initiate and lead the initial establishment of the Collective Impact Framework and clearly identify how WRC will continue to support Collective Impact (this may include some of the options listed in this table or elsewhere such as the LIBS transition plan). • Provide expert advice and support to landowners and the community through the Collective Impact initiative. • Undertake literature review to seek avenues to engage with	of other CME issues when running prioritisation). • Obtain political support to follow through with CME for biodiversity and indigenous vegetation clearance. • Develop and pursue options to incorporate biodiversity into whole farm planning (eg; Healthy Rivers portal and guidance), including working with industry partners. • Provide or connect appropriately qualified experts for landowners to work with in farm planning, including specific biodiversity expertise to support farm planners in whole farm planning. • Increase funding support percentage for landowners undertaking biodiversity protection and enhancement work on their land, particularly for high priority sites. • Consider strategic land purchase where there is clearly significant public good for securing a site of high value biodiversity or with potential for restoration (eg; wetlands, saltmarsh, riparian margins). • Proactively approach landowners with high value,

	• Drivers for protecting and maintaining biodiversity, or not, are complex, a wicked problem of their own. • Industry drivers for increasing production mean that biodiversity sites are considered unproductive and of no value to the farming operation. • WRC LIBS pilot identified some opportunities but is also a sub-regional strategy without an overarching regional strategy to work from.		landowners around valuing biodiversity. • Expand on-farm modelling (as per LIBS) to demonstrate potential farm productivity gains from retiring areas for biodiversity enhancement over a wider range of farming operations. • Extend funding support beyond the initial preparation and planting phases to support ongoing maintenance. • Boost the information available through farm planning portals to include biodiversity and guidance on incorporating it into farm plans, to boost its profile in that context.	high priority biodiversity sites and attempt to explain why they are important and then work collaboratively with landowners to make it easy for them. • Research and develop materials that are evidence based that demonstrate what is in it for landowners and developers. • Explore avenues for obtaining funding from a public good, public pays perspective – ie, how much is the wider community willing to pay for managing biodiversity on public land for wider benefit, and how could that be administered to be applied directly to action on the ground? • Implement the Biodiversity Roadmap.
Plans and Strategies	• High levels of inconsistency in planning documents (11 district plans). • No provisions in the Waikato Regional Plan for indigenous vegetation clearance for biodiversity purposes – rules are for soil and water conservation – therefore no complementary rules from the	• Align Waikato Regional Plan with WRPS minimum standards. • Ensure district plans meet WRPS minimum standards. • Test the ability to implement and achieve objectives and rules, and to remove interpretation issues for rules to enable clarity where rules	As per do minimum and including: • Provide higher levels of protection for indigenous vegetation and biodiversity, for the sake of biodiversity in the Waikato Regional Plan through a plan review or plan change process. • Identify opportunities with TLAs for shared services and/or	As per do intermediate and including: • Take responsibility for biodiversity into the Regional Council similar to the Horizons approach, by agreement with TLAs, with regional level provisions for the protection of indigenous biodiversity

	Regional Council to support the TLA provisions. ● Permissive regulatory provisions. ● Lack of protection for areas not identified as SNAs. ● Policy and regulatory provisions developed in isolation with no regional picture for biodiversity to aid their development. ● WRC LIBS pilot identified some opportunities but is also a sub-regional strategy without an overarching regional strategy to work from.	are breached, and simplify the ability for compliance action to be taken.	transfer of powers to Regional Council for some or all biodiversity or biodiversity support functions. ● Engage with TLAs ahead of public submissions process, and provide constructive feedback into planning processes to improve alignment and consistency between TLA district plans.	including SNA and non-SNA areas. ● Establish a formalised governance and communications group to share information and work collaboratively to achieve regional biodiversity goals. ● A collaborative approach is agreed with the TLAs, DOC and other organisations with a role in managing biodiversity, including a common goal, and agreed roles and responsibilities. Includes regulatory and non-regulatory frameworks, and could be done through a regional biodiversity strategy. ● Implement the Biodiversity Roadmap.
Relationships and Communication	● TLAs unable to access expertise at WRC – no established processes, or single point of contact. ● TLAs and WRC operating in isolation – little or no collaboration around biodiversity is occurring at regional level. ● No relationships with the Department of Conservation at organisational level.	● Develop and maintain individual level relationships between Regional Council, TLA, DOC staff.	● Identify opportunities with TLAs for shared services and/or transfer of powers to Regional Council for some or all biodiversity or biodiversity support functions. ● Assign an individual role as a key liaison with TLAs, DOC and other groups involved in biodiversity management.	● A collaborative approach is agreed with the TLAs, DOC and other organisations with a role in managing biodiversity, including a common goal, and agreed roles and responsibilities. Includes regulatory and non-regulatory frameworks, and could be done through a regional biodiversity strategy. ● Establish regular forum for meeting and discussing

	• Any existing relationships between WRC and TLAs is reliant on a few individual personnel connecting between organisations. • Existing relationships are not widespread enough or at the right organisation level to facilitate ongoing conversations and a collaborative approach.			biodiversity, particularly through the phases of working to establishing the above. • Implement the Biodiversity Roadmap.

Strategic alignment

Table 4 outlines the strategic fit for the proposed changes against relevant documents. The proposed options align strongly with key policy documents and national and regional objectives for the maintenance and enhancement of indigenous biodiversity. Although the Willis Reports do not carry statutory weight, they have been endorsed by the regional council chief executives as a key piece of work that will improve the ability for regional councils to make a more effective contribution to halting decline in biodiversity will require a number of strategic shifts.

Table 4: Assessment of Strategic Fit

Document/ Strategic Priorities	Provision	Strategic fit
Draft NPS for Indigenous Biodiversity	All the principles and provisions of the draft NPSIB.	High
Waikato Regional Policy Statement	Several objectives touch on biodiversity. The key objective for biodiversity itself is Objective 3.19 Ecological integrity and indigenous biodiversity: The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state. Policy 11.1 which promotes positive indigenous biodiversity outcomes to maintain the full range of ecosystem types and maintain or enhance their spatial extent as necessary to achieve healthy ecological functioning of ecosystems. Policy 11.2 protects significant indigenous vegetation and significant habitats of indigenous fauna by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced. Policy 11.3 Collaborative management - Maintaining and enhancing indigenous biodiversity shall be promoted in an integrated and efficient manner including by working collaboratively with landowners, resource managers, tāngata whenua and other stakeholders. Policy 11.4 to safeguard indigenous biodiversity in the coastal environment. 11A provides the criteria for determining significance of indigenous biodiversity. 11B which outlines roles and responsibilities.	High
Waikato Regional Council Strategic Direction	Strategic priorities for 2020-2030 include biodiversity and biosecurity: ● Communities are supported to deliver biodiversity outcomes that provide multiple benefits. ● A strategic regional approach is taken to biodiversity investment and partnering. ● Delivery of a refreshed regional pest management approach that	High

	is planned, prioritised and performance based.	
Willis Report – the five shifts.	Shift 1 – Stronger leadership and clearer lines of accountability. Shift 2 – Building on what regional councils do best. Shift 3 – Better information for better management. Shift 4 – Planning and delivering joined up action. Shift 5 – Modern, fit for purpose frameworks.	High

What are the expected benefits of change?

Changing from the status quo is expected to deliver a variety of benefits. Establishing regional priorities, with regional oversight and leadership will improve the ability to implement a regionally coordinated approach and enable consistent messaging out to the community, from all those involved with biodiversity management, as to what is most important to maintain, enhance and protect in the region.

Table 5: Expected benefits

Main benefits	Who benefits?	Description
Increased collaboration towards management of vegetation clearance issues.	Regional Council; TLAs; communities; DOC; NZ inc.	A more coordinated and efficient approach to biodiversity management with common goals, and clearly identified priorities. Avoid duplication both in terms of agency effort and community requirements for consents or otherwise. Enable targeted methods of implementation for different elements and situations. Ability for consistent guidance and support from all agencies, including from Regional Council to TLA. Clarity in the community about where priorities are derived from, and that there is regional oversight.
Ability/processes to better support the TLAs in achieving improved outcomes for biodiversity.	Regional Council; TLAs	Improved support for TLAs leads to building better relationships, taking a more collaborative approach and having everyone working towards the same set of priorities and goals. Enables the application of expertise where it is needed, using available resources rather than requiring additional resourcing.
Allow Regional Council and TLAs to more effectively undertake their responsibilities under the Resource Management Act 1991.	Regional Council; TLAs	Improved coordination and collaboration improves consistency of regulatory provisions and builds strategic relationships with other organisations and agencies responsible for biodiversity management.

Opportunities for economies of scale.	Regional Council; TLAs	Potential for shared services approaches reduces duplication of effort and resources for local authorities by sharing costs. Improved ability to align different sources of funding to priority areas to maximise the benefits that can be gained from existing funding. Access to expertise for those who do not have it. One source of information provides the same consistent information to a range of audiences regardless of source.

8 Next steps

This document provides a list of options for consideration. To arrive at a preferred option, the next steps are to:

- Identify and agree on the investment objectives and critical success factors against which the options will be assessed and scored;
- Socialising and testing of the options within WRC to arrive at a short list within each of the broad options (status quo to do maximum);
- Test and score the resulting shortlist either internally, or with key stakeholders where necessary.

It is our recommendation that once a preferred option has been arrived at, that the final stages of the business case process are applied, and that key stakeholders are involved as appropriate.

Recommended priority options

With specific regard to the options in Table 3, our recommended priority actions are:

1. Complete the regional biodiversity inventory. The inventory underpins:

    a. regional prioritisation (should be tenure neutral and ecologically focussed), and operationalising this,
    b. a common picture of the region's biodiversity values and priorities for protection,
    c. an internal resource for reference by all directorates and teams (eg; RUD),
    d. monitoring frameworks and sampling strategies,
    e. a basis for targeting policy and plan provisions,
    f. a basis for targeting internal operational funding and resources,
    g. targeted funding to support landowners, particularly to secure priority sites,
    h. the ability for the TLAs to see where they fit in the regional picture for biodiversity and better align their regulatory provisions for the protection of high priority biodiversity areas,
    i. a base level of regional leadership around biodiversity,
    j. a basis for discussion and relationship building amongst the key players in the region (eg; Department of Conservation; TLAs; co-management iwi partners), including the potential establishment of a regional vision by stakeholders.

2. Implement the elements of the Biodiversity Roadmap that create an internally coordinated biodiversity programme where internal roles, responsibilities and connections are clear to all. This could be achieved through the development of an internal strategy or a centralised

biodiversity programme of actions coordinated by a single team or individual role.

3. Proactively develop and maintain relationships with TLAs at a range of strategic organisation levels. This should include providing an established and consistent process and/or portal for TLAs to access WRC expertise for a range of agreed purposes.

Suggested investment objectives and critical success factors

Investment objectives are used to determine whether an option aligns with the organisational strategic priorities, responds to a true business need and links to required outcomes and benefits. The WRPS objectives could be applied as the investment objectives for assessing options (see Table 6). Alternatively, SMART objectives could be developed with a more defined time period to arrive at a preferred option.

The critical success factors in Table 7 are the generic Better Business Case factors and these could be applied as they are, or potentially assessed and adjusted if considered necessary. They aim to inform the decisions around which options to carry forward and which can be set aside.

Table 6: Suggested investment objectives

Investment Objective	Description
Investment Objective 1	Prevent the further loss and ongoing decline of indigenous vegetation and indigenous biodiversity in the Waikato region to achieve the WRPS Objective: *The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state.*
Investment Objective 2	WRPS Policy 11.1: Promote positive indigenous biodiversity outcomes to maintain the full range of ecosystem types and maintain or enhance their spatial extent as necessary to achieve healthy ecological functioning of ecosystems
Investment Objective 3	WRPS Policy 11.2: Significant indigenous vegetation and the significant habitats of indigenous fauna shall be protected by ensuring the characteristics that contribute to its significance are not adversely affected to the extent that the significance of the vegetation or habitat is reduced.

Table 7: Critical success factors

Critical Success Factor	Description
Critical Success Factor 1 Strategic fit and business needs	How well the option meets the agreed investment objectives, related business needs and requirements, and fits with other strategies, programmes and projects.
Critical Success Factor 2 Potential to improve shared outcomes	How well the option optimises the ability to collaborate and achieve the agreed investment objectives.
Critical Success Factor 3 Potential value for money	How well the option optimises value for money, considering the optimal mix of potential benefits, costs and risks.
Critical Success Factor 4 Potential achievability	How well the option can be met from likely available funding and resources.

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10 Appendix 1 – Problem Statements

Problems
Problem 1. Inconsistent and poorly aligned policy and rules. Inconsistent policy and regulations (regional/local, and inter-district) means that there is a lack of consistency in the level of control and scrutiny being applied to biodiversity management, and at times confusion as to what clearing requires permission or not. This is resulting in the unnecessary clearing of indigenous habitat and lack of endorsement and mind set for any loss in the region. **1a**: The Waikato Regional Plan and some district plans pre-date the operative Waikato Regional Policy Statement. This means that clearing of indigenous habitat in the region is not always subject to the appropriate level of control. **1b**: District plan rules vary from district to district, this makes it hard for a landowner to know what they can do with or without permission, and can create confusion about the roles and responsibilities of the district and regional councils.
Problem 2. Lack of clarity in roles, responsibilities and the nature of the relationship between WRC and TLAs. Including with respect to: Compliance monitoring and enforcement, the sharing of data and information and the extent to which the Regional Council should be considering terrestrial biodiversity when undertaking its s30(c) functions. This makes it difficult for us to act in a coordinated way, makes us subject to gaming, and can send mixed messages to landowners. It also means that it is difficult for the public to tell who is accountable for maintaining and protecting biodiversity, who to call for advice, or if they spot something that they think is dodgy.
Problem 3. A lack of knowledge about the rules. There is a lack of knowledge about what permissions are required to clear habitats, and the penalties that could apply if clearing is undertaken without permission. This is leading to decisions by land owners that is reducing the stock of indigenous habitats in the region.
Problem 4. Biodiversity is being under-valued A lack of commercial drivers in favour of biodiversity protection and enhancement: The cost to farmers of producing in an ecologically friendly way is not recovered through the enhanced ecosystem services or a market premium for what they produce. This means that protecting and enhancing biodiversity on site will be perceived to have a higher commercial cost than benefit making it less likely that land owners will decide voluntarily in favour of biodiversity protection and enhancement. There is a lack of understanding of the importance of biodiversity values, and the effort and investment being put into its protection and enhancement. This means that for some, that they will not feel a social expectation to contribute to biodiversity protection and restoration, to the extent that they might otherwise.
Problem 5. A lack of compliance monitoring and enforcement There is a general lack of monitoring for compliance with plan rules and a lack of capacity and capability to take effective compliance and enforcement action driven by competition for limited resources between local government functions and socio-political factors. This means that some land owners may perceive the risk of having compliance action taken against them is low and does not outweigh the benefits of clearing without appropriate permissions, or do not seek knowledge of the rules. There is a chance that this risk-taking could increase as regulatory costs for farmers increase overall.

Problem 6. A lack of expertise There is a lack of ecological expertise being applied in resource consenting, and where it is, the advice may not be given sufficient weight when setting conditions.
Problem 7. A lack of clear information about current state and trends. We do not have a regional baseline for the extent of indigenous habitats or a system for tracking losses and gains. This means that we cannot reliably track or communicate our progress towards key biodiversity outcomes or objectives, such as WRPS Objective 3.19, and so the public do not have clear and reliable facts about whether things are getting better or worse. This will mean that there is a lack of political mandate to invest or make substantive system changes. It also means that our system is not as well informed or responsive as it could be.

11 Appendix 2 – Regulatory framework for managing vegetation clearance for WRC

Resource Management Act 1991

The requirement to maintain biodiversity is primarily governed by the Resource Management Act 1991 (RMA). In the RMA, the focus is on maintaining *indigenous* biodiversity because there is often conflict between introduced species and the long-term survival of indigenous species.[10] Much of the Council's role and responsibilities arise from the RMA and need to incorporate this view of biodiversity.

The RMA defines biological diversity as follows:

'Biological diversity means the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems'

The definition refers to three interdependent aspects of diversity:[11]

1. **Genetic diversity –** This is the genetic variation between individuals of a single species or within a population of a single species. This variation is important for the long-term survival of a species because it increases the adaptability and therefore resilience of a species to external changes. It also enables species to survive across a range of physical conditions.

2. **Species diversity –** This is the variety of species within a geographic area. In general, the more complex a habitat, and the longer it has been in existence, the greater the number of species that will be found within it.

3. **Ecosystem diversity –** This is the variety of ecosystem types or different assemblages of species. It is closely related to the complexity and variation in the physical components of the environment, such as soil, nutrients, light, temperature and water, which interact with living species to form distinct ecosystems.

Willis in his 2014 report, states that although described as separate dimensions, the three types of diversity outlined above are, in fact, interdependent. That is, all must be present for any one type to be maintained long term. For example, species biodiversity is reliant on genetic diversity and genetic diversity is reliant on ecosystem diversity[12].

Whilst it is often overlooked, biodiversity protection has been an outcome sought by the RMA since its inception in 1991[13]. The RMA governs the sustainable management of natural and physical resources to ensure continued enjoyment and use for future generations. Underpinning the use and development of these resources is the requirement to *safeguard the life-supporting capacity of air, water, soil and ecosystems*[14]. Since amendments to the Act in 2003 however, the establishment of objectives, policies

[10] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.
[11] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.
[12] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.
[13] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.
[14] Resource Management Act 1991 – Part 2, Section 5(2)(b).

and methods to maintain indigenous biodiversity has become a mandatory function of regional and district councils under the RMA[15].

The 2014 Willis Report further explains that reducing biodiversity management to a discussion about the importance of particular areas or habitats ('sites') is a failure to recognise the interdependent nature of biodiversity – *biodiversity management can never be simply about managing defined areas of vegetation in isolation from the biophysical context within which they occur. Biodiversity occurs across the landscape and the connections and flows between areas and habitats and through aquatic and marine systems that also require management if biodiversity is to be maintained."*[16]

The protection of biodiversity is now woven throughout the RMA. Section 6 of the RMA, which sets out matters of national importance, specifies that all persons exercising functions and powers under the Act, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

(g) the protection of protected customary rights:[17]

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall also have particular regard to *the intrinsic value of ecosystems*.[18] Intrinsic value in relation to ecosystems is defined in the RMA as meaning *those aspects of ecosystems and their constituent parts which have value in their own right, including their biological and genetic diversity; and the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience*.[19]

The preservation and enhancement of biodiversity is essential to all the above. If we allow biodiversity to diminish, natural character, outstanding features and landscapes would change; indigenous vegetation and significant habitats of indigenous fauna would decline; and the relationship that tangata whenua have with Papatūānuku, Tangaroa, Tāne-mahuta, and the bounty they provide would be at risk.

In addition to the above, Sections 30 and 35 of the RMA set out that regional councils must maintain indigenous biodiversity and report on the state of the environment within their region, thereby placing further obligation on regional councils to achieve better biodiversity outcomes. Maintenance of

[15] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.

[16] Enfocus Limited. (2014). *Biodiversity Roles and Functions of Regional Councils.* Auckland, New Zealand: Gerard Willis.

[17] Resource Management Act 1991 – Part 2, Section 6

[18] Resource Management Act 1991 – Part 2, Section 7(d)

[19] Resource Management Act 1991 – Part 1, Section 2(1)

biodiversity is more than just managing the adverse effects of activities, and is considered in the Willis Reports to require active management and interventions by a range of agencies.

Section 30 of the RMA sets out the functions of regional councils, specifically stating that regional councils shall establish, implement, and review objectives, policies, and methods to achieve integrated management of the natural and physical resources of the region, as well as to achieve the maintenance of indigenous biological diversity.[20] It is important to note that methods can include rules in regional plans to regulate land use activities.

Section 35 of the RMA requires regional councils to gather such information, and undertake or commission such research, as is necessary to carry out effectively its functions under the RMA. This section also requires Councils to report on the state of the environment within their region, including an analysis of the efficiency and effectiveness of policies, rules or other methods in the regional policy statement, regional plan or coastal plan. The results of this monitoring must be made publicly available at intervals of not more than 5 years.[21]

Draft National Policy Statement for Indigenous Biodiversity

Central Government is also recognising the importance of biodiversity through the development of a draft National Policy Statement for Indigenous Biodiversity. The purpose of a national policy statement is to state objectives and policies for matters of national significance that are relevant to achieving the purpose of the RMA. Once in force, Regional and Territorial Authorities must amend their regional policy statements, and regional/district plans to give effect to the objectives and policies set out in the National Policy Statement. Consultation on the draft National Policy Statement for Indigenous Biodiversity closed on the 14th of March 2020, with an exposure draft of the NPSIB due for release in the first half of 2022.[22]

Provisions are likely to change between the draft and final versions, however the draft version lays out extensive requirements for TLAs which will require significant investment on the part of the TLAs which many will struggle to resource particularly in the timeframes given. The draft NPSIB also proposes protection provisions for indigenous biodiversity outside of SNAs. Provisions are made to increase the percentage of indigenous cover in areas that have less than 10% remaining, and highly mobile fauna outside SNAs are also provided for.

While the NPSIB identifies which local authority is to undertake each of the tasks, it does little to reduce the existing confusion and overlaps in roles and responsibilities between the TLAs and the regional councils and further clouds it with the requirement for local authorities to survey and record areas outside SNAs for highly mobile fauna, a task which sits more comfortably with the existing mandate of the Department of Conservation.

There are significant implications for the local authorities within the draft NPSIB, particularly around resourcing in terms of funding and procuring expertise. The TLAs frequently are unable to resource their existing RMA requirements, and the regional councils are also variably able to complete their existing requirements.

[20] Resource Management Act 1991 – Part 3, Section 30

[21] Resource Management Act 1991 – Part 3, Section 35

[22] https://www.mfe.govt.nz/publications/biodiversity/draft-national-policy-statement-indigenous-biodiversity

New Zealand Coastal Policy Statement

The purpose of the New Zealand Coastal Policy Statement (NZCPS) is to state policies in order to achieve the purpose of the Resource Management Act in relation to the coastal environment of New Zealand. The NZCPS 2010 took effect on 3 December 2010 when the NZCPS 1994 was revoked. It sets a higher bar with more stringent requirements than the basic requirements of the RMA, adding an additional layer of compliance within the coastal environment. Policy 11a requires the avoidance of adverse effects for taxa and habitats that are rare or threatened under national and international frameworks. Policy 11b requires significant adverse effects to be avoided, and other adverse effects of activities to be avoided, remedied or mitigated.

Waikato Regional Policy Statement

The RMA requires every region to prepare a regional policy statement. The purpose of a regional policy statement is to achieve the purpose of the RMA by providing an overview of the resource management issues of the region, and objectives, policies and methods to achieve integrated management of the natural and physical resources. The Waikato Regional Plan must give effect to the Waikato Regional Policy Statement.

The Waikato Regional Policy Statement 2016 (Te Tauākī Kaupapa here ā-Rohe), or WRPS, is a mandatory document that provides an overview of the resource management issues in the Waikato region, and the ways in which integrated management of the region's natural and physical resources will be achieved.

By connecting people across diverse communities and jurisdictional boundaries, and supporting regional development, the WRPS sets the overall regional direction for the Waikato by providing a sustainable framework to help achieve community aspirations over a ten year period.

It provides policies and a range of methods to achieve integrated outcomes for the region across resources, jurisdictional boundaries and agency functions, and guides development of sub-ordinate plans (regional as well as district) and consideration of resource consents.[23] The provisions set out in the WRPS must be achieved by Council and Council is required to monitor the efficiency and effectiveness of the policies and methods contained in the WRPS.

The WRPS recognises the importance of biodiversity and the role it plays, specifically in 'Objective 3.19 – Ecological Integrity and Indigenous Biodiversity' which states:

"The full range of ecosystem types, their extent and the indigenous biodiversity that those ecosystems can support exist in a healthy and functional state."[24]

Figure 2 provides an overview of the issues this objective seeks to address and the different policies within the WRPS that set out to achieve objective 3.19. It also demonstrates the interconnected nature of biodiversity and how it permeates into multiple areas.

[23] https://www.waikatoregion.govt.nz/council/policy-and-plans/regional-policy-statement/

[24] Waikato Regional Council. (2016). The Waikato Regional Policy Statement - Te Tauākī Kaupapahere O Te Rohe O Waikato. Hamilton, New Zealand.

Objective 3.19 addresses the following issues:			
1.1	*State of resources*		
1.5	*Relationship of tāngata whenua with the environment (te taiao)*		
1.6	*Health and wellbeing of the Waikato River catchment*		
Objective 3.19 is achieved by the following policies:			
4.1	*Integrated approach*	*9.2*	*Significant Geothermal Features*
4.2	*Collaborative approach*	*9.3*	*Development Geothermal Systems*
4.3	*Tāngata whenua*	*9.4*	*Limited Development Geothermal Systems*
6.1	*Planned and co-ordinated subdivision, use and development*	*9.5*	*Protected Geothermal Systems*
6.2	*Planning for development in the coastal environment*	*9.6*	*Research Geothermal Systems*
6.10	*Implementing the Coromandel Peninsula Blueprint*	*11.1*	*Maintain or enhance indigenous biodiversity*
7.2	*Marine water quality*	*11.2*	*Protect significant indigenous vegetation and significant habitats of indigenous fauna*
8.1	*Approach to identifying fresh water body values and managing fresh water bodies*	*11.3*	*Collaborative management*
8.2	*Outstanding fresh water bodies an significant values of wetlands*	*11.4*	*Safeguard coastal/marine ecosystems*
8.3	*All fresh water bodies*	*12.1*	*Outstanding natural features and landscapes*
8.4	*Catchment-based intervention*	*12.2*	*Preserve natural character*
8.5	*Waikato River catchment*	*12.3*	*Maintain and enhance areas of amenity value*
8.6	*Allocating fresh water*	*12.5*	*Appropriate restrictions on public access*

Figure 2: Issues that objective 3.19 addresses and the policies that achieve this objective.

Waikato Regional Plan and Coastal Plan

The Waikato Regional Plan and Waikato Regional Coastal Plan govern what activities can and cannot be undertaken and set out objectives, policies, and methods to manage the natural and physical resources of the Waikato region and the allocation and use of coastal resources. These plans implement the WRPS and NZCPS respectively and give effect to the RMA. The Waikato Regional Plan does not currently give effect to the WRPS requirements for biodiversity.

12 Appendix 3 - Non-regulatory framework for managing native vegetation clearance

There are a range of non-regulatory tools that local authorities can use to manage native vegetation clearance and promote the maintenance and enhancement of indigenous biodiversity. These are outlined below, along with commentary on the extent to which WRC utilises these tools.

Biodiversity strategies and action plans for a region or district

Biodiversity strategies provide for a coordinated approach to biodiversity within a region or district. These tend to either cover the roles and actions across the range of agencies and organisations with roles in biodiversity management, or focus on the internal role for the Council, without trying to coordinate other agencies and organisations.

WRC identifies the development of district level strategies as a method towards the implementation of Policy 11.1- Maintain or enhance indigenous biodiversity, in the WRPS. Two pilot projects have been completed to develop local indigenous biodiversity strategies (LIBS), one for Hamilton City, and a rural based project – Source to Sea – to begin identifying strategic capacity needs, including improved understanding of ecosystem processes, enhanced biodiversity management ability and stronger working partnerships[25].

Other than what is set out in the WRPS, at present there is no regional level strategy either for internal programmes at WRC or aiming to coordinate across agencies. The lessons learned from the LIBS pilot projects are being used to inform the development of a framework and toolbox, and more strategic approaches to biodiversity management at different scales. For example, Hamilton City Council are using the LIBS pilot to help develop their biodiversity strategy and Long Term Plan. An implementation and transition plan has been developed to move the LIBS learnings forward.

Information, education, awareness, and guidance

Most regional councils provide a range of information and guidance via a range of mediums, including online resources, field days and tailored advice from council officers. WRC is no exception with web pages providing a range of this type of information aiming to improve community and landowner awareness around biodiversity values, clearance history, planting guides, and advice on managing sites and threats to biodiversity values.

Biodiversity protection programmes for private land and management plans

Some councils have developed biodiversity work programmes to support the protection of indigenous biodiversity, and these can include incentives to assist landowners in managing biodiversity sites. Funding is provided through the development of costed work programmes, based on priorities identified by the council concerned, and can include obligations for legal protection mechanisms and ongoing maintenance by the landowner.

[25] https://www.waikatoregion.govt.nz/assets/PageFiles/40706/Full-report-Source-to-the-Sea-Te-Puna-o-Waihou-ki-Tikapa-te-Moana.pdf

Biodiversity management plans can be part of a wider farm plan or specific to the site. These plans are generally voluntary, relying on landowner willingness and often come with funding assistance from regional councils.

WRC provides funding towards the management of biodiversity sites (amongst other aspects such as retiring riparian margins and managing erosion issues) and work with landowners to implement work programmes. Council provides funding grants up to 35% of the cost of works, with additional third party funding up to 70% of total cost, dependent on priority of works and availability of funding.

Councils can also coordinate multi-agency or community partnership projects. In the Waikato these include Beachcare, and the Peninsula Project, as well as the development of the Waikato and Waipa River Restoration Strategy which provides guidance to all groups engaged in delivering restoration activities.

Employing staff with biodiversity related expertise

Employing staff with appropriate expertise to provide advice both internally and externally for the purposes of meeting requirements for biodiversity, and to assist the community and landowners, has increasingly been recognised by councils as an important aspect to service this area of work. Regional councils generally have staff employed with biodiversity expertise to provide technical support and advice to the rest of the council, and council officers working in catchment and land management areas may also be employed specifically to provide this expertise into a catchment team.

In the Waikato region, WRC has a number of staff employed to provide for a range of different roles relating to biodiversity, from facilitating community and landowner works to technical aspects of biodiversity monitoring and policy and planning functions. Few of the TLAs have any personnel employed to support biodiversity work, and those that do often only have one person in a specifically defined role.

Economic instruments

These can include contestable funds from a range of sources including councils, grants directly to landowners, rates relief and provision of materials like bait stations, traps and pest animal poison baits at discounted prices, or supporting larger groups and trusts involved in environmental protection activities.

WRC provides grants directly to landowners, as described above, and applies for supplementary funding from third parties to boost these grants to a higher percentage of total costs. While rates relief is available, it is not widely known or applied for as it tends to be perceived as too onerous for little return.

The LIBS pilot projects identified a need to improve the coordination of existing funds, with an overarching framework and support structure to help support communities to collectively contribute to achieving biodiversity outcomes in the region.