Report

Ministry for the Environment - Biodiversity Planning and Management Research

Prepared for Ministry for the Environment

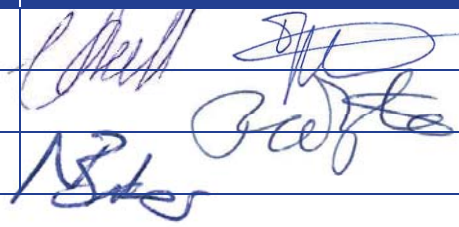
Prepared by Beca Limited and Wildland Consultants Ltd

16 December 2016

Revision History

Revision Nº	Prepared By	Description	Date
	Claire Fell, Tom McKnight	Early Draft for Client Review	8/11/2016
	Nathan Baker	Draft for Client Review	9/12/2016
	Nathan Baker	Final Report	16/12/2016

Document Acceptance

Action	Name	Signed	Date
Prepared by	**Claire Fell, Tom McKnight**		16/12/2016
Reviewed by	**Paul Whyte**		16/12/2016
Approved by	**Nathan Baker**		16/12/2016
on behalf of	Beca Limited		

Executive Summary

In 2010, MfE procured research on biodiversity management to support the development of the Draft National Policy Statement (NPS) on Indigenous Biodiversity, and while the NPS was drafted and consulted on in 2011 it was not progressed further. In 2015 the Minister for the Environment announced his intention to progress an NPS on Indigenous Biodiversity using a collaborative process.

The purpose of the report is to undertake an updated analysis of how regional, unitary and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, to what effect. The focus of analysis is on more recent plans that have changed since the previous 2010 research, some 25 plans in all. This analysis is supported by four case studies that draw on practical examples of biodiversity planning and management in New Zealand.

This report comprises two main parts:

1. A stocktake of biodiversity provisions in a sample of 25 more recent regional policy statements; regional plans; unitary plans and district plans; and
2. Four case studies of the development, implementation and effect of biodiversity policy for selected regions and districts.

Where relevant, observations made through the case studies are discussed in relation to observations made through the stocktake. Collectively, this research seeks to demonstrate how planning for biodiversity has evolved, and provides a better understanding of the impact of council variation on biodiversity outcomes and any observable trends.

The key findings of this research are identified below:

Broad approaches to biodiversity planning and management

- Similar to the findings of previous research, the plan suite notified since 2010 had a range of approaches to biodiversity planning and management. Between these documents reviewed, there is no identifiable consistent approach to biodiversity planning and management across objectives; policies and regulatory and non-regulatory methods.
- There was however a theme of these more recent documents having a more direct approach to biodiversity by having objectives and/or policies that specifically use the term 'biodiversity' (20 of the 25 plans reviewed). Eight plans had a dedicated chapter on biodiversity.
- Although some plans do not have a specific chapter on 'biodiversity' they still often contain policy provisions which reference 'biodiversity' and this was found largely to be because of the different structures and formats used in RPSs/Regional/District Plans rather than inadequately managing biodiversity.
- There are a range of closely related terms that are common in plans, including indigenous biological diversity; significant indigenous vegetation; significant natural areas; outstanding landscapes; indigenous vegetation; indigenous forest; ecological sites; wetlands; threatened species; to name a select few. Objectives, policies and methods that seek to manage these matters naturally will manage at least aspects of biodiversity.
- A main theme of inconsistency was around terminology, where a multitude of terms directly or closely related to biodiversity where used to either directly or indirectly achieve biodiversity outcomes. Given the complexity of biodiversity, many objectives; policies; and methods have either a direct or indirect influence on biodiversity as they seek to manage outcomes around the sustainable management of marine; terrestrial and freshwater environments. In terms of this research, we have focussed on the more direct reference to biodiversity and simply note that broader theme of biodiversity planning and management being covered in a variety of ways under these regional and district planning documents.
- Eight of the plans contained a definition of 'biodiversity'. The definitions were broadly similar, although again some inconsistency.
- A more consistent approach to definitions and terminology for biodiversity would certainly be an obvious areas of focus for an NPS on Indigenous Biodiversity. We have captured in this research the more common terminology observed and have also provided examples of good practice whereby terminology used in Regional Policy Statements has consistently flowed down to supporting Regional and District Plans.

We have also provided an example of where the Bay of Plenty RPS has provided some direction on where district and city councils manage indigenous biodiversity (use of land, excluding coastal marine area) and where the regional council manages indigenous biodiversity (including within the coastal marine area and freshwater). We observed that the variation in terminology across plans is partly a result of the different functions and focus of regional and district plans in relation to land use management and different jurisdictional environments across the CMA, land and water. District Plans for example may not use the encompassing term 'biodiversity' as they do not aim to address freshwater and marine biodiversity. Rather, it appears District Plans much more commonly use terms such as 'indigenous vegetation protection' which seeks to achieve good terrestrial biodiversity outcomes.

In terms of policy direction, a further observation was that aspects of biodiversity are being managed indirectly through giving effect to other national level policy documents, for example the NPS on Freshwater and the NZCPS. These documents require authorities to address specific environmental concerns and in managing these matters the matter of biodiversity is often at least partly addressed, albeit indirectly.

Regulatory approaches adopted

- There was also inconsistency in the approach to managing biodiversity across plans – a mix of enhance/improve; maintain; avoid; avoid, remedy, mitigate; off-set; protect; minimise; and restore observed through-out the sample set.
- Although we observed a good amount of plans having specific objectives and policies on biodiversity management, we observed a less clear transition of those to clear rules giving effect to those. Only two of the plans had clear rules specific to biodiversity. Biodiversity was more commonly listed amongst assessment criteria for rules with a less direct focus on biodiversity (observed in 11 of the plans).
- For rules, matters of biodiversity are often narrowed down into more manageable activities, such as vegetation clearance, earthworks, protecting significant areas/ landscapes.

Non- regulatory approaches adopted

- A good range of non-regulatory approaches were observed across the plans, including monitoring; incentives/ funding; research and database; covenants; advocacy and education; iwi involvement; use of management plans.
- Provision for monitoring specific to biodiversity was inconsistent across plans. We have provided examples of good practice where biodiversity is more directly referenced in relation to monitoring.

Criteria being applied to define significant areas and habitats

- For areas identified as significant, for example, Significant Natural Areas, there were a range of terms/criteria used to define those areas across plans. For example, representativeness; rarity; diversity; distinctiveness; uniqueness; outstanding; ecological; shape/size; biophysical.
- There was a range of categories used to term these significant areas. For example, Outstanding Natural Landscape; Outstanding Natural Feature; Rare/Threatened habitat; Outstanding Natural Character; Significant Ecological Area; Indigenous ecosystems and habitats; High Natural Character; ecosystems and habitats with significant indigenous biodiversity values; watercourses of ecological value.

Differentiation in consent thresholds across the plan suite

- There is a vast range of consent thresholds that Councils use to manage biodiversity. They key activity that the research focused on was vegetation removal. It was difficult to make comparisons across the plan suite as some plans managed vegetation removal using a catch all rule and others used much more specific rules to manage different removal activities.
- What was clear was that a range of different thresholds are used in the plan suite for triggering the requirement for consent for the removal of vegetation in significant natural areas or in areas of ecological significance.

The extent to which plans differentiate or prioritise categories of significance

- "Outstanding Natural Landscapes" was the most common term of categorising different types of significant areas.
- The majority of the plans assessed had two to three different categories to differentiate categories of significance with a biodiversity connection.
- The differences in categories is likely due to the different rule formats and the effects that each different rule is aiming to manage.

The extent to which plans make provision for non-significant biodiversity.

- All plans assessed (with the exception of the Air Plans) managed non-significant biodiversity. Rules that aimed to manage non-significant biodiversity included tree protection provisions, setback provisions, earthworks around water bodies and the trimming of vegetation.

Case studies

The case studies undertaken by Wildlands, appended in full to this report (Appendix A-D) and summarised in Section 3, provide a more detailed look at the practicalities of implementing biodiversity management and planning. In particular, the use of regulatory and non-regulatory methods are explored in more detail in relation to specific locations of New Zealand – Canterbury; Kapiti Coast, Rotorua Lakes and South Waikato. Each of the case studies has a series of standard questions and answers summarised in the Executive Summary that provide a consistent commentary across the research.

The overall findings of these case studies supports the Stocktake findings in that there are a range of ways biodiversity management and planning is taking place across and within these different locations. These differences reflect the environmental and political pressures, and the history of use and development in each location. Solutions for biodiversity management need to be tailored to the environments and ecosystems present in each district and the particular land use pressures and communities present in each place. The observation across the case studies is that plans need rules to ensure that biodiversity values are protected, but should be supported by non-regulatory incentives to provide land owner and stakeholder engagement.

There is also a range of ways councils are engaging with stakeholders and the community on biodiversity. A finding from the case studies was the benefits of a more collaborative approach with stakeholders/ land owners, whereby biodiversity planning is more collegial and more widely accepted by the community after consultation with a cross-section of stakeholders on biodiversity values to be protected, and criteria for identifying significant biodiversity values.

Recommendations

Based on our observation, there is certainly opportunity to provide a more consistent and clear approach to biodiversity planning and management. Some useful areas of focus would be:

- The definition of biodiversity;
- Which plans need to cover which aspects of biodiversity;
- Consistent criteria for assessing what is considered significant biodiversity;
- Guidance as to how to separate 'biodiversity values' from 'landscape values' which are typically assessed using similar criteria;
- Regulatory guidance for rules;
- Non-regulatory guidance for methods; and
- Monitoring of biodiversity values.

Contents

Appendices

1 Introduction

1.1 Purpose

In 2010, MfE procured research on biodiversity management to support the development of the Draft National Policy Statement (NPS) on Indigenous Biodiversity, and while the NPS was drafted and consulted on in 2011 it was not progressed further. In 2015 the Minister for the Environment announced his intention to progress an NPS on Indigenous Biodiversity using a collaborative process.

The purpose of the report is to undertake an updated analysis of how regional, unitary and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, to what effect. The focus of analysis is on more recent plans that have changed since the previous 2010 research, some 25 plans in all. This analysis is supported by four case studies that draw on practical examples of biodiversity planning and management in New Zealand.

This report comprises two main parts:

1. A stocktake of biodiversity provisions in a sample of 25 more recent regional policy statements; regional plans; unitary plans and district plans; and
2. Four case studies of the development, implementation and effect of biodiversity policy for selected regions and districts.

Where relevant, observations made through the case studies are discussed in relation to observations made through the stocktake. Collectively, this research seeks to demonstrate how planning for biodiversity has evolved, and provides a better understanding of the impact of council variation on biodiversity outcomes and any observable trends.

1.2 What is Biodiversity?

The Resource Management Act 1991 (RMA) contains various definitions[1] that relate to biodiversity. These terms are identified in Table 1 below. The terms "Outstanding" and "Significant" are not defined by the RMA or the NZ Biodiversity Strategy. These terms often have amenity and landscape values associated with their use as well as biodiversity outcomes.

The term "biological diversity" is often shortened to "biodiversity" which is more commonly used in regional and district plans.

Table 1 - Definition of "biodiversity" and other terms that relate to biodiversity within the RMA and the New Zealand Biodiversity Strategy

	Resource Management Act 1991	NZ Biodiversity strategy 2000
Biological Diversity	*"the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystem*	*"the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems"*

[1] Section 2 of the Resource Management Act 1991.

	Resource Management Act 1991	NZ Biodiversity strategy 2000
Intrinsic values	*"in relation to ecosystems, means those aspects of ecosystems and their constituent parts which have value in their own right, including—* *(a) their biological and genetic diversity; and* *(b) the essential characteristics that determine an ecosystem's integrity, form, functioning, and resilience"*	*N/A*

1.3 Current statutory and non-statutory framework

This section outlines the current background documents and legislation that aims to manage biodiversity on a national scale.

1.3.1 The New Zealand Biodiversity Strategy 2000-2020

The New Zealand Strategy on Biodiversity was published in 2000 as a part of New Zealand's international responsibility under the Convention of Biological Diversity. This strategy establishes a framework to halt decline of biological biodiversity. As well as "biological diversity", the strategy aims to manage:

- *"**Genetic Diversity:** The variability in the genetic make up among individuals within a single species. In more technical terms, it is the genetic differences among populations of a single species and those among individuals within a population.*
- ***Species Diversity:** The variety of species - whether wild or domesticated - within a particular geographical area. A species is a group of organisms which have evolved distinct inheritable features and occupy a unique geographic area. Species are usually unable to interbreed naturally with other species due to such factors as genetic divergence, different behaviour and biological needs, and separate geographic location.*
- ***Ecological (ecosystem) Diversity:** The variety of ecosystem types (for example, forests, deserts, grasslands, streams, lakes, wetlands and oceans) and their biological communities that interact with one another and their non-living environments[2]"*

The strategy contains the following goals:

- To enhance community and individual understanding about biodiversity, and to inform, motivate and support community initiatives. Enable the community to equally share responsibility for and benefits from conserving New Zealand's biodiversity.
- Actively protect iwi and hapu interests in indigenous biodiversity, and build and strengthen partnerships between government agencies and iwi and hapu in conserving and sustainably using indigenous biodiversity.
- Halt the decline in New Zealand's biodiversity and to restore the remaining natural habitats.

[2] New Zealand Biodiversity Strategy 2000 - Glossary

- Maintain the genetic resources of introduced species that are important for economic, biological and cultural reasons by conserving their genetic diversity[3].

This strategy also contains mechanisms for co-ordinating and implementing the strategy at a central government level.

1.3.2 New Zealand Biodiversity Action Plan 2016-2020

The New Zealand Biodiversity Action Plan was released in October 2016 and sets the national action plan for managing biodiversity for the next four years. It sets ambitious national targets toward greater protection and sustainable use of biodiversity. The targets put forward in this action plan aim to demonstrate New Zealand's progress towards achieving the goals of the New Zealand Biodiversity Strategy 2000-2020.

Other national Plans that have come out of this plan include:

- Predator Free 2050 - with an ambitious goal to rid New Zealand of introduced species
- War on weeds - with an aim to rid New Zealand of wilding conifers
- Battle for the Birds - this includes 1080 drops and self-setting traps to protect high risk populations of New Zealand's native birds.

Relevance to this study

The following national targets are particularly relevant to the purpose of this research:

National target 3 is to integrate biodiversity into national and local strategies, policies, plans and reporting. The key actions for achieving this target are:

- *"**BY 2020**, we will fully implement a new national environmental reporting series, including the synthesis report Environment Aotearoa, in which biodiversity is a cross-domain theme.*
- ***BY 2017**, natural resources are recognised in New Zealand's Long Term Fiscal Statement underlining the importance of the natural resource base to New Zealanders' living standards.*
- ***BY 2017**, investigate the need and potential to produce New Zealand environmental-economic accounts."*[4]

National Target 7 aims to promote the sustainable use and protection of biodiversity through improved national guidance, information and industry background. Key actions for achieving this target are:

- *"**BY 2020**, a National Policy Statement on Indigenous Biodiversity will provide national direction to councils on managing biodiversity under the Resource Management Act 1991.*
- **NEW ZEALAND** *will continue work to improve the efficiency of agricultural production systems by improving decisions around land use, maintaining soil and water health, and enhancing flexibility in land management and farming practices.*
- **BY 2018**, *a National Environmental Standard for Plantation Forestry will be implemented to improve consistency and reduce negative impacts in the management of plantation forestry*[5]*."*

[3] Goals obtained from http://www.doc.govt.nz/nature/biodiversity/nz-biodiversity-strategy-and-action-plan/new-zealand-biodiversity-strategy-2000-2020/executive-summary/

[4] New Zealand Biodiversity Action Plan 2016-2020, pg 14

[5] New Zealand Biodiversity Action Plan 2016-2020, pg 22

By undertaking an assessment of the emerging trends in Regional Policy Statements, Regional Plans and District Plans notified post 2010, clear tends and emerging themes can be analysed as to how plans are currently giving effect to the biodiversity matters. This will in turn, have flow on effects for the implementation of a Draft NPS of Indigenous Biodiversity.

1.3.3 Part 2 of the Resource Management Act

The Resource Management Act gives direction to Regional Councils and Territorial Authorities as to how they should managing their resources. Part 2 of the Act, encompassing Section 5, 6, 7 and 8 of the Act, outlines the purpose and principles.

Section 5 of the RMA outlines the purpose of the Act which is to:

> *"(1) The purpose of this Act is to promote the sustainable management of natural and physical resources.*
>
> *(2) In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—*
>
> *(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and*
>
> *(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and*
>
> *(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.*[6]*"*

The term "biodiversity" is not directly used, however, it is indirectly managed through all matters of Section 5(2).

Section 6 of the RMA outlines matters of national importance.

> *"In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:*
>
> *(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:*
> *(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:*
> *(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
> *(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:*
> *(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:*

[6] Section 5 of the Resource management Act 1991

> *(f) the protection of historic heritage from inappropriate subdivision, use, and development:*
> *(g) the protection of protected customary rights*[7]*."*

The term "biodiversity" is not included in this list of matters, although it is indirectly managed by protecting *natural character, outstanding natural features and landscapes*, and the protection *of indigenous vegetation and habitats of indigenous fauna*. The term outstanding natural features and landscapes is not defined by the RMA.

Section 7 outlines other matters that particular regard has to be given to:

> *"(a) kaitiakitanga:*
> *(aa) the ethic of stewardship:*
> *(b) the efficient use and development of natural and physical resources:*
> *(ba) the efficiency of the end use of energy:*
> *(c) the maintenance and enhancement of amenity values:*
> *(d) intrinsic values of ecosystems:*
> *(e) [Repealed]*
> *(f) maintenance and enhancement of the quality of the environment:*
> *(g) any finite characteristics of natural and physical resources:*
> *(h) the protection of the habitat of trout and salmon:*
> *(i) the effects of climate change:*
> *(j) the benefits to be derived from the use and development of renewable energy*[8]*."*

"Biodiversity" is also not specifically mentioned, but again, it is indirectly managed through the maintenance and *enhancement of the quality of the environment* (Section 7(f)) and partially through the *intrinsic values of ecosystems* (Section 7(d)) which refers to biological diversity within its definition under the Act.

1.3.4 Functions of Regional Councils under RMA 1991

Section 30(1) of the RMA outlines the functions of regional councils for the purpose of giving effect to the Act in its region. Subsection (ga) states that:

> *"(1) Every regional council shall have the following functions for the purpose of giving effect to this Act in its region*
>
> *(ga) the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity:"*

In accordance with section 30(1) of the RMA, Regional Councils must contain rules to manage biodiversity.

[7] Section 6 of the Resource Management Act 1991.

[8] Section 7 of the Resource Management Act 1991.

1.3.5 Functions of Territorial Authorities under the RMA 1991

Section 31(1) of the RMA outlines the functions of Territorial Authorities when giving effect to the Act. Subsection (1)(b)(iii) states that

> *"(1) Every territorial authority shall have the following functions for the purpose of giving effect to this Act in its district:*
>
> > *(b) the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of—*
> >
> > > *(iii) the maintenance of indigenous biological diversity."*

In accordance with Section 31(1) of the RMA, a District Plan must contain rules to control any potential effects of development or use activities on the maintenance of biodiversity.

1.4 Summary of past research findings

1.4.1 Timeline of past reports and research

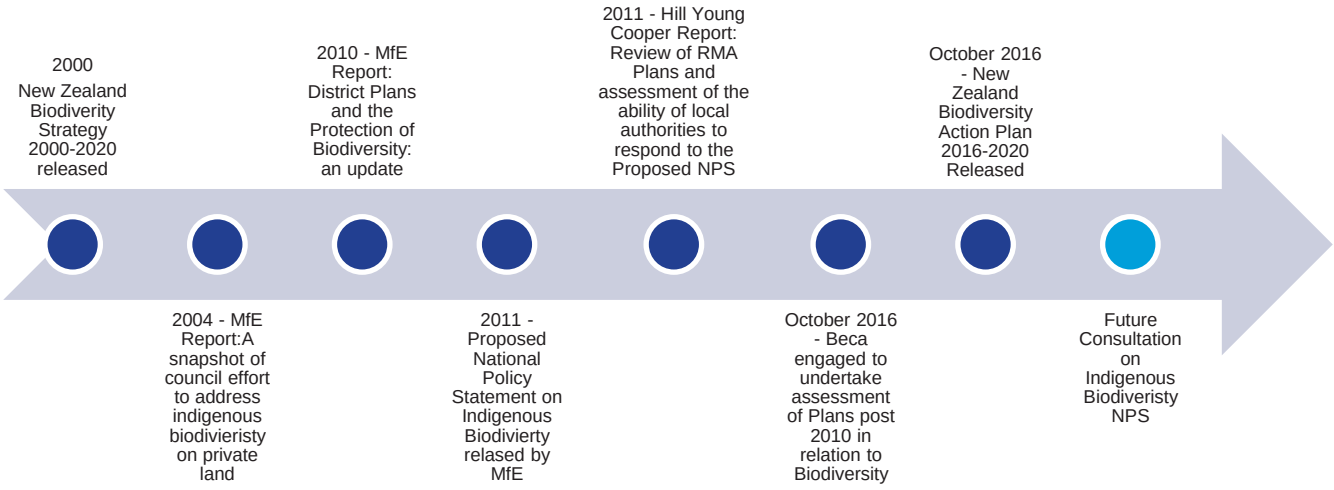


Figure 1 - Timeline of past reports and the subsequent release of Strategy documents

Three research projects have been commissioned by the Ministry to better understand how biodiversity matters are addressed at a local level. These three reports are briefly summarised below:

1.4.2 Ministry for the Environment (2004). A snapshot of council effort to address indigenous biodiversity on private land: a report back to councils

The purpose of this report was to present a snap shot of:

- The extent of council effort and expenditure on biodiversity; and
- The extent of the biodiversity protection.

The findings of this report were used to assist the Minister of the Environment to make a decision about the Draft National Policy Statement on Indigenous Biodiversity.

The key findings of this report in relation to district plans included:

- There is a wide range of policy tools available to councils. Most council support on-the-ground activities such as covenants, landcare groups, education and advice to landowners; while also using regulation (e.g. subdivision controls).
- Biosecurity programmes account for a large amount of council expenditure that impacts both directly and indirectly on biodiversity health including work funded through the Regional Pest Management Strategy and the Animal Health Board.
- Some district plans have comprehensive and detailed provisions for the identification of significant sites and habitats. These provisions are backed up by a range of methods to protect the significant sites and habitats identified.
- Other district plans, however, have minimal (or no) identification of sites and lack of adequate provision to ensure protection.
- Most district plans fall into an intermediate level - neither particularly strong nor particularly lacking. A significant proportion of these contain general clearance rules but have no criteria for determining significance.
- A key issue that emerged is the lack of good-quality information on biodiversity across the country. Some areas are information rich, but many others lack adequate information on biodiversity in their areas.
- It was noted that there was a wide range in variance in the instruments being used to enforce rules relating to significant indigenous biodiversity. The results show that while some councils have taken a regulatory approach to biodiversity preservation, others still favour a voluntary approach and do not enforce regulation. The results show that among the councils that use regulation, there is a wide range of both frequency and type of enforcement action undertaken[9].

1.4.3 Ministry for the Environment (2010) District Plans and the Protection of Biodiversity: An Update

In September 2010, AWT was engaged by the Ministry to update the 2010 assessment, following the same methodology and criteria where possible, with particular focus on how many of the district councils have relatively weak or non-existent plan provisions for biodiversity protection. The project consisted of a desk top review of all the proposed and operative district plans (75 plans) to assess the provisions and approaches for identifying significant biodiversity, and the protection of biodiversity in general.[10] This report concluded by stating that although some of the plans assessed had been updated since 2004, there still had been very little uptake and change to the number of plans that had rules governing issues such as vegetation clearance and disturbance of significant sites. It also noted that a number of councils that had set biodiversity strategies in place were making real progress towards achieving their statutory requirements.

Key findings from this report included:

- “80% of plans included criteria for identifying Significant Natural Areas
- The most common criteria used to define “significant” were representativeness, diversity and pattern, rarity and special features, naturalness, long-term viability, size and shape, and buffering and surrounding landscape which was largely consistent with the 2004 research.
- Approximately a quarter of plans (19) differentiate between categories of significance; either through the assessment criteria, or in the schedule of sites.

---

[9] All points taken from the Ministry for the Environment (2004). *A snapshot of council effort to address indigenous biodiversity on private land: a report back to councils*

[10] Ministry for the Environment (2010) District Plans and the Protection of Biodiversity: An Update

- The majority of the district plans (96%, or 72 plans) have adopted a regulatory approach to the preservation of indigenous flora and fauna (i.e. some form of rules).
- With regard to non-regulatory measures, the most common cited in plans are: education, advocacy (promoting protection mechanisms/techniques/contestable funds, etc), financial incentives/assistance (rates relief, funds for fencing, etc), and land acquisition or swaps.
- Eighty-four percent of plans (63) have rules targeted at the protection of significant areas (including wetlands and special ecological zones). Several plans state that the Council is in the process of developing rules specifically tailored to significant indigenous areas.
- The majority of the plans (59) contain provisions targeting the protection of biodiversity outside s6(c) requirements. Such measures include:
  - General clearance controls;
  - Controls on pest species (e.g. planting trees);
  - Controls on certain activities, such as goat and deer farming;
  - Controls on earthworks;
  - Controls on riparian activities, etc[11]."

1.4.4 Review of the RMA Plans and assessment of the ability of local authorities to respond to the proposed NPS for Indigenous Biodiversity - A Report to the Ministry for the Environment (2011)

In June 2011, the Ministry engaged Hill Young Cooper to assist the Ministry in understanding the way biodiversity is currently managed by Councils and the impact that the National Policy Statement on Indigenous Biodiversity would have on local authorities[12]. This report was to advise the section 32 Report that had to be submitted before the draft NPS could become adopted. This report included a desktop study as well as visits to the Local Councils. The key findings were

- Implementation of Policy 5 - Most Councils would need to significantly change their plans to give effect to this policy in regards to avoiding, remedying and mitigating to achieve a 'no net loss outcome' for biodiversity
- Policy 6 - Most Councils were well placed to meet Policy 6 as plans already contained measures to restrict and manage the removal of indigenous vegetation. There was also a range of non-regulatory approaches supported by Council. The implementation and effectiveness was however largely reliant on Council resourcing, so there was no consistent information across the councils.
- Policy 7 - Plans reviewed were somewhat inconsistent in the way they referred to tangata whenua values in the management of biodiversity. However, Council had still largely consulted with iwi during their plan development.
- Policy 8 - All councils were able to meet the intent of this policy.

The report recommended to the Ministry to consider the scope under the RMA to outline the final NPS as an interim policy that Councils can adopt in their plans without using the first schedule process, until such time as they develop their own policies to better fit with the existing policy approach[13].

[11] As stated in *Ministry for the Environment (2010) District Plans and the Protection of Biodiversity: An Update*

[12] Hill Young Cooper (2011) Review of the RMA Plans and assessment of the ability of local authorities to respond to the proposed NPS for Indigenous Biodiversity - A Report to the Ministry for the Environment

[13] As stated in the Hill Young Cooper Report (2011).

2 Review of Plans

2.1 Methodology

2.1.1 Plans to assess

24 plans were assessed as a part of this research that have been notified post 2010.

	Regional Plan	District Plans
1	Northland Regional Plan Combined 2016	Far North District Plan 2015
2	Auckland Unitary Plan 2016 Auckland Unitary Plan RPS 2016	
3	Bay of Plenty Proposed Air Plan 2016	Proposed Opotiki District Plan (Notified October 2015)
4	Bay of Plenty RPS 2014	
5	Bay of Plenty Coastal Plan 2014	
6	Gisborne Freshwater Plan	Gisborne District Plan (Operative 2006)
7	Horizons - One Plan (2010)	Whanganui District Plan PC40 - Natural Environment July 2016
8	Wellington - Proposed Natural Resources Plan 2015	Kapiti Coast Proposed District Plan 2012
9	Wellington RPS 2013	
10	Chatham Islands Resource Management Document 2015 (includes district plans)	
11	Marlborough Draft Environment Plan 2016	
12	Canterbury RPS 2013	Christchurch City Council Replacement Plan 2016
13	Canterbury Land and Water Plan 2016	
14	Otago Coastal Plan 2011	Proposed Queenstown Lakes District Plan
15	Southland Air Plan 2016	Proposed Southland District Plan 2012

For completeness, we have also included the Draft Waikato Regional Policy Statement that was released in May 2016. This was not included in the original scope. This brings the total to **25 plans**.

Step 1 - Key Word search

Each of the 25 plans were assessed by using the following high level key words:

- Biodiversity;
- Significant Natural Areas; and
- Outstanding Landscapes.

The use of key words is one limitation of this research. As biodiversity is covered within the plan suite in a great deal of different ways, limiting the search term to “Biodiversity” initially may result in some key themes in plans being missed. We have tried to limit this risk as much as possible, by using a range of different key word searches.

If the key themes of a plan were not initially identified using the above words, then the following words were used to further depict issues in a plan that may be indirectly linked to the management of biodiversity:

- Indigenous vegetation;
- Wetlands;

- Waterway;
- Indigenous Forest;
- Riparian;
- Tussock;
- Estuarine; and
- Threatened.

Step 2 - the Stocktake

In order to capture the themes from the key word searching, the following questions were put in a table to classify the key themes and trends. The full Data Collection Table is included at Appendix E of this report.

2.1.2 What are the broad objectives of and approaches to biodiversity planning and management

The general approach taken to the management of biodiversity in each plan was classified. For example, it was noted whether a council has one overarching objective for managing biodiversity or whether there were various objectives or policies scattered throughout the plan. Insights into whether biodiversity was integrated with landscape values as well as ecological values were collected in this column.

2.1.3 What are the type of regulatory approaches adopted?

Examples of specific rules that seek to manage biodiversity enhancement, significant natural areas, or other interrelated topics.

2.1.4 What are the types of non-regulatory approaches adopted?

It was noted if there were any methods or any other similar non-regulatory mechanisms used to address matters relevant to biodiversity while still meeting the purpose of the Resource Management Act

2.1.5 The criteria being applied to define significant areas and habitats

Different types of words being used to define significant natural areas or habitats were captured. For example, are areas being described as significant based on cultural, ecological or amenity values and is there any specific reference to biodiversity?

2.1.6 The extent to which rules and consent thresholds differ across plans

The different rules used to manage matters relating to biodiversity and the types of thresholds that trigger consent were assessed.

2.1.7 The extent to which plans differentiate and prioritise categories of significance

The different types of categorisation used by the different councils for defining what is a significant natural area or an outstanding landscape were captured.

2.1.8 The extent to which plans make provisions for biodiversity that is not significant

A broad approach to capture examples of rules that cover aspects of the environment such as vegetation that has not been identified as significant or outstanding, but still aims to encourage good biodiversity outcomes was captured.

2.1.9 Level of monitoring

Any relevant information was assessed based on the questions listed below:

- In each plan, is there a level of monitoring of enhancement or degradation of an activity on biodiversity matters?
- Is there reference to the state of the environment reporting requirements?
- Are there any biodiversity offsetting requirements?

Step 3 - undertake the analysis

Key themes and insights presented in the table are discussed in Section 2.3.

2.2 Results

2.2.1 Policy Direction

This section provides detail as to whether similarities and differences between plans is driven by policy (national, regional or local), or by some other method that has been developed by each council.

2.2.1.1 Objectives and Policies that directly use the term "biodiversity"

Table 2 outlines the number of plans that have specific objectives and/or polices that make a special mention of 'biodiversity.' The more interesting statistic is the number of plans that do not contain objectives that use the specific word 'biodiversity' but have policies that directly address biodiversity. Of the five plans that contained neither objectives nor policies, two of these were air plans which typically do not need to address matters of relevance to indigenous biodiversity.

Table 2 - Number of Plans that have objectives and policies relating to Biodiversity

Plans that have:	Number of Plans
Objectives that **do** Specifically reference Biodiversity **and** Policies that **do** specifically reference biodiversity	16
Objectives that **do** Specifically reference Biodiversity **and** Policies that **do not** specifically reference biodiversity	0
Objectives that **do not** Specifically reference Biodiversity **and** Policies that **do** specifically reference biodiversity	4
No Objectives **and No** Policies specifically referencing Biodiversity	5 (two of these plans are an Air Plan)
Total	**25 Plans**

Of the plans that do not contain any reference to 'biodiversity' within objectives and policies, biodiversity matters are termed or broken down into more specific provisions as outlined in Table 3. Interestingly, the Proposed Southland District Plan has a chapter termed 'biodiversity,' but does not specifically reference biodiversity in the objectives and policies. This is likely due to the level of detail that the each objective and policy contain.

Table 3 - The plans that do not contain specific reference to 'biodiversity' in their plans, but have closely related terms

Plan	Other relevant objectives and policies
Whanganui District Council – Plan Change 45 Natural Environment July 2016	■ Natural heritage ■ Natural character ■ Outstanding natural landscapes (overlay) ■ To have particular regard for the maintenance and enhancement of conservation values, public access, amenity values and spiritual and cultural values, on key waterways. ■ Urban river landscape overlay ■ Landscape conservation area

<table>
<tr><th>Plan</th><th>Other relevant objectives and policies</th></tr>
<tr><td>Proposed Southland District Plan</td><td>

Indigenous vegetation and habitats of indigenous fauna are managed so that the overall life supporting capacity of ecosystems are safeguarded.
Protect ecosystems which support significant indigenous vegetation and significant habitats of indigenous fauna.

<u>Explanation:</u>

Indigenous flora and habitats of indigenous fauna considered ‘significant’ are those specified in the Statement of National Priorities for Protecting Rare and Threatened Indigenous Biodiversity on Private Land (MfE, 2007).

The Ministry for the Environment and Department of Conservation Statement of the National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land 2007 identifies the following priorities:

<table>
<tr><td>National Priority 1:</td><td>To protect indigenous vegetation associated with land environments, (defined by Land Environments of New Zealand at Level IV), that have 20% or less remaining in indigenous cover.</td></tr>
<tr><td>National Priority 2:</td><td>To protect indigenous vegetation associated with sand dunes and wetlands, ecosystem types that have become uncommon due to human activity.</td></tr>
<tr><td>National Priority 3:</td><td>To protect indigenous vegetation associated with ‘originally rare’ terrestrial ecosystem types not already covered by Priorities 1 and 2.</td></tr>
<tr><td>National Priority 4:</td><td>To protect habitats of acutely and chronically threatened indigenous species.</td></tr>
</table>

Careful consideration must be given to activities where adverse effects on biodiversity cannot be avoided or appropriately remedied or mitigated. In some cases it may be appropriate to decline an activity. Particular scrutiny should be given to activities which involve earthworks, vegetation clearance, wetland drainage, significant stormwater run-off, waste management and disposal, stock grazing and the introduction of plant or animal pests, including wilding trees. (Forest & Bird, Department of Conservation)

(Yellow means that the provision is under appeal by Forest and Bird)
</td></tr>
<tr><td>Otago Coastal Plan</td><td>

Ecological values
To provide for the use and development of Otago’s coastal marine area while maintaining or enhancing its natural character, outstanding natural features and landscapes, and its ecosystem, amenity, cultural and historical values.
Areas of significant indigenous vegetation and significant habitats of indigenous fauna.
To protect significant coastal values from public access.

</td></tr>
</table>

2.2.2 Level of detail covered in plans in relation to Biodiversity

This section aims to address the level of detail covered in each of the plans assessed in relation to biodiversity.

2.2.2.1 Chapters containing a specific 'Biodiversity' chapter

Table 4 outlines the plans that contained a specific chapter to manage biodiversity.

Table 4 - Plans that contain a specific chapter on Biodiversity

Plan	Chapter Title
Horizons One Plan 2010	'Land use activities and indigenous biodiversity'
Kapiti Coast District Plan Review	Subchapter termed 'Ecological and Biodiversity' under 'The Natural Environment' chapter
Proposed Marlborough Environment Plan 2016	'Indigenous Biodiversity'
Canterbury RPS 2013	'Ecosystems and Indigenous Biodiversity'
Christchurch City Replacement Plan 2016	Chapter called 'Natural and Cultural Heritage', with a subchapter on 'Indigenous Biodiversity and ecosystems.'
Proposed Queenstown Lakes District Plan 2016	'Indigenous Vegetation and Biodiversity'
Proposed Southland Land and Water Plan 2016	'Indigenous Biodiversity'
Proposed Southland District Plan 2012	'Biodiversity'

Of the suite of plans assessed, eight plans out of the 25 contained a specific reference to Biodiversity within the chapter heading. Nine of the 17 plans that did not contain the term 'biodiversity' within the title contained both clear objectives and policies to address biodiversity matters.

Although 17 plans did not contain biodiversity in the chapter title, the majority of the plans appeared to manage biodiversity indirectly alongside other matters such as 'natural heritage' or 'indigenous ecosystems.' For example, the Greater Welling Regional Policy Statement and the Southland Land and Water Plan respectively have a chapter called 'Indigenous Ecosystems' which contains objectives that directly reference the term 'Biodiversity.'

The way Regional Plans were structured determined whether or not there was a specific chapter on 'Biodiversity.' For example, a Council that had structured their plan using objectives, then policies, then rules in separate chapters, will not contain a topic based chapter on biodiversity, when compared with a plan that has all the objectives, policies and rules structured per topic/zone/activity.

Of the plans that did not contain a chapter on Biodiversity, two of these were Air Plans.

2.2.2.2 Use of Wording within Objectives and Policies

Within the plans that did contain objectives and policies referencing 'Biodiversity', a range of different terminology was used to manage the impacts of activities on biodiversity. The terminology used is summarised in Table 5 below and ranged from 'enhancing' and 'improving' to 'avoid', to a combination of various terms including avoid, remedy, mitigate and protect, maintain and enhance. Some of the more common terminology used was to 'avoid' first, then if avoidance is not possible, 'remedy then mitigate'. 'Protect, maintain and enhance' was also very common within objectives and policies.

Table 5 - Terms used within the Objectives and policies in relation to the management of Biodiversity

Terms used to describe management of Biodiversity	Number of times used	Example
Enhance/improve	3	Kapiti Coast District Plan Review 2016 - Objective 2.2 *"To **improve** indigenous biological diversity and ecological resilience through: a) **protection** of areas of significant vegetation… **restoration** of the ecological integrity of important degraded environments...c) **enhancement** of health of terrestrial ecosystems…"*
Maintain	2	Far North District Plan 2015 - Policy 12.2.41 *"That areas of significant indigenous vegetation and significant habitats of indigenous fauna be protected for the purpose of promoting sustainable management with attention being given to…(c) **maintaining** the variety and range of indigenous species contributing to biodiversity."*
Avoid	2	Draft Northland Regional Plan 2016 - Policy D.2.3 *"Manage adverse effect of activities requiring resource consent on indigenous biodiversity by:* *1. **Avoiding** adverse effects on the characteristics and qualities that comprise the following indigenous biodiversity in the coastal environment..."*
Avoid, remedy or mitigate, offset	3	Proposed Opotiki District Plan 2016 Policy 12.2.2.5 *"To **avoid** or, where this is not practicable, **remedy, mitigate** or **offset** the adverse effects on indigenous biodiversity…"*
Protect	5	Bay of Plenty Regional Policy Statement 2014 - Policy CE6B *"**Protecting** indigenous Biodiversity"* Proposed Southland District Plan 2016 - Objective BIO.1 "***Protect** ecosystems which support significant indigenous vegetation and significant habitats of indigenous fauna"*
Combination of all aspects Protect, maintain, enhance, avoid, remedy, mitigate Maintained and restored	9	Decision Version of the Auckland Unitary Plan 2016 Policy E15.3 *2) Mange the effects of activities to **avoid** significant adverse effects on the biodiversity values as far as practical, **minimise** significant adverse effects where avoidance is not practicable, and **avoid, remedy and mitigate** any other adverse effects on any other indigenous biological diversity and ecosystem services…"* Bay of Plenty Regional Policy Statement 2014 - Objective 2 *"**Preservation, restoration** and where appropriate, **enhancement** of the natural character and ecological functioning of the coastal environment"* Proposed Queenstown Lakes District Plan 2016 Objective 33.2.1 "***Protect, maintain** and **enhance** indigenous biodiversity"*

Terms used to describe management of Biodiversity	Number of times used	Example
Minimise	0	No objectives and policies that aimed to only minimise impacts. The term 'minimise' was often used in conjunction with other terms
Restore	0	No objectives and policies that aimed to only restore impacts. The term 'restore' was often used in conjunction with other terms

2.2.2.3 Plans that define 'Biodiversity'

Of the plans assessed, only eight out of the 25 plans contained a definition for biodiversity. These definitions are outlined in the table below:

Table 6 - Definitions of biodiversity

Plan	Definition
Proposed Bay of Plenty Regional Coastal Environment Plan – Appeals Version Bay of Plenty RPS 2014	Biodiversity: The variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.
Proposed Opotiki District Plan 2016	Biodiversity: The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part, this includes diversity within and between species.
Waikato Regional Policy Statement	Biodiversity: the variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.
Greater Wellington Regional Policy Statement 2013	Biological diversity: (or biodiversity): As defined in the Resource Management Act. The variability among living organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.
Canterbury Regional Policy Statement 2013	Biodiversity: Has the same meaning as biological diversity as defined by Section 2 of the Resource Management Act 1991
Christchurch City Council Replacement Plan 2016	Indigenous biodiversity: means organisms of New Zealand origin, the variability among these organisms, and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.
Proposed Southland Land and Water Plan	Biodiversity: 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. Within the context of the District Plan this refers to ecosystems that support indigenous vegetation and habitats of indigenous fauna.

Although all plans contain provision for the management of biodiversity a minority (only eight out of the 25 selected) actually define what biodiversity means and what it covers in the interpretation section of their plans. Of the eight plans that do have definitions, they are varied.

2.2.2.4 Regulatory mechanisms to manage biodiversity

Table 7 outlines the number of plans that used regulatory mechanisms directly in their rules to manage biodiversity. The Regional Policy Statements are not captured within this table as they are not required to provide rules for the management of biodiversity. The Regional Air Plans that were assessed also did not have rules that were relevant to managing biodiversity. The column called "biodiversity used in rules" captures where the term "biodiversity" is used directly in the wording of the rule. The next line outlines where the term "biodiversity" is used as a matter or discretion or in the list of assessment criteria.

Table 7 - Regulatory Mechanisms for managing biodiversity

Regulatory Mechanism	RPS	Unitary	Regional Plan	District Plan	Total
The term "Biodiversity" used in Rules?	N/A	0	2	0	2
The term "Biodiversity" in assessment criteria, matters of control or discretion?	N/A	0	4	7	11
The term "Biodiversity" not used at all	N/A	3	4	3	10

The term 'biodiversity' is not widely used in the rules of regional and district plans. However, there is an array of other terms used interchangeably with biodiversity that aim to achieve the same outcomes as if the word 'biodiversity' was used. Examples of these activity terms include:

- Removal of indigenous vegetation
- Management and protection of indigenous species
- Management of indigenous flora and fauna
- Modification of regionally significant wetlands
- Restoration of significant wetlands
- Limiting vegetation removal within five metres of a waterbody
- Planting of vegetation for the purpose of edge protection and aquatic habitat.

Although there are no District Plans that have 'biodiversity' specifically mentioned in the rules, 'biodiversity' is managed through either matters of control/discretion or through the assessment criteria. An example of this approach are outlined below:

> *Far North District Plan 2015 - Chapter 12 - Natural and Physical Resources*
>
> *"The matters set out in s104 and s105, and in Part II of the Act, apply to the consideration of all resource consents for land use activities. In addition to these matters, the Council shall also apply the relevant assessment matters set out below:*
> *…*
> *(c) the potential effects on the **biodiversity** and life supporting capacity of the area;"*

The two regional plans and their associated rules which directly refer to 'biodiversity' are outlined below

- GWRC Proposed Natural Resources Plan 2015 - Rule 106
  - Rule allows for the restoration of the indigenous biodiversity values of significant wetlands identified in Schedule 3 - Outstanding wetland, so long as the works are carried out in accordance with a restoration management plan (Controlled Activity)
- Proposed Southland Land and Water Plan - Rules 14, 25, 74
  - Rule 14 manages the discharges from fertilizer as a permitted activity so long as the fertiliser is not directly discharged within 10 metres of the bed or within 10 metres of a wetland boundary or any identified biodiversity site

- Rule 25 manages cultivation on sloping ground as a restricted discretionary activity with the council restricting their discretion to the risks to biodiversity and water quality and mitigation measures for reducing those risks
- Rule 74 manages the use and modification of a wetland as a permitted activity so long as the modification does not result in any establishment of pest species that many damage the existing biodiversity values of the wetland.

The rest of the regional plans refer to biodiversity (or biodiversity related matters such as indigenous vegetation removal) within the matters of control or discretion.

2.2.2.5 Non-regulatory mechanisms used to manage biodiversity

Non-regulatory approaches were more widely used by Councils to manage biodiversity than regulatory approaches. The different types of non-regulatory approaches used; the number of times used throughout the plan, and an example are outlined in Table 8 below:

Table 8 - Non-Regulatory Mechanisms for managing biodiversity within Plans

Type of non-regulatory approach used	Times used within Plans	Example
Incentives	5	Whanganui District Plan Change 40 - 2016 24.6.20 *"…provide free assistance to owners of protected tree inventory items in preparation of maintenance or conservation plans when required"*
Funding	2	Greater Wellington Proposed Natural Resources Plan 2015 - Method 20 *"Wellington Regional Council will work in partnership with mana whenua, land owners and territorial authorities and the community to…(d) provide incentives to land owners such as assistance with the costs of riparian and wetland fencing and pest control, and (e) encourage and assist with legal protection of wetlands through covenants with QEII National Trust and DoC and Nga Whenua Rahui"*
Covenant	3	Bay of Plenty Regional Policy Statement 2014 - Method 49 *"To improve biodiversity values of open spaces, reserves and other open spaces, land should be acquired to be protected by covenant and then managed to improve biodiversity values…"*
Research	2	Gisborne District Plan Section 4.5.4 Methods of implementation-. *"Identify areas within the District which are voluntarily protected in a manner ensuring the long-term protection of natural heritage values contained within them. Propose inclusion of these areas in the Urban and Rural Planning Maps as Formally Protected Areas (FPAs) for information purposes only"*
Purchase of land	2	Proposed Marlborough Environment Plan 2016 8.M.12 *"The Council may consider acquiring sites with outstanding ecological values where land purchase is the only means available for protection of values and that land is available for purchase. The Councils will also encourage other agencies to do this."*
Keeping of databases	5	Far North District Plan 2015 *"Voluntary protection areas of significant indigenous vegetation and habitat: establish a significant natural areas committee with iwi, land owners and council to manage resource issues; establish a database of indigenous vegetation*
Advocacy	5	Gisborne District Plan Section 4.5 Methods of implementation - *4.5.1.1.* *"Encourage awareness of natural heritage values and sustainable management through a programme of:*

Type of non-regulatory approach used	Times used within Plans	Example
		a) Individual property advice, including information on significant geological features in the District; *b) Promoting co-operation with and between landowners, users, iwi and runanga and other organisations with statutory responsibilities for resource management to advance the integrated management of natural resources;* *c) Supporting programmes of other organisations…"*
Education/ increasing knowledge	7	Proposed Opotiki District Plan 2016 "*Raise Public Awareness"*
Landowner and stakeholder involvement	8	Far North District Plan 2015 *"Voluntary protection areas of significant indigenous vegetation and habitat: establish a significant natural areas committee with iwi, land owners and council to manage resource issues; establish a database of indigenous vegetation"* Proposed Marlborough Environment Plan 2016 8.M.3 "Marlborough Significant Natural Areas Programme… involves the collection of information about natural ecosystems on private land, with the aim of working with land owners to protect significant sites…"
Iwi Involvement	6	Proposed Gisborne Freshwater Plan 2016 *"Method 3.4 Iwi and hapu, community and landowner input to identifying outstanding and regionally significant waterbodies.* *Method 3.5 Iwi, landowners, communities and water user groups working with council on specific actions to improve water quality."*
Engagement of volunteers	6	Greater Wellington regional Policy Statement 2013 Method 53 *"Support community restoration initiatives for the coastal environment, rivers, lakes and wetlands"*
Use of Management Plans/Policies	10	Draft Northland Regional Combined Plan Wastewater network management plan, storm water management plan, drainage district management plan.

One of the more common non-regulatory approach is for Councils to work with private land owners to identify the level of biodiversity that is within sites in private ownership. The Proposed Southland District Plan 2012 uses this approach through a programme called the "High Value Area Programme (HVAP)". This provides opportunity for private land owners to request (voluntarily) an ecological assessment of the indigenous flora and fauna on their properties[14]. This is so that the Territorial Authority can have a better understanding of the biodiversity values within their jurisdiction. This approach is teamed with a regulatory approach through the district wide rules that ensure that the significance of indigenous vegetation and habitats of indigenous fauna are assessed if clearance or modification is proposed through a resource consent.

The keeping of databases as a non-regulatory method was suggested in the 2007 Ministry for the Environment "Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land" which encouraged councils to collect information from private land owners who may have significant biodiversity sites on their property. This strategy then suggested that Councils could provide incentives to the land owner

[14] Proposed Southland District Plan 2012 - Chapter 2.1

to protect these areas as well as list them in the district plan to raise awareness and increase their protection within the Plan framework.

2.2.2.6 Monitoring

Table 9 outlines the range of different monitoring types used within the plans assessed. Over a quarter of the plans assessed simply contained the basic monitoring provisions in accordance with Section 35 of the RMA, while just under a quarter of all the plans did not contain any biodiversity specific monitoring. Six plans contained their monitoring provisions within the Policies of the Plans. Some plans contained both General Section 35 Monitoring Provisions alongside other provision. Where a plan contains more than one type of monitoring, it has been captured twice in the graph below:

Table 9 - Biodiversity Monitoring Requirements

Monitoring	Nº of times in plans
No specific biodiversity monitoring	12
General Section 35 (RMA) Monitoring	13
Monitoring included in Objectives	3
Monitoring included in Policies	7
Monitoring included in the Methods	4
Monitoring in the Rules	3
Council Run Monitoring strategies	6
Monitoring included in Regional Policy Statement	2

Table 10 below outlines which plans contained biodiversity specific monitoring. This table shows that only four of the plans that contain clear objective and policy direction, contain methods that also aim to address specific biodiversity monitoring.

Of the plans that do not contain specific biodiversity monitoring, some forms of monitoring regarding biodiversity are indirectly managed through other methods such as Section 35 of the RMA. Under Section 35 of the RMA 1991, each local authority is required to gather information and undertake research to effectively carry out its functions under the RMA. This monitoring includes the "state of the whole or any part of the environment[15]." Every five years, the Council must produce a "State of the Environment Report" which includes monitoring undertaken under the requirements of this section of the Act.

Six plans also contained council run monitoring programmes. An example of such a programme is the "Significant Natural Areas Programme" referred to in the Proposed Marlborough Environment Plan. Using this programme to monitor the condition or habitats and ecosystems is listed within the Proposed Plan as a Method (8.M.5) It states that the Council "*will use this baseline monitoring to provide a bench mark for determining the ongoing condition of habitats, ecosystems and areas that have significant indigenous biodiversity values as well as use the resource consent process to monitor the effects of an activity on marine biology in particular*.[16]"

[15] Section 35(1) of the resource Management Act 1991

[16] Proposed Marlborough Environment Plan 2016, Page 8-14

Table 10 -Plans that contained objectives and policies relating to biodiversity monitoring requirements

Plan	Example of Biodiversity Specific Monitoring
Far North District Council 2015	No specific mention of "biodiversity" in the District Plan monitoring provisions
Auckland Unitary plan RPS - Decision version 2016	General monitoring of non-compliances under Section 35 of the RMA
Auckland Unitary Plan Decision version 2016	Monitoring under the Regional Policy Statement No specific mention of "biodiversity" in the District Plan monitoring provisions
Proposed Opotiki District Plan 2016	General monitoring of non-compliances under Section 35 of the RMA
Horizons One Plan	Monitoring under the Regional Policy Statement General monitoring of non-compliances under Section 35 of the RMA
GWRC RPS 2013	General monitoring of non-compliances under Section 35 of the RMA
GWRC Proposed Natural Resource Plan 2015	Policy 8 Beneficial Activities - provides for structures for the purpose of undertaking state of the environment reporting and monitoring in the Coastal marine. Various mentions of undertaking water quality monitoring within Policies Specific reference to biodiversity (offset) monitoring is contained in "*Schedule G: Principles to be applied when proposing and considering mitigation and offsetting in relation to biodiversity*"- 5. *"Long-term outcomes* *Any proposals for mitigation or **biodiversity offset** should be based on an adaptive management approach, incorporating **monitoring** and evaluation, with the objective of securing outcomes that last at least as long as the activity's impacts, and preferably in perpetuity. The proposed mitigation or biodiversity offset will:* *(a) demonstrate that management arrangements, legal arrangements (e.g. covenants) and financial arrangements (e.g. bonds) are in place that allow the positive effects to endure as long as the adverse effects of the activity, and preferably in perpetuity, and* *(b) be able to be implemented and enforced in line with any resource consent conditions associated with the activity. These conditions should include:* *i. specific, measurable and time-bound targets, and ii. mechanisms for adaptive management using the results of periodic monitoring and evaluation against identified milestones to determine whether the mitigation or biodiversity offset is on track and how to rectify if necessary* *(c) establish roles and responsibilities for managing, governing, monitoring and enforcing the mitigation or biodiversity offset, and* *(d) undertake methods by which analysis will identify when milestones of the mitigation or biodiversity offset are not achieved, and the causes of non-achievement, and how to revise the mitigation or offset management plan to avoid similar occurrences."*
Proposed Kapiti District Plan 2012	Monitoring through Policies Section 3.2 Ecology and Biodiversity: "*Monitoring of levels of biodiversity in the District will be undertaken through:*

Plan	Example of Biodiversity Specific Monitoring
	a) periodic monitoring of the District's indigenous vegetation and habitats of indigenous fauna by desktop methods including aerial photography analysis, and site inspections; *b) monitoring of compliance with resource consent conditions affecting the District's indigenous vegetation and habitats of indigenous fauna;* *c) complementing monitoring work undertaken by other relevant authorities or suitably qualified persons on the state of the environment in the Kāpiti Coast District;* *d) reviewing District Plan policies in response to development pressures, expressed community outcomes and environmental changes which may reduce the policies' effectiveness;* *e) requiring that data for monitoring purposes is collected and analysed in a scientifically defensible manner; and* *f) including monitoring and review conditions on resource consents where required for base level and performance monitoring and to implement adaptive management if unanticipated effects occur."*
Proposed Marlborough Environment Plan 2016	General monitoring of non-compliances under Section 35 of the RMA Monitoring through implementation of Policy 8.2.8 within "Indigenous Biodiversity Chapter" *"Policy 8.2.8 – Where monitoring of ecosystems, habitats and areas with significant indigenous biodiversity value shows that there is a loss of or deterioration in condition of these sites, then the Marlborough District Council will review the approach to protection.* *Explanation - Ongoing monitoring of the condition of sites with significant indigenous biodiversity value will be necessary to determine if the methods in the MEP are helping to improve the overall condition of significant indigenous biodiversity in Marlborough. Where state of the environment monitoring shows a loss of or deterioration in the condition of significant sites as a result of the voluntary approach to protection, then the Council will review the voluntary approach to determine whether increased use of regulation should be pursued. Any changes to the MEP as a result of this review would only occur through the First Schedule process of the RMA."*
Canterbury Re 2013gional Policy Statement	General monitoring of non-compliances under Section 35 of the RMA
Christchurch Replacement Plan 2016	General monitoring of non-compliances under Section 35 of the RMA No specific mention of "biodiversity" in the District Plan monitoring provisions

2.2.3 Significance of Biodiversity covered in the Plan suite

This section outlines the criteria being used in each plan to define what makes a significant natural area or habitat in relation to biodiversity.

2.2.3.1 Criteria applied to define significant areas and natural habitat

Many plans used a range of criteria to determine or assess what sites within their districts or regions were "significant or outstanding" in terms of biodiversity. The larger the word in Figure 2 below, the more times it was used in the criteria throughout the plans assessed.

The New Zealand Biodiversity Strategy 2000 describes the principal criteria for New Zealand's protected network are:

- **Comprehensiveness:** The degree to which the full range of ecological communities and their biological diversity are incorporated within protected areas.
- **Representativeness**: The extent to which areas selected for inclusion in the protected area network are capable of reflecting the known biological diversity and ecological patterns and processes of the ecological community or ecosystem concerned, or the extent to which populations represent or exemplify the range of genetic diversity of a taxonomic unit.[17]"

Three examples of a policy that clearly outline the criteria used to assess whether or not a wetland, marine or terrestrial ecosystem, habitats or other areas have significant indigenous biodiversity values is outlined in the boxes below:

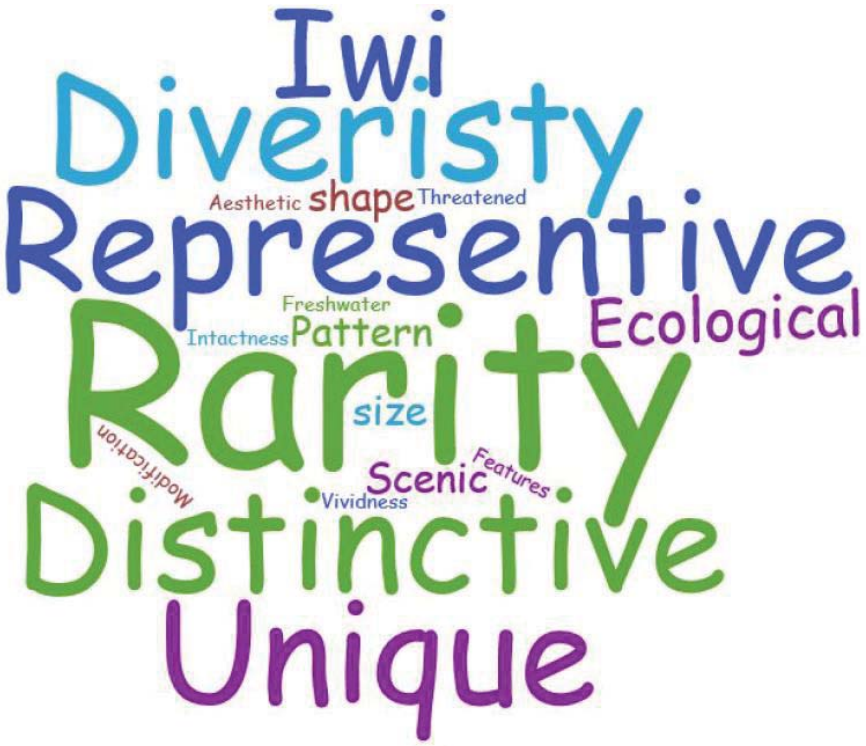


Figure 2 - Word cloud using commonly used criteria to define significant natural areas

It is unclear in the plans assessed as to what guidance has been given to include the more common terms of rarity, distinctiveness, uniqueness and diversity into the criteria for assessing whether or not a natural feature is described as significant or outstanding. There is likely to be a significant amount of case law on this issue that may add value to this statement.

[17] Definition of Protected Area Network in the New Zealand biodiversity Strategy 2000.

Proposed Marlborough Environment Plan

'Identification of sites, areas and habitats with significant indigenous biodiversity value'

Policy 8.1.1 – When assessing whether wetlands, marine or terrestrial ecosystems, habitats and areas have significant indigenous biodiversity value, the following criteria will be used:

(a) representativeness;
(b) rarity;
(c) diversity and pattern;
(d) distinctiveness;
(e) size and shape;
(f) connectivity/ecological context;
(g) sustainability; and
(h) adjacent catchment modifications.

For a site to be considered significant, one of the first four criteria (representativeness, rarity, diversity and pattern or distinctiveness/special ecological characteristics) must rank medium or high.

To determine whether a site is significant for the purposes of Section 6(c) of the RMA, an assessment needs to be made by the Council or others against consistently applied criteria. The criteria identified in this policy (further explained in Appendix 3 - Ecological Significance Criteria for terrestrial wetlands and coastal environments), have been used by the Council previously to identify and encourage opportunities for the conservation of natural features on private land in Marlborough and will enable assessments to be made in the future where none have occurred to date. The same criteria have also been used in identifying wetlands of significance in Marlborough and in identifying areas in the coastal marine area with significant indigenous biodiversity value."

Proposed Opotiki District Plan

Natural Heritage Policy 1.3

"To identify indigenous vegetation and habitats in the District that are significant for their ecological and amenity values. In determining their significance the following matters will be considered:

(i) Representativeness.
(ii) Diversity and pattern.
(iii) Naturalness/intactness.
(iv) Rarity and distinctiveness.
(v) Long term viability.
(vi) Buffering and connectivity.
(vii) Importance for breeding, feeding, roosting, or loafing areas for indigenous fauna on a regular or annual basis."

Proposed Kapiti Coast District Plan 2012

Ecology and Biodiversity - Policy 3.11 Criteria for identification of significant biodiversity

"Significant indigenous vegetation and significant habitats of indigenous fauna in the District will be identified, using the following criteria:

a) Representativeness: high representativeness values are given to particular ecosystems and habitats that were once typical and commonplace in a district or in the region, and:
- i. are no longer commonplace (less than about 30% remaining); or
- ii. are poorly represented in existing protected areas (less than about 20% legally protected).

b) Rarity: the ecosystem or habitat has biological physical features that are scarce or threatened in a local, regional or national context. This can include individual species, rare and distinctive biological communities and physical features that are unusual or rare and also species that are endemic to the local ecological district.
c) Diversity: the ecosystem or habitat has a natural diversity of ecological units, ecosystems, species and physical features within an area.
d) Distinctiveness: the ecosystem, habitat or species contains a large/dense population of viable species or is largely in its natural state or restorable, or is an uninterrupted ecological sequence, or contains significant land forms.
e) Continuity and linkage within landscape: provides significant indigenous vegetation and significant habitats of indigenous fauna, or has potential to provide, corridor/buffer zone to an existing area.
f) Landscape integrity: the ecosystem, habitat or species is significant to the original character of the landscape, blends in, or has a role in landscape protection.
g) Ecological context of an area: the ecosystem or habitat:
- i. enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats;
- ii. provides seasonal or core habitat for protected or threatened indigenous species;
- iii. has the ability to be restored (when the difficulty, cost and time of restoration are considered).

h) Tāngata whenua values: the ecosystem or habitat contains characteristics of special spiritual, historical or cultural significance to tāngata whenua, identified in accordance with tikanga Māori, which may include factors such as:
- i. traditionally important for Māori;
- ii. recreational values;
- iii. significant landscape value;
- iv. protection of soil values;
- v. water catchment protection;
- vi. recreation or tourism importance;
- vii. aesthetic coherence.

i) Sustainability and resilience: the feature and its contribution to the wider natural environment has potential for long term viability based on:
- i. size and shape of area;
- ii. activities occurring on the boundaries which may affect its sustainability;
- iii. proximity to another protected area; iv. linkages (actual or potential) with other ecosystems, habitat or species; or v. ease of management."

2.2.3.2 The extent to which plans categorise 'Significance'

The table below outlines the categories used to describe sites of 'significance.' These categories indirectly cover matters in relation to biodiversity. Plans that use more than one category to categorise 'significant' are scored more than once in the table below.

Table 11 - Labels of different ways biologically significant habitats are categorised

Categories used*	Number
Outstanding Natural Landscapes	14
Outstanding Natural Features	8
Rare/Threatened Habitat	5
Outstanding Natural; Character	4
Significant Ecological Areas	4
Indigenous Ecosystems and Habitats	4
Management Areas	4
High Natural Character	3
Outstanding Water bodies	2
Regionally Significant Wetlands	2
Protected Watercourses	2
Ecosystems and habitats with significant indigenous biodiversity values	1
Very High Natural Character	1
Outstanding Indigenous Biodiversity Values	1
High Priority Water bodies	1
Watercourses of Ecological Value	1
Migration Paths	1

*Categories Used (Multiple similar categorises in singular plans counted as 1)

As clearly shown in the table above, there is a vast range of different methods for categorising sites of biological significance. There is no clear, consistent way of defining or categorising sites of biological significance or importance across the plan suite.

All the plans (with the exception of the Air Plans) contain at least one significance category, with the majority of plans having two or three different categorisations of significance. The most common categorisation is "Outstanding Natural Landscapes" as shown in the table above. The Proposed Greater Wellington Natural Resources Plan contains six different categories of significance which range from listing "*ecosystems with significant indigenous biodiversity values"* to "*sites with significant mana whenua values."* On face value, there does not seem to be any reasoning for the use of a range of different categorisation throughout the plan suite, however, it is likely that the differences are driven by the effects that the rules are aiming to manage on different types of significant ecosystems and biodiversity areas within each region.

2.2.3.3 The extent to which rules and consent approaches differ across the plan suite

There is a large variation in the thresholds that Councils use to manage activities that have a biodiversity outcome. For example,

- The AUP has different activity based thresholds for vegetation clearance in significant ecological areas. For example, The blanket rule for all zones, Rule E15 (A10), states that "*Vegetation alteration or removal, including cumulative removal on a site over a 10 year period, of greater that 250m^2 of indigenous vegetation that (a) is a contiguous vegetation on a site or existing site on the 30th of September 2013, and (b) is outside the rural urban boundary"* is a Restricted Discretionary Activity.

- The Christchurch Replacement Plan 2016 states that if you are any clearing vegetation within a significant natural area, the activity triggers a discretionary activity (with the exception of track clearance and pest eradication).
- The Proposed Kapiti District Plan states that if you are clearing indigenous vegetation within an ecological site of larger than 100m^2, than the activity is automatically a Restricted Discretionary Activity.
- The Queenstown Lakes Proposed District Plan states that the permitted standard for the clearance of indigenous vegetation is a maximum area of 50m^2 within significant natural areas identified in the plan. Any clearance of vegetation above 50m^2 is a Discretionary activity.

There is a vast range of ways that councils aim to manage activities to take into account the potential effects on biodiversity. Including using different zoning, different consent triggers and different area thresholds. This level of data was difficult to capture in a way where comparisons are able to be made due to the structuring and formatting of the rules and the variation in activities that the rules aim to cover. As these examples show, the area of indigenous vegetation clearance in different regions that triggers different consents is varied. There is no reasoning noted in the plans as to why the Auckland Plan choses to use a threshold of 250m^2 and why Kapiti uses 100m^2 to trigger a restricted discretionary consent.

2.2.3.4 The extent to which plans make provision for biodiversity that is not significant

All of the plans assessed (with the exception of the Air Plans) made provision for biodiversity that was not identified as significant. Rules that aimed to manage not significant biodiversity included, but was not limited to, tree protection provisions, setback provisions for earthworks around water bodies and wetlands and the trimming of vegetation. Again, the rules that addressed non-significant biodiversity were vast and varied across the plan suite.

2.3 Analysis

The aim of this section is to provide analysis on the four statements below which outline the objectives of this research:

- whether the similarities or differences are driven by policy (national, regional or local),
- the level of detail covered in plans in relation to biodiversity; and
- the level of significance of biodiversity covered; and
- any noticeable trends that differ from the research undertaken by the Ministry to date.

An analysis of the following topics is undertaken within the following sections.

2.3.1 Policy Direction

This section looks at the different policy direction local and regional authorities have received for addressing biodiversity and how this has shaped existing policy.

As an opening comment, rather than policy direction it was more apparent that how each of the plans was structured largely determine whether or not there is a specific chapter on “Biodiversity.” Eight plans contained a specific chapter on biodiversity. These eight chapters were largely “topic” based plan structures which contained all the objectives and policies (and in some cases rules) within one chapter. This resulted in plans such as the GWRC Proposed Natural Resources Plan which groups the objectives in one chapter and the policies in another chapter being excluded from this group. In the GWRC Proposed Natural Resources Plan, there are specific objectives and policies on biodiversity, but not under a specific biodiversity chapter heading.

2.3.1.1 Direction from National Policy Statements (NPS)

There is currently no operative NPS for biodiversity, although the development of other NPSs, such as the NPS for Freshwater Management and New Zealand Coastal Policy Statement (NZCPS), has seen regional and local authorities develop policy that addresses biodiversity as a by-product of having to give effect to these documents.

Policy 11 of the NZCPS specifically addresses indigenous biological diversity and sets national direction on protecting biodiversity in the coastal environment – which regional and district councils must give effects to. Policy 11 of the NZCPS specifically states that:

> *"To protect indigenous biological diversity in the coastal environment:*
>
> *a.avoid adverse effects of activities on:*
>
> *i. indigenous taxa[4] that are listed as threatened[5] or at risk in the New Zealand Threat Classification System lists;*
> *ii. taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;*
> *iii. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare[6];*
> *iv .habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;*
> *v. areas containing nationally significant examples of indigenous community types; and*
> *vi .areas set aside for full or partial protection of indigenous biological diversity under other legislation; and*
>
> *b. avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on:*
>
> *i. areas of predominantly indigenous vegetation in the coastal environment;*
> *ii. habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;*
> *iii. indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;*
> *iv .habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;*
> *v. habitats, including areas and routes, important to migratory species; and*
> *vi. ecological corridors, and areas important for linking or maintaining biological values identified under this policy"*

Policies 13 and 14 of the NZCPS relate to protecting and restoring natural character, features and landscapes of the coastal environment. These policies also have indirect outcomes for improving the biodiversity within the coastal environment without making specific reference to the term 'biodiversity.' As described in the results section above natural character, features and landscape are all phrases which are used to cover biodiversity related aspects at a regional and district authority level and therefore Policies 11, 13 and 14 of the NZCPS provide indirect national direction to protect and restore aspects of biodiversity.

2.3.1.2 Direction from Regional Policy Statements

Regional Policy Statements (RPSs) set policy direction at a regional level and must give effect to NPSs. Regional and District plans must give effect to the policy direction set by RPSs. There is variation across the country in how RPSs set policy direction to address biodiversity. This ranges from RPSs containing clear

objectives and policies on biodiversity, such as Objective 16 of the Greater Wellington Regional Policy Statement, to delegating responsibilities to different authorities such as Policy IR8C of the Bay of Plenty Regional Policy Statement – both shown in Table 12.

Table 12: Direction from Regional Policy Statements

GWRC Regional Policy Statement	BOP Regional Policy Statement
Objective 16 *'Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state'*	**Policy IR8C** *Local authorities shall specify objectives, policies and methods (including rules), for the control of the use of land to maintain indigenous biodiversity as follows:* *(a) The Bay of Plenty Regional Council shall be responsible for specifying objectives, policies, and methods in the Regional Policy Statement;* *(b) City and district councils shall be responsible for specifying in their district plans objectives, policies, and methods (including rules) for the control of the use of land, excluding land within the coastal marine area, to maintain indigenous biodiversity; and* *(c) The Bay of Plenty Regional Council shall be responsible for specifying in regional plans objectives, policies and methods (including rules) for the control of the use of land within the coastal marine area and freshwater bodies to maintain indigenous biodiversity*

In Table 12 the GWRC example directs that regional plans must give effect to Objective 16 and provides policy direction to address biodiversity. The BOP example above directs that regional plans address biodiversity in the coastal marine area and within freshwater bodies, and district councils to control land use (including the land area in the coastal environment) in order to maintain biodiversity. This reflects the different functions of the respective councils under the RMA.

In contrast the GWRC RPS 2013 gives direction to both the Regional and District Councils as to how they should give effect to indigenous ecosystems with significant biodiversity values. Table 13 below shows an example of clear direction from the RPS and how this direction utilised through the GWRC Proposed Natural Resources Plan and the Proposed Kapiti Coast District Plan (KCDC).

The GWRC RPS gives very broad direction in Objective 16 and Policy 23 which directs regional plans to both identify and protect *'habitats with significant indigenous biodiversity values.'* Policy 40 of the Proposed Natural Resources Plan (PNRP) lists out Schedules of *identified 'indigenous ecosystems and habitats with significant indigenous biodiversity values'* – which gives effect to Policy 23 of the GWRC RPS, and Objective 35 along with Policy 23 sets the direction for ecosystems and habitats with significant indigenous biodiversity values to be *'protected and restored'*, including significant natural wetlands and lakes and rivers.

The KCDC District Plan has identified that one way they can give effect to the direction of protecting significant wetlands, lakes and rivers is to provide policy and rules around protecting significant indigenous vegetation and significant habitats of indigenous fauna, including aquatic ecosystems, from subdivision effects. This is a good example of a district council implementing the direction from the RPS.

Table 13: Example of progression from RPS direction, through to regional plan, then to district plan (note that the GWRC Natural Resources Regional Plan and KCDC District Plan are in their proposed stages and the provisions will be subject to change through the hearings process).

	GWRC Regional Policy Statement	GWRC Natural Resources Regional Plan	KCDC District Plan
Objective	**Objective 16** Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state	**Objective 35**: **Sites with significant values** Ecosystems and habitats with significant indigenous biodiversity values are protected and restored.	**Objective 2.2 - Ecology and Biodiversity** To improve indigenous biological diversity and ecological resilience through the: a) protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna; b) restoration of the ecological integrity of important degraded environments and habitats; c) enhancement of the health of terrestrial and aquatic ecosystems; and d) enhancement of the mauri of waterbodies.
Policy	**Policy 23** Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values – district and regional plans	**Policy 40: Ecosystems and habitats with significant indigenous biodiversity values** Protect and restore the following ecosystems and habitats with significant indigenous biodiversity values: (a) the rivers and lakes with significant indigenous ecosystems identified in Schedule F1 (rivers/lakes), and (b) the habitats for indigenous birds identified in Schedule F2 (bird habitats), and (c) significant natural wetlands, including the significant natural wetlands identified in Schedule F3 (significant wetlands), and (d) the ecosystems and habitat-types with significant indigenous biodiversity values in the coastal marine area identified in Schedule F4 (coastal sites) and Schedule F5 (coastal habitats).	**Policy 3.12 - Management approach to biodiversity protection** Adverse effects from subdivision, use and development on significant indigenous vegetation and significant habitats of indigenous fauna including aquatic ecosystems will be minimised, including by: a) avoiding the removal or significant modification of any significant locally indigenous vegetation, in particular avoiding disturbance of all indigenous vegetation within ecological sites; b) managing land use activities resulting in increased sediment and contaminant levels of surface water, including storm water, to reduce the likelihood of aquatic ecosystems being detrimentally affected; c) creating and maintaining appropriate buffer zones around and linkages between, areas of significant indigenous vegetation, significant habitats of indigenous fauna and around aquatic ecosystems to ensure that wider ecological processes are considered when making decisions about significant sites; and d) preventing the introduction or spread of exotic weed species and pest animals (both terrestrial and aquatic).
Methods/ Rules	**Method 1:** District plan implementation **Method 2:** Regional plan implementation **Method 21**: Information to assist with the identification of indigenous ecosystems and habitats with significant biodiversity values	**Rule 106 - Restoration of natural wetlands, significant natural wetlands and outstanding wetlands -** controlled Activities for the purpose of restoring the indigenous biodiversity of a natural wetland, significant natural wetland or outstanding wetland (identified in schedule A3)...are controlled activities providing that they meet the following conditions: (a) Activities are stipulated in and carried out in accordance with an approved restoration management plan Matters of control 1. Removal, damage and modification of indigenous vegetation 2. Changes to the hydrology 3. Species for planting 4. Amount of disturbance and deposition that may occur 5. Timing of activities 6. Management of sites with significant mana whenua values 7. Livestock access to the wetland	**Rule 3A.3.3 Restricted Discretionary** Subdivision of land containing significant or locally indigenous vegetation or significant habitats of indigenous fauna. 1. Any significant or locally indigenous vegetation and significant habitats of indigenous fauna must be identified on a site before subdivision, and if the site contains any of these features, the following will apply: a) Sites or areas of significant indigenous vegetation and significant habitats of indigenous fauna shall be identified on site plans. … Matters that the council will restrict its discretion to: 1. The type of protection, including: a) permanency of the mechanism for legal protection (e.g. covenant or consent notice under s.221 RMA);

	GWRC Regional Policy Statement	GWRC Natural Resources Regional Plan	KCDC District Plan
		8. Ongoing natural wetland management **Biodiversity - Method 20: Wetlands** Wellington Regional Council will work in partnership with Mana whenua landowners, territorial authorities and the community to: (a) Promote the value of wetlands and advocate for their management, restoration and protection (b) Provide guidance to landowners with wetlands on their property to assist with the management of those wetlands (c) Develop and implements restoration management plans for landowners with outstanding wetlands and significant wetlands (d) Provide incentives to landowners, such as assistance with the costs of riparian and wetland fencing, planting and pest control (e) Encourage and assist with the legal protection of wetlands through covenanting with QEII National Trust, DoC and Nga Whenua Rahui	b) suitability of fencing or alternation exclusion methods; c) the extent to which the biodiversity value(s) of any significant indigenous vegetation and significant habitats of indigenous fauna is enhanced; and d) the location and design of buildings and access(es).

2.3.1.3 Direction from other strategies

Non-statutory policy directions and strategies were referred to within the suite of plans. One example of this is the Proposed Southland District Plan (PSDP) 2012, where Policy BIO.1 gives effect to "*The Ministry for the Environment and Department of Conservation Statement of National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land 2007.*[18]" The national priorities listed are:

- **National Priority 1:** To protect indigenous vegetation associated with land environments, (defined by Land Environments of New Zealand at Level IV), that have 20% or less remaining in indigenous cover.
- **National Priority 2:** To protect indigenous vegetation associated with sand dunes and wetlands, ecosystem types that have become uncommon due to human activity.
- **National Priority 3:** To protect indigenous vegetation associated with 'originally rare' terrestrial ecosystem types not already covered by Priorities 1 and 2.
- **National Priority 4:** To protect habitats of acutely and chronically threatened indigenous species.

Both Forest and Bird and the Department of Conservation have appealed Policy BIO.1 under the PSDP, which states:

> *'Protect ecosystems which support significant indigenous vegetation and significant habitats of indigenous fauna.'*

The explanation of proposed policy BIO.1 of the Proposed Southland District Plan states that "careful consideration must be given to activities where adverse effects on biodiversity cannot be avoided or

[18] Proposed Southland District Plan 2012 - Chapter 2.1

appropriately mitigation[19]", such activities include earthworks, vegetation clearance, wetland drainage, stormwater runoff and grazing of stock. As stated in the Forest and Bird Appeal, the grounds for the appeal are that the policy fails to capture the full intent of the *"Statement of National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land.[20]"* simply because it does not address protecting rare and threatened native biodiversity on private land – which is the intent of the national priorities.

2.3.2 Level of detail covered in plans in relation to biodiversity

This section discusses how biodiversity is covered within the plan suite.

2.3.2.1 Chapters on Biodiversity

Eight Plans assessed had a specific chapter on Biodiversity. Nine of the 17 plans that did not have a chapter on biodiversity, had both objectives and policies that contained the term biodiversity. This clearly shows that although some of the plans did not contain a specific chapter heading termed "biodiversity," plans still contained objectives and policies that aimed to manage biodiversity within their regions. Northland Regional Combined Plan 2016 for example did not have a specific chapter, but had policies that aimed to *"manage the effects of activities by avoiding adverse effects on the characteristics of indigenous biodiversity…" (Policy D.2.3).* This may be due to the layout of the plan structure. If all policies and objectives are grouped together in chapters rather that separated out under topics, it may be unclear to the plan user as to which objectives and policies are relevant to biodiversity.

By Contrast, the Proposed Southland District Plan 2012 contained a chapter termed "biodiversity" but did not contain specific references to the term "biodiversity" within the objectives and policies.

The fact that more councils are including biodiversity specific chapters within their plans gives an indication that the management of biodiversity is becoming more of a focus for Councils.

2.3.2.2 Coverage of non-indigenous biodiversity

All of the plans contained provision to manage non-significant or non-outstanding biodiversity through a range of regulatory and non-regulatory mechanisms including:

- Raising awareness of the significance of indigenous wetlands through education
- Management plans
- Rules that managed activities such as
  - Earthworks within 20m buffers of streams and wetlands
  - Vegetation clearance (blanket rules).

2.3.2.3 Regulatory and non-regulatory methods

The results show that plans more commonly use non-regulatory mechanisms to manage biodiversity with only two regional plans that contain rules that use the term "biodiversity" within the rules. Another common place to reference biodiversity in a regulatory sense was through the matters of control/discretion or through the assessment criteria. This approach was more common in district plans. This issue with the prominence of the use of non-regulatory mechanisms is that there is no guarantee that these methods will be applied.

---

[19] Proposed Southland District Plan 2012 - Policy BIO.1

[20] Appeal Lodged by Forest and Bird

Voluntary mechanisms have value in increasing awareness of the significance of biodiversity, but have no legally binding actions associated with them for applicants as a part of the resource consent process.

2.3.2.4 Monitoring

The results from the monitoring section show that while some plans are strong in providing both objectives and policies to directly address biodiversity, the flow through to other levels of management within the plan such as rules and monitoring provisions is relatively weak. This may be due to the vast coverage of the matters considered under the banner of "biodiversity."

2.3.3 Significance of the biodiversity covered in the plan suite

The most common words used as criteria to determine if a site is of biodiversity significance are:

- Rarity;
- Diversity;
- Ecology;
- Distinctiveness;
- Representativeness; and
- Naturalness.

There is a wide range of additional criteria used to assess the significance of biodiversity.

2.3.4 Comparison with past research

Table 14 provides a comparison between the research findings of this report and previous reports and research undertaken on biodiversity.

Table 14 - Comparison of findings with findings of past reports

Past Research Findings	Emerging trends
Ministry for the Environment (2004) A snapshot of Councils effort to address indigenous biodiversity on private land: A report back to Councils	As at November 2016
Most councils Support on the ground activities such as covenants, Landcare groups, education and advice to land owners; while also using regulation (controls)	There is variation across plans in how councils support on the ground activities using non-regulatory approaches.
Some district plans have comprehensive and detailed provisions for identification of significant sites and habitats. These provisions are backed up by a range of methods to protect the significant sites and habitats identified. Other District Plans, however, have minimal (or no) identification of sites and lack of adequate provision to ensure protection	The district plans that were assess within this research largely contained detailed provisions for identification of significant or outstanding sites. However, landscape and amenity values were often inextricably linked to biodiversity. A vast range of methods are still being used to manage biodiversity. Non-regulatory methods are more commonly used. However, many councils manage biodiversity without using the term "biodiversity." An example of this is district plans that aim to manage indigenous vegetation through their rules. This type of rule still seeks to achieve good biodiversity outcomes.
Most district plans fall into an intermediate level - neither particularly strong nor particularly lacking. A significant proportion of these contain general clearance rules but have no criteria for determining their significance.	This trend is changing. Many plans, including the two most recent plans, Proposed Marlborough Environment Plan 2016 and the Proposed Opotiki District Plan 2016 contain assessment criteria for assessing the significance of the biodiversity values.

Past Research Findings	Emerging trends
A key issue that emerged is the lack of good quality planning information on biodiversity across the country. Some areas are information rich, but others lack adequate information on biodiversity in their areas	This trend is still largely present today. However, there have been added non-regulatory monitoring initiatives including incentives for private landowners to manage their private wetlands. The Councils will provide funding for fencing and planting in return for protection and enhancement of the wetland for example. This wetland will then be identified on the Council Database. Education, iwi involvement and management plans are other non-regulatory methods of promoting biodiversity management.
It was noted that there was a wide range of variance in the instruments being used to enforce rules relating to significant biodiversity. The results show that while some councils have taken a regulatory approach to biodiversity preservation, others still favour a voluntary approach and do not enforce regulation.	This trend somewhat still remains. It is more common for councils to use and adopt non-regulatory approaches to directly manage biodiversity. However, in the more recent proposed plans, biodiversity is a much stronger theme. The term "biodiversity" is used sparingly, but other management terms such as significant vegetation or wetlands are used to indirectly manage biodiversity through regulatory means.
Ministry for the Environment (2010) District Plans and the Protection of biodiversity: An Update	As at November 2016
"80% of plans included criteria for identifying Significant Natural Areas	All the plans assessed with the exception of the Regional Air Plans contained criteria to identify Significant Natural Areas.
The most common criteria used to define "significant" were representativeness, diversity and pattern, rarity and special features, naturalness, long-term viability, size and shape, and buffering and surrounding landscape which was largely consistent with the 2004 research.	The most common criteria used to define "significant" in the plans assessed were rarity, representativeness, diversity, ecology, naturalness, and distinctiveness which is largely consistent with both the 2004 and 2010 findings.
Approximately a quarter of plans (19) differentiate between categories of significance; either through the assessment criteria, or in the schedule of sites.	This trend is largely consistent. There is a vast range of different ways that sites of significance are categorised, both through schedules and assessment criteria.
With regard to non-regulatory measures, the most common cited in plans are: education, advocacy (promoting protection mechanisms/techniques/contestable funds, etc), financial incentives/assistance (rates relief, funds for fencing, etc), and land acquisition or swaps.	There is a large number of different non-regulatory mechanisms used. The most common types of non-regulatory approaches used in the plans notified post 2010 were education, increasing awareness, management plans, iwi involvement. Land owner and stakeholder involvement, advocacy, incentives and the keeping of data bases. This is largely consistent with the 2010 research.
Eighty-four percent of plans (63) have rules targeted at the protection of significant areas (including wetlands and special ecological zones). Several plans state that the Council is in the process of developing rules specifically tailored to significant indigenous areas.	There was a theme of these more recent documents having a more direct approach to biodiversity by having objectives and/or policies that specifically use the term 'biodiversity' (20 of the 25 plans reviewed). Eight plans had a dedicated chapter on biodiversity. Broadly, 90% of plans have rules targeted at the protection of significant areas.
The majority of the plans (59) contain provisions targeting the protection of biodiversity outside s6(c) requirements. Such measures include: ■ General clearance controls; ■ Controls on pest species (e.g. planting trees); ■ Controls on certain activities, such as goat and deer farming; ■ Controls on earthworks; ■ Controls on riparian activities, etc	This is largely consistent within the District Plans assessed. It was common for activities such as earthworks and subdivision to have vegetation clearance and erosion and sediment control methods listed in the matters of discretion.

Past Research Findings	Emerging trends
Hill Young Cooper Report (2011)	As at November 2016
Councils would have to significantly change their plans to give effect to avoiding, remedying and mitigating to achieve a “no net loss outcome”	Yes, this is still the case. Non-regulatory approaches are more commonly used than regulatory approaches. To achieve a no net loss outcome, councils will have to ensure that their rules that aim to achieve biodiversity outcomes are aligned to achieve this goal. (although noting that this was the goal of the Draft NPS of Indigenous Biodiversity 2011)
There is a range of non-regulatory mechanisms used by councils to manage the removal of indigenous vegetation	Yes there continues to be a range of non-regulatory approaches listed in plans.
The plans reviewed were some-what inconsistent in the way they referred to tangata whenua values	An analysis of the effectiveness and efficiently of the rules that addressed tangata whenua values was not specifically undertaken as a part of this research.

2.4 Conclusion

Based on our observation, there is certainly opportunity to provide a more consistent and clear approach to biodiversity planning and management. Some useful areas of focus would be:

- The definition of biodiversity;
- Which plans need to cover which aspects of biodiversity;
- Consistent criteria for assessing what is considered significant biodiversity;
- Guidance as to how to separate ‘biodiversity values’ from ‘landscape values’ which are typically assessed using similar criteria;
- Regulatory guidance for rules;
- Non-regulatory guidance for methods; and
- Monitoring of biodiversity values.

In terms of emerging trends, and in comparison to the previous research undertaken, there was an observed theme of these more recent documents reviewed having a more direct approach to biodiversity by having objectives and/or policies that specifically use the term ‘biodiversity’ (20 of the 25 plans reviewed) and/or a dedicated chapter on biodiversity (8 of the plans reviewed).

Similar to the findings of previous research, the plan suite notified since 2010 had a range of approaches to biodiversity planning and management. Between these documents reviewed, there is no identifiable consistent approach to biodiversity planning and management across objectives; policies and regulatory and non-regulatory methods. The findings boxes presented in the Executive Summary provide a more detailed observation in relation to our findings.

3 Case Studies

The case studies undertaken by Wildlands, appended in full to this report (Appendix A-D) and summarised in this section, provide a more detailed look at the practicalities of implementing biodiversity management and planning. In particular, the use of regulatory and non-regulatory methods are explored in more detail in relation to specific locations of New Zealand - Canterbury; Kapiti Coast, Rotorua Lakes and South Waikato. Each of the case studies has a series of standard questions and answers summarised in the Executive Summary that provide a consistent commentary across the research.

The overall findings of these case studies supports the Stocktake findings in that there are a range of ways biodiversity management and planning is taking place across and within these different locations. These differences reflect the environmental and political pressures, and the history of use and development in each location. Solutions for biodiversity management need to be tailored to the environments and ecosystems present in each district and the particular land use pressures and communities present in each place. The observation across the case studies is that plans need rules to ensure that biodiversity values are protected, but should be supported by non-regulatory incentives to provide land owner and stakeholder engagement.

There is also a range of ways councils are engaging with stakeholders and the community on biodiversity. A finding from the case studies was the benefits of a more collaborative approach with stakeholders/ land owners, whereby biodiversity planning is more collegial and more widely accepted by the community after consultation with a cross-section of stakeholders on biodiversity values to be protected, and criteria for identifying significant biodiversity values.

Key finding from the case studies are summarised below:

- Comparison of District Plans illustrated that some rules are considerably more restrictive in some Districts, while other rules are more permissive or non-existent[21]. These differences reflect the environmental and political pressures, and the history of use and development in each district. One of the case studies[22] demonstrates the use of a comprehensive set of methods to test whether an activity meets the requirements for Permitted Activity status. Solutions for biodiversity protection need to be tailored to the environments and ecosystems present in each district and the particular land use pressures and communities present in each place.
- Many of the most threatened ecosystems remain largely in private and Maori-owned land and identification and protection of these ecosystems requires collaboration and cooperation with and support from landholders.
- Biodiversity planning is more collegial and more widely accepted by the community after consultation with a cross-section of stake holders on biodiversity values to be protected, and criteria for identifying significant biodiversity values[23]. Identification of policies and rules (and methods) may be required for specific areas[24]. Interpretation of significance criteria may also need further consultation or guidance[25].

[21] Kapiti Coast, South Waikato case studies

[22] Rotorua Lakes A Zone case study

[23] Compare Kapiti Coast with South Waikato and Canterbury case studies

[24] Rotorua Lakes A Zone, Kapiti Coast, Canterbury case studies

[25] Canterbury and Kapiti Coast case studies

- A shift away from using ranks for biodiversity significance. Significance is seen as a binary process (significant/not significant) whereas ranking of sites (e.g. high/medium/low) and measures of viability or sustainability are seen to relate to management (including future management) of a site rather than current ecological significance[26].
- A core set of criteria is (and has been historically) applied to determine ecological significance. An area or habitat only needs to meet one (as opposed to all, or multiple) of the following key criteria to be significant for biodiversity:
  - Representativeness
  - Rarity of habitats, flora and fauna
  - Diversity and uniqueness of communities
  - Context and connectivity
- Rules and non-regulatory mechanisms in District Plans should be appropriate to the amount of biodiversity remaining in a particular planning zone, with more stringent rules required in biodiversity depauperate areas. This should include biodiversity (and landscape) aspects valued by the community, which may include not-threatened elements[27].
- Reviews of Regional and District Planning documents are not synchronised. This results in variable incorporation of Regional Policy in to District Plans and could result in failure to identify and protect areas and habitats of significant biodiversity[26]. A mechanism should be developed to protect areas or habitats of significant biodiversity identified between planning reviews.
- A specific criterion for identification of significant habitats of indigenous fauna is necessary to promote the recognition of indigenous fauna habitats in ecological significance assessments[26].
- Landholder resistance to regulation of effects on biodiversity is patchy, and not widespread[28]. This could potentially be dealt with by more intensive council work in the areas of resistance. Resistance has also diminished where Councils have provided landowners with financial opportunities and incentives to protect indigenous biodiversity, such as transferable development and additional subdivision rights, along with access to financial support for biodiversity protection[29].

[26] Canterbury and Kapiti Coast case studies

[27] Rotorua Lakes A Zone, South Waikato case studies

[28] Canterbury, South Waikato and Kapiti Coast case studies

[29] Kapiti Coast, South Waikato case studies

Appendix A

Case Study - Canterbury RPS

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY FOR THE CANTERBURY REGION

providing outstanding ecological services to sustain and improve our environments

Wildlands

R4153a

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY FOR THE CANTERBURY REGION

Contract Report No. 4153a

November 2016

Project Team:
Kelvin Lloyd - Report author

Prepared for:
Ministry for the Environment
PO Box 10362
Wellington 6143
New Zealand

DUNEDIN OFFICE: 764 CUMBERLAND STREET, DUNEDIN 9016
Ph 03-477-2096, 03-477-2095

HEAD OFFICE: 99 SALA STREET, P.O. BOX 7137, TE NGAE, ROTORUA
Ph 07-343-9017; Fax 07-343-9018, email ecology@wildlands.co.nz, www.wildlands.co.nz

EXECUTIVE SUMMARY

This project considers how biodiversity policy was dealt with in real terms, in a case study of the Canterbury Regional Policy Statement (RPS). Key indigenous ecosystems in Canterbury Region are wetlands, braided rivers, coastal ecosystems, and glacial landforms. Current threats include habitat loss caused by pastoral intensification and wilding conifer invasion, and loss of ecosystem function due to fragmentation and modification of the habitats which remain. The project aimed to address a number of specific questions, which are discussed briefly below.

To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

Issues, objectives, and policies in the Canterbury RPS do a reasonably good job of addressing the state of indigenous biodiversity in Canterbury Region and the pressures that it faces, but have no specific focus on glacial landforms such as outwash plains and moraines.

What approaches were considered but did not make the final cut? And why?

Importing of second generation ecological significance criteria from another region was rejected, presumably because it was felt the criteria needed to be tailored to Canterbury Region. Various criteria in early versions of the criteria set were deleted or modified after consultation with local authorities. Site rankings were favoured by some parties, but were ultimately rejected in favour of a 'one or more' approach to determining ecological significance.

How have different rule settings affected biodiversity outcomes?

The Canterbury RPS criterion specifically addressing habitats of indigenous fauna has made a significant difference to interpreting ecological significance in one district, but most district plans are older than the RPS. There is evidence that vegetation-focussed criteria are not giving enough attention to significant habitats of indigenous fauna.

Are policies being implemented as intended? If not, why not?

A small selection of recently-granted consents in Canterbury Region indicate consistency with RPS policies, with a focus on avoidance of adverse effects on significant indigenous vegetation and significant habitats of indigenous fauna.

Is there variation in how districts apply regional policy?

There is considerable variation among district plans in Canterbury Region, but approximately half of these plans pre-date the operative Canterbury RPS. Those that post-date the RPS generally have objectives and policies that are consistent with the Canterbury RPS, but there is policy variation in promotion of ecological restoration in lowland habitats, how significant sites are identified, and in controls on biodiversity offsetting.

What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

Environment Canterbury staff are concerned that the effects of irrigation on indigenous biodiversity are not being sufficiently accounted for in resource consent decision-making. Landholders in Waitaki District do not seem to very aware of vegetation clearance rules in the Waitaki District Plan.

What has been the community response to different approaches?

Community responses to biodiversity policies are evidently patchy in Canterbury Region. Significant concern from landholders about the identification and management of significant biodiversity is evident in Hurunui District, but was not detected in any other part of Canterbury Region.

CONTENTS

Reviewed and approved for release by:

_____

W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

The Ministry for the Environment is collating information to support the development of National Policy Statement on Biodiversity. As part of this they are reviewing how regional, unitary, and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, the effectiveness of these planning policies.

This project comprises two parts: firstly evaluating how indigenous biodiversity is identified, protected, or otherwise managed in terms of Regional and District Plan objectives, policies, and rules; the second is to consider how these issues are dealt with in real terms, in four case studies. Beca is reviewing the various plans and Wildland Consultants is undertaking the delivery of the four case studies.

The Canterbury RPS was chosen as the basis for one case study, to examine how effective regional policy has been in determining local authority practices. Recent development of regional ecological significance criteria in the Canterbury RPS was accompanied by strong consultation with local authorities. Development of the criteria set also involved a workshop with Canterbury ecologists and planners. A further project involved the production of detailed guidelines for application of the criteria. These guidelines, which sit outside the RPS, were also subject to an extensive consultation process. A number of assessments using the criteria have already been made, and audited externally. Thus this case study presents an opportunity to assess development of consensus-based second generation ecological significance criteria and biodiversity policy and evaluate the effects of these policy developments on biodiversity outcomes.

2. ECOLOGICAL CONTEXT

2.1 Canterbury Region vegetation cover

Land Cover

The Canterbury Plains and other lowland habitats have had almost all of their indigenous vegetation removed and are largely classified as Acutely Threatened land environments (Walker *et al.* 2007) in which less than 10% of the original indigenous vegetation cover remains. Inland basins such as the Hanmer Basin, Mackenzie Basin, Omarama Basin, Hakataramea Valley, and Waihao Basin have also experienced considerable loss and depletion of indigenous vegetation cover, and are largely classified as Chronically Threatened land environments in which less than 20% of the original indigenous cover remains. Hill country on Banks Peninsula and in the coastal hills of North Canterbury also has a considerable proportion of Chronically Threatened land environments, as does the coastal plain at Kaikoura. Elsewhere, mid-elevation hill country varies in the extent of indigenous cover remaining, depending on the extent to which topography has made clearance of indigenous vegetation more difficult. A greater proportion of the original indigenous cover remains further west, on steeper, higher elevation landforms.

The pattern of remaining indigenous vegetation and habitats across Canterbury is therefore far from uniform. These geographical differences mean that significant examples of vegetation and habitat in a highly modified part of the Region will often be smaller and less intact than comparable vegetation/habitat types in those parts of Canterbury that retain most of their natural values.

Despite the overall loss of indigenous vegetation cover across lowland and montane Canterbury, the Region still contains many significant biodiversity features. A selection of these is described briefly below.

2.2 Key ecosystem and habitat types in Canterbury Region

Wetlands

Important Canterbury wetlands include wetlands on the margins of coastal lagoons, lakes, and estuaries, riparian wetlands associated with rivers, and ephemeral wetlands and swamps, fens, and bogs in inland basins and river valleys. Many of these wetlands provide habitat for Nationally Threatened or At Risk indigenous plants and animals, and some wetland complexes are considered to be nationally outstanding (e.g. Wildland Consultants 2012).

Braided Rivers

Canterbury Region holds New Zealand's most outstanding range of braided rivers, which have distinctive plant communities and important habitat for indigenous fauna, particularly populations of 'braided river birds' that breed on braided river beds in spring and summer.

Coastal Ecosystems

Significant lagoons and estuaries are associated with several Canterbury river mouths and provide important wildlife habitat. Kaitorete Spit is a nationally significant coastal beach and dune system that holds the largest and most continuous population of pikao (*Ficinia spiralis*) in New Zealand (Johnson 1992) and is important for its plant, invertebrate, and lizard assemblages. Coastal cliffs, points, and reefs are abundant on Banks Peninsula and the Kaikoura coast, and contrast with the sand, gravel, and mudstone substrate along much of the Canterbury coast.

Glacial Landforms

Canterbury Region contains an outstanding assemblage of glacial landforms reflecting several major ice advances over the last 65,000 years (Barrell *et al.* 2011). Moraine and outwash plain landforms are particularly well represented in the Waimakariri, Rakaia, Canterbury Plains, Lake Heron, Rangitata, and Mackenzie Basin areas. Glacial landforms are responsible for the creation of most of the ephemeral wetlands found in inland Canterbury, and dry outwash plains support a characteristic and distinctive flora of indigenous plant species, many of which are classified as Nationally Threatened or At Risk (Wildland Consultants 2012; 2014). Eastern moraines and outwash plains are naturally uncommon ecosystem types that have been assessed as Endangered habitats (Holdaway *et al.* 2012). The extensive fine-scale

patterning of Mackenzie Basin outwash plains is unparalleled elsewhere in New Zealand.

2.3 Current threats to indigenous biodiversity in Canterbury Region

Pastoral intensification, driven by advances in irrigation, is a major threat to some of the most vulnerable biodiversity features in Canterbury. Significant irrigation of large new areas has recently occurred, or is planned, on the Canterbury Plains and on outwash plains and terraces in the Mackenzie Basin.

On hill country landforms, mechanical clearance of indigenous vegetation and habitat has also occurred, and afforestation with exotic plantation trees is also a threat in these areas.

Wilding conifers, originating from historic plantings of species such as contorta pine (*Pinus contorta*), and new plantings of species such as Douglas fir (*Pseudotsuga menziesii*) pose an additional threat due to their ability to invade and subsequently dominate almost all non-forested indigenous habitats except wetlands. Uncontrolled spread of wilding conifers is thus a threat to indigenous shrubland, grassland, and herbfield communities.

In the lowland and coastal areas, the remaining biodiversity is fragmented and modified, resulting in loss and modification of ecosystem functions. On the low plains, almost all areas of indigenous vegetation and habitat have been cleared, with only tiny examples remaining. The most threatened ecosystems remain largely in private ownership, thus identification and protection of these ecosystems requires co-operation with and support from landholders.

3. POLICY FRAMEWORK

3.1 Does RPS policy address biodiversity state and pressures?

This section addresses the following question:

(a) To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

Threats to indigenous biodiversity, and challenges to its protection, are identified as issues in the Canterbury RPS (Issues 9.2.1 and 9.2.2), and three objectives aim to address these issues:

- Halting the decline in indigenous biodiversity (Objective 9.2.1).
- Restoring and enhancing indigenous biodiversity (Objective 9.2.2).
- Protecting significant indigenous vegetation and habitats (Objective 9.2.3).

Policies developed under these objectives include the protection of significant natural areas (Policy 9.3.1), utilising the four national priorities for the protection of rare and threatened indigenous biodiversity as priorities for protection (Policy 9.3.2), using an

integrated management approach (Policy 9.3.3), promoting ecological enhancement and restoration (Policy 9.3.4), wetland protection and enhancement (Policy 9.3.5), and limitations on the use of biodiversity offsets (Policy 9.3.6). The RPS defines the responsibilities of regional authorities, territorial authorities, and local authorities in each case.

Issues, objectives, and policies set out within the Canterbury RPS do a reasonably good job of addressing the state of indigenous biodiversity in Canterbury Region and the pressures that it faces. There is a clear focus on halting the decline, on ecological restoration and enhancement in lowland areas where significant modification and loss of indigenous vegetation and habitat have occurred, and on wetlands, which are key areas of concern for Canterbury Region. There is no specific focus however on glacial landforms such as moraines and outwash plains, which are experiencing rapid conversion of indigenous cover to exotic cover in the inland basins, with consequent loss of habitat for Threatened and At Risk indigenous plant, bird, lizard, and invertebrate species.

4. PROJECT PROCESS

This section addresses the following question:

(c) What approaches were considered but did not make the final cut? And why?

As part of the review of the Canterbury RPS, second generation ecological significance criteria from the Waikato RPS were amended for potential use in Canterbury Region. These criteria did not survive internal review, which concluded that a new set of criteria was needed, appropriate for Canterbury Region. A draft ecological significance criteria set was then developed (Wildland Consultants 2009), based on a review of more recently developed significance criteria and national policy. The first draft criteria set contained a large number of criteria referring specifically to wetlands, as wetlands were considered by Environment Canterbury to merit special consideration, and this was presented to a full Council meeting in Timaru in 2009.

In December 2010 a workshop was convened for representatives of all Territorial Land Authorities (TLAs) within Canterbury Region, the Department of Conservation, Ngai Tahu, and local ecological consultants, to discuss this version of the proposed ecological significance criteria and other policy relating to indigenous biodiversity for the Canterbury RPS. This consultation was very important because no appeals on the RPS decision would be allowed. Constructive feedback on the draft criteria was received at the workshop.

A revised criteria set addressed the feedback, the main change being to remove many wetland-specific criteria on the basis that wetland values could be captured under more general criteria, although one wetland-specific criterion was retained (Wildland Consultants 2011). The scope of several criteria was amended, ensuring that the ecological district scale was the main context for the assessment of most criteria. The revised criteria set was incorporated into the Proposed Canterbury RPS.

The Proposed Canterbury RPS containing policies addressing these matters was notified in 2011. Providing TLAs and other parties with an opportunity for early engagement in RPS policy development enabled consensus-based policy at notification, greatly narrowing the remaining issues that were addressed at the subsequent hearing.

A key focus of submissions was the proposed low-moderate-high framework proposed to score criteria, and their use to establish quantitative thresholds of significance. Questions raised in submissions included:

- Should a low-moderate-high framework be used to score ecological significance criteria?
- Should a low-moderate-high framework be used to determine significance thresholds?
- Would a low-moderate-high framework provide more consistency or more complexity/uncertainty in terms of the significance outcome?
- Will the significance criteria and rankings provide sufficient protection for Canterbury ecosystems?

Ultimately, the hearings commission ruled that a 'one or more' approach should be used to determine significance, meaning that if site values resulted in any one or more of the significance criteria being met, the site would become significant. Thus the low-moderate-high framework was rejected as a basis for determining significance.

The number of criteria was reduced from twelve to ten. The 'naturalness' criterion was deleted, as most aspects of it were duplicated under representativeness. In addition, a specific criterion for modified sites was removed, and replaced by additional wording within the representativeness criterion, so as to capture modified sites that were the most representative examples remaining.

A key advance that was retained in the operative significance criteria set was a specific criterion for indigenous fauna habitat, consistent with the second limb of S6c which requires recognition and protection of significant habitats of indigenous fauna. The Canterbury RPS criterion that deals with fauna habitat is:

> *Indigenous vegetation or habitat of indigenous fauna that provides important habitat (including refuges from predation, or key habitat for feeding, breeding, or resting) for indigenous species, either seasonally or permanently.*

The word 'important' requires interpretation of an expert ecologist, but could potentially be further defined by defining thresholds for attributes such as the national or regional population of indigenous fauna, breeding individuals of Threatened and At Risk species, numbers of indigenous fauna, numbers of individuals, and fish spawning, nursery or migration. Robust thinking would be required to ensure that all attributes of 'importance' were covered if objectively-defined thresholds, such as these, were used.

The representativeness criterion in the Canterbury RPS is tautological to an extent, as part of the definition includes the word 'representative'. Neither does it contain a method for determining what is representative or characteristic. The full criterion is:

> *Indigenous vegetation or habitat of indigenous fauna that is representative, typical, or characteristic of the natural diversity of the relevant ecological district. This can include degraded examples of their type, or represent all that remains of indigenous biodiversity in some areas.*

Representativeness is a key criterion because it is the only one that captures all classes of ecosystems, including those that are typical and characteristic, which may not be given weight under other criteria. How representativeness should be defined was traversed in an interim Environment Court decision (NZEnvC345) addressing ecological significance criteria to identify significant wetlands in the West Coast Region. The Court held that no arbitrary thresholds should be imposed on the definition of representativeness, because significance does not lie in the size of the class, but the values of those attributes that are shared by members of the class.

Once the Canterbury RPS became operative in early 2013, attention moved to development of guidelines (Wildland Consultants 2013a) for assessing ecological significance according to the operative RPS criteria. The intention was for the guidelines to sit outside the RPS and have no statutory effect, but to guide ecologist interpretation of the criteria. Following the success of the workshop on ecological significance criteria, a workshop approach was also used to get feedback on the guidelines from Canterbury ecologists. To provide a framework for the workshop, a discussion document was prepared (Wildland Consultants 2013b) that outlined changes to the RPS criteria following the hearing, and provided a series of key questions that the workshop participants could help resolve.

Whether a size threshold should be applied to areas of indigenous cover on Level IV land environments (Walker *et al.* 2007) is an issue for the national priority that addresses this matter (MFE and DOC 2007). If applied with no other filters, this priority would capture all areas of indigenous cover on land environments with less than 20% of their original vegetation remaining. This could capture areas of indigenous vegetation of relatively low value according to all other criteria, for example bracken (*Pteridium esculentum*) fernland along railway corridors. A size filter, for example having a minimum size of 0.5 ha, would mean that small examples of otherwise non-significant vegetation would not be captured.

The guidance considered that it is appropriate to have higher thresholds for highly mobile indigenous fauna under the rarity criterion. For plants and less mobile indigenous fauna with restricted ranges, the presence of either Threatened or At Risk-Declining species would trigger significance under the rarity criterion. For mobile fauna, the rarity criterion captures the presence of Threatened species and significant populations of At Risk or regionally uncommon species. This issue warrants further consideration, because even Threatened species sometimes use sites on a very temporary and restricted basis. For example red-billed gull (*Larus novaehollandiae*), which have a threat status of Threatened-Nationally Vulnerable (Robertson *et al.* 2013), may occasionally perch on lamp posts in an urban setting. Are these lamp posts therefore significant habitat? On a more nuanced basis, black-billed gull (*Larus*

bulleri; Threatened-Nationally Critical) may follow machinery cultivating farm paddocks to feed on invertebrates exposed by cultivation. Does this make the farm paddock a significant habitat? Possibly it does, but cultivation may not occur every year, so this 'significance' has a temporal basis.

In addition, 'significant' populations of At Risk or regionally uncommon species are not defined. A definition of 'significant' in this context could address the size of the population, the number of populations remaining, the proportion of the national population, the geographic context of the population, or other attributes of significant populations.

For the diversity criterion, it was decided not to incorporate quantitative thresholds, for example expected numbers of species, vegetation types, or habitat types, because diversity is context-dependent, *i.e.* its attributes depend on the type of vegetation or habitat.

The guidance considered that 1840 was a useful baseline for the assessment of representativeness. Thus vegetation most similar in composition and structure to that present in 1840 would have the highest value for representativeness. In the Canterbury context, much of the indigenous vegetation had been strongly modified by 1840, so this allowed modified examples of indigenous vegetation to be captured under the representativeness criterion.

Subzones were not used in the Canterbury Region guidance, though had broad zones been already in place for other reasons, they would very likely have been referred to in the guidance. As an example, Dunedin City has recently proposed seven rural zones and based proposed vegetation clearance rules around an analysis of indigenous remnant sizes in each zone.

With ongoing debate about the use of 'one or more' versus 'high-moderate-low' frameworks, it was decided to incorporate both in the examples used to illustrate the guidelines. This was done by putting the examples in a 'high-moderate-low' framework, but specifying which examples met the threshold of significance. The 'high-moderate-low' framework can be useful for prioritising sites for management, and for state of the environment reporting, since relative value often relates to condition and threats such as pest plants and pest animals.

One issue with examples is that they can be viewed as criteria, with sites not described in examples being perceived as not significant. This was dealt with in a disclaimer that noted the list of sites were not exhaustive, and where possible by illustrating a broad range of ecological values, including ecosystems, vegetation types, modified examples, and species of plants, birds, lizards, bats, and invertebrates, under each criterion.

4.1 Summary

Development of the ecological significance criteria set within the operative Canterbury RPS followed a strong consultative approach that led to a consensus-based criteria set which had only a few areas where differences of expert opinion were

still present at the RPS review hearing. Key questions where significance criteria may require further development include:

- Should representativeness be made more explicit by specifying assessment of the structure and composition of indigenous vegetation and the baseline that the assessment should be compared with?
- How should 'important' habitats of indigenous fauna be defined?
- Should a size threshold or other filter be applied to criteria that implement the national priority covering land environments with less than 20% indigenous cover remaining nationally?
- How should the rarity criterion deal with the presence of mobile indigenous fauna that may use particular habitats only rarely?
- What would constitute a 'significant' population of At Risk or regionally uncommon species?
- How can indigenous fauna assemblages be best considered under RMA S6c?

Other conclusions relating to Canterbury RPS process were that:

- A 'one or more' approach was preferred in terms of deciding how significance should be demonstrated.
- Strong consultation results in better policy and significance criteria.
- General indigenous vegetation clearance rules are needed in addition to significance criteria.
- Policy needed to constrain biodiversity offsetting given the inability of existing methods to account for complex indigenous biodiversity.

5. RULES AND BIODIVERSITY OUTCOMES

This section addresses the following question:

(b) How have different rule settings affected biodiversity outcomes?

Christchurch City Council adopted the Canterbury RPS criteria as the basis for assessing potentially significant areas of indigenous vegetation and significant habitats of indigenous fauna. A review of 20 of these significance assessments was undertaken by Wildland Consultants (2015). Of particular note was the strong focus on assessment of important habitats for indigenous avifauna, fish, and invertebrates, which was clearly informed by the 'fauna habitat' criterion (Criterion 10) in the Canterbury RPS. This significant advance in recognition of indigenous fauna habitat in the RPS criteria set thus resulted in excellent recognition of important indigenous fauna habitats within Christchurch City.

A farmer in Ashburton District who recently cleared indigenous shrubland without a resource consent narrowly escaped prosecution, expressed remorse, and made a $10,000 contribution to the Council's biodiversity fund[1], which illustrated enforcement of district plan rules.

In Timaru District, recent clearance of significant lizard habitat occurred because the landholder and Council were unaware of its significance[2]. The area had been assessed previously as a potential significant natural area but was not assessed as being significant as the significance criteria were mostly related to vegetation, which was largely exotic. A re-assessment of significance was made, and lizard habitat rehabilitation works were agreed. As the identification of significant habitats of indigenous fauna at this site was initially flawed, the importance of significance criteria that explicitly direct ecologists to focus on indigenous fauna habitats is stressed. The example also indicates that significant habitats of indigenous fauna may be dominated by exotic vegetation.

In Waitaki District, the Waitaki District Council had, in 2012, issued a certificate of compliance for farming activities on a property, which was later quashed in a judicial review decision, as the Council had issued the certificate in the absence of technical information on the existence or extent of indigenous vegetation on the property. This indicates that the Council did not have a good understanding of the ecological significance of indigenous vegetation and habitats on the farm, and did not adequately consider its indigenous vegetation clearance rules when issuing the certificate of compliance. Thus, even if strong rules are present in plans, lack of indigenous biodiversity information for a site, or awareness of that information, can mean that those rules are not applied.

There has been significant loss of indigenous cover in the Mackenzie Basin in recent decades (Weeks *et al.* 2013), driven by large scale irrigation of outwash plain habitats. This is a significant issue because outwash plain habitats are important for a number of nationally threatened plant species and indigenous fauna.

5.1 Summary

As the Canterbury RPS only became operative in 2013, it is not clear whether there has been sufficient time for it to significantly affect biodiversity outcomes, especially in those districts within the region which have older district plans. The example of Christchurch District adopting the Canterbury RPS criteria shows that the new criteria made a significant difference to the identification of significant habitats of indigenous fauna. Conversely, where criteria sets do not specifically address indigenous fauna habitats, their recognition may be poor. A fundamental requirement to effectively implement indigenous biodiversity policy is good information on the distribution and composition of indigenous biodiversity at sites. Another significant issue is making rural landholders more aware of indigenous vegetation clearance rules.

1 http://www.ashburtondc.govt.nz/our-council/news/articles/Pages/Clearing%20native-vegetation.aspx
2 http://www.stuff.co.nz/timaru-herald/news/10627237/No-charges-over-lizard-habitat-clearance

6. IMPLEMENTATION OF POLICIES

This section addresses the following question:

(d) Are policies being implemented as intended? If not, why not?

Some recently-granted resource consents were reviewed to assess whether the granting of these consents was consistent with policies in Chapter 9 of the Canterbury RPS.

Selwyn District Council granted resource consents (RC155373) for the Central Plains Water irrigation scheme in mid-Canterbury. A consent condition required a terrestrial ecology protection plan, and minimisation of adverse effects, including identification of significant sites within the project area and to avoid or mitigate any adverse effects on these sites. Furthermore, the plan included a requirement to:

Detail a calculation of biodiversity 'no net loss' (by area) using international best practice approaches, including the valuation of the biodiversity costs associated with any destruction/damage and the benefits of mitigation and any proposed biodiversity offsets.

None of the limitations on offsetting specified in Policy 9.3.6 of the Canterbury RPS are identified, including a requirement of a net gain in biodiversity where offset areas are located on areas covered by the national priorities. Thus the requirement for an offset has not considered Canterbury RPS policy on biodiversity offsets, probably because the Selwyn District Plan lacks policy on biodiversity offsets.

Canterbury Regional Council granted resource consent (CRC154950) in 2015 to Christchurch City Council to undertake rock fall remediation works along Sumner Road. A condition of the consent was to compile an ecological management plan containing objectives to minimise disturbance to significant indigenous vegetation and significant indigenous habitats. This is consistent with Canterbury RPS Policy 9.3.1, Method (8) which is to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna as local authorities undertake their own activities and operations.

Christchurch City Council gave consent (RMA92026094) in January 2015 for an adventure park in the Port Hills. Conditions of consent included provisions requiring avoidance of adverse effects on four areas identified as significant natural areas, and the taking of all practicable steps to avoid adverse effects on indigenous biodiversity outside these areas. These conditions are consistent with RPS Policy 9.3.1(3), which requires areas identified as significant to be protected from the potential adverse effects of land use activities.

6.1 Summary

A small number of consents involving potential adverse effects on indigenous biodiversity have been reviewed, and in general they all focus on avoidance of adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna, which is consistent with Canterbury RPS policy. Thus the

Canterbury RPS policies are being followed and correctly interpreted where they are being referred to.

7. VARIATION IN POLICY IMPLEMENTATION

Indigenous biodiversity policy in district plans within Canterbury Region was reviewed to assess the consistency of biodiversity policy. The review included both older plans and those that became operative after 2013. This section addresses the following question:

(e) Is there variation in how districts apply regional policy?

7.1 Kaikoura District Plan

Kaikoura District Plan became operative in 2008. A good summary of the current ecological context of indigenous avifauna, invertebrates, lizards, fish, and marine mammal populations is provided. Threats to the coastal environment, wetlands, and lakes and rivers and their margins are recognised, with an objective to maintain and enhance of ecological integrity, functioning, and natural character of these. Policies under this objective similarly encourage protection, maintenance and enhancement. Loss of significant indigenous vegetation and habitats of indigenous fauna is also identified as an issue, with an objective for protection of such values from adverse effects, and a range of policies to address this objective.

7.2 Hurunui District Plan

Hurunui District Plan became operative in 2003. The plan has an objective to protect and enhance the life supporting capacity and ecological values of natural resources within the District. There are policies to identify significant natural areas, to avoid, remedy, or mitigate adverse effects on ecological integrity, functioning, and habitat values, to promote the protection of the natural character of wetlands, and to promote the rehabilitation or enhancement of significant natural resources. Thus the enhancement focus of the Canterbury RPS is also recognised within the Hurunui District Plan. Ecological significance criteria within the Hurunui District Plan are reasonable for their time, but would need to be updated to be consistent with those in the Canterbury RPS. In particular, there is no focus on the four national priorities, representativeness focuses only on the best remaining examples, and viability criteria, which do not represent intrinsic values, are included.

7.3 Waimakariri District Plan

Waimakariri District Plan became operative in 2013. Loss and degradation of indigenous ecosystems and wetlands are identified as an issue, and have associated objectives of safeguarding indigenous biodiversity, recognising and protecting significant indigenous vegetation and habitats, maintaining, enhancing, and where appropriate restoring wetland ecosystems, and maintaining, enhancing, and restoring appropriate waterways and roadsides as areas of indigenous vegetation and fauna habitat. Ecological significance criteria are somewhat outdated and do not capture important habitats of indigenous fauna very well. Another policy requires avoidance

or remediation of adverse effects on both significant and other indigenous vegetation and habitats, and another policy to avoid, remedy or mitigation adverse effects on activities that affect the intrinsic values of ecosystems. Thus the Waimakariri District Plan objectives are consistent with the Canterbury RPS objectives that relate to the enhancement and restoration of indigenous vegetation and habitat in areas where it is most reduced.

7.4 Proposed Christchurch Replacement District Plan

Submissions on the proposed Christchurch Replacement Plan have closed and hearings are currently being held by an Independent Hearings Panel, with some decisions released. Decisions on policy for indigenous biodiversity have not yet been released, so the proposed policy is subject to change. Objective 9.1.1.1 of the Proposed plan captures all three Canterbury RPS objectives. There is no specific policy focus on wetlands, but the other RPS policies are reflected in Proposed Christchurch Replacement Plan policies. Permitted activity standards are stringent for clearance of indigenous vegetation on the Low Plains Ecological District and for sites of ecological significance elsewhere. Detailed discretionary activity descriptions are provided for indigenous vegetation clearance that falls outside permitted activity status. Discretionary activity thresholds are generally consistent with the state of indigenous biodiversity in different parts of Christchurch District, and the pressures facing it. They include a rule requiring discretionary consent for the clearance of indigenous wetland vegetation. The process for biodiversity offsets is specified in policy and a comprehensive appendix in the Proposed Christchurch District Replacement Plan, which is a higher level of specificity compared to the Canterbury RPS.

7.5 Selwyn District Plan

Selwyn District Plan became operative in 2016. The plan identifies issues with loss of indigenous vegetation and habitats, the spread of pest plants, and a decline in biodiversity in general. The state of indigenous vegetation and habitat, and its protection status, is discussed for various parts of the District. The importance of protecting indigenous vegetation and habitat in general is stressed. The plan has objectives to recognise and protect significant areas of indigenous vegetation and habitats, avoid wilding tree spread in the high country, protect and enhance indigenous vegetation along riparian margins and in wetlands, and avoid, remedy, and mitigate adverse effects on indigenous vegetation and habitat generally. A general indigenous vegetation clearance rule exists, and stresses that adverse effects should be avoided on particular vegetation and habitat types including wetlands, braided river habitat, indigenous vegetation on the Canterbury Plains, and limestone and bluff communities. The policy for identifying significant indigenous vegetation is largely voluntary, and subject to consideration of six non-ecological factors. The policy for protecting significant sites does not apply to grazing. As grazing is significant adverse effect on indigenous forest and tussock grassland ecosystems, this policy won't fully protect significant sites. Ecological significance criteria are largely consistent with those in the Canterbury RPS, but could be updated in places. There is no policy on biodiversity offsetting.

7.6 Ashburton District Plan

Ashburton District Plan became operative in 2014. The plan emphasises the importance for indigenous wildlife of wetland ecosystems in the Hakatere Basin, and of the braided rivers and river mouths on the Canterbury Plains that are critical habitat for braided river birds. Objective 3.2 is to protect, maintain, and enhance indigenous biodiversity by controlling and managing activities that affect indigenous biodiversity values. Policy 3.2b specifies ecological significance criteria which are similar to those in the Canterbury RPS. Significance is not however met if only one criterion is triggered, and in considering whether to protect sites, the plan lists ten other factors that the Council shall have regard to. While the plan mentions that ecological restoration planting is occurring in places on the Plains, there are no policies promoting ecological restoration of lowland habitats where little indigenous vegetation remains.

7.7 Timaru District Plan

Timaru District Plan became operative in 2005. The plan has an objective for safeguarding the indigenous biodiversity and ecosystem functioning of the district through both protection and restoration. Policies relate to both protection and enhancement of indigenous vegetation and habitats of indigenous fauna. Policies aim to protect the values of significant areas, and encourage landholder protection of both significant and non-significant areas. Methods include a natural heritage fund which can assist landholders to protect and enhance sites, requiring eco-sourcing for Council revegetation programmes, and providing information to landholders to raise their awareness of significant areas. Significance is to be assessed using a reasonably robust set of significance criteria but, under representativeness, only the best examples are captured, which may exclude modified sites from capture. The Council confirms significant sites by having regard to eight other factors that are not related to ecological significance. Elsewhere in the plan, explicit guidance on significance is provided for different land systems based on descriptions of important or characteristic plant species with height and spacing qualifiers. The Timaru District Plan is unusual in having a method requiring state of the environment monitoring of indigenous biodiversity and ecosystem health, which is a worthwhile element.

7.8 Mackenzie District Plan

The Mackenzie District plan became operative in 2004, but has since been subject to a number of reviews. A decision on Plan Change 13, centred on landscape issues, has been released, but is under appeal. The plan addresses some issues, but a significant issue not identified is the intensification of agriculture leading to loss of indigenous vegetation and habitats on the outwash plains of the Mackenzie Basin. It is, however, identified in one of the implementation methods, where a review of indigenous clearance rules is planned for short tussock grassland and indigenous cushion and mat vegetation. No policies address restoration and enhancement of indigenous vegetation, and there is no further guidance on the use of biodiversity offsets.

7.9 Waimate District Plan

Waimate District Plan became operative in 2014. The plan has an objective to safeguard the life supporting capacity of indigenous biodiversity and ecosystem functions, the protection and enhancement of significant indigenous biodiversity and riparian areas, and the maintenance of indigenous vegetation and wetlands generally. The plan utilises Canterbury RPS criteria to identify significant natural areas, and has a policy to protect these areas. A specific policy promotes enhancement of degraded areas, consistent with the Canterbury RPS. There are also specific policies for protection and maintenance of wetlands, and to promote the establishment of indigenous riparian vegetation. Wainono Lagoon is recognised as an important site for indigenous wildlife.

7.10 Waitaki District Plan

Waitaki District Plan dates to 2010, and a review of the plan has commenced with scoping of land use issues. The plan identifies the current distribution of indigenous vegetation and habitats within Waitaki District, including the significant loss of indigenous vegetation in lower elevation parts of the District. The plan has a single objective relating to indigenous biodiversity, covering maintenance of biological diversity, nature conservation values, and ecosystem functioning. Critically, this objective is not consistent with the restoring and enhancing policy of the Canterbury RPS, and no policies or methods for restoration or enhancement of indigenous biodiversity are contained in the Waitaki District Plan. There is no further guidance on the use of biodiversity offsets.

7.11 Summary

A key feature of the Canterbury Region is regional policy recognising the importance of ecological restoration and enhancement, and with a specific policy focus on wetlands, but some district plans only emphasise protection of what remains. Significance criteria in the Canterbury RPS identify modified sites as potentially being significant, which is generally not reflected in district plan criteria. Recently-developed plans have variable consistency with Canterbury RPS policies. For example, there are significant differences between the Ashburton District Plan and the Waimate District Plan in this respect. Thus it would be fair to say that the guidance provided by the Canterbury RPS has had uneven uptake by local authorities, partially due to the plan update process.

8. CONSENTS WITH POTENTIAL BIODIVERSITY EFFECTS

This section addresses the following question:

(f) What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

Environment Canterbury staff indicated a conflict in RPS policy where policy favours better water use efficiency generated by spray irrigation, but this has resulted a much greater area being irrigated, with consequent adverse effects on indigenous biodiversity caused by loss of habitat. Environment Canterbury controls water takes, but has to rely on district councils to enforce policy relating to terrestrial indigenous

biodiversity. Environment Canterbury concern about the adverse effects of irrigation on indigenous biodiversity may therefore indicate that territorial authorities are not taking this into account sufficiently when considering whether consent applications involving irrigation trigger indigenous vegetation clearance rules or granting of certificates of compliance for farming activities involving irrigation. Environment Canterbury does not receive many consent applications for activities that directly affect wetlands, as most developments aim to avoid affecting wetlands. This suggests that the RPS policy focussing on wetlands is effective in making land users and developers aware of the importance of wetlands.

Waitaki District Council has received no resource consent applications for activities that affect indigenous biodiversity in recent years. This suggests that the consenting process is not functioning well, and that many landholders may well be unaware of the indigenous vegetation clearance rules within the Waitaki District Plan.

Information on these issues was requested from other district councils, but none provided information.

8.1 Summary

While all councils in Canterbury Region were contacted for information on this question, a low number of responses makes generalisation difficult. The effects of irrigation on indigenous biodiversity in dryland environments suggest that the consenting process is not functioning very well for these habitats, and landholder awareness of vegetation clearance rules appears to be lacking in Waitaki District.

9. COMMUNITY RESPONSE

This section addresses the following question:

(g) What has been the community response to different approaches?

Landholders in Hurunui District have raised concerns about rules protecting areas of significant indigenous vegetation and habitat, and have directed their concern toward Canterbury RPS policy[1]. There appears to be significant community feeling among private landholders within Hurunui District against regulatory controls involving the protection of indigenous biodiversity on private land[2]. Submissions on the Hurunui District Plan review included several that requested deletion of proposed plan rules relating to indigenous vegetation and habitats.

No significant community responses were identified in other parts of Canterbury Region.

---

1 http://www.stuff.co.nz/the-press/news/68936835/ecan-blackmailing-hurunui-conservationists-with-strict-rules

2 http://www.stuff.co.nz/business/farming/81084193/ECan-apologises-for-misleading-photos-criticising-work-it-had-approved

9.1 Summary

Significant adverse community responses to policy on indigenous biodiversity were only found for Hurunui District.

10. Conclusions

Canterbury Region has a range of significant indigenous ecosystems and these are generally well described in the Canterbury RPS, with the exception of indigenous ecosystems associated with glacial landforms, which have no specific RPS policy focus. A strength of Canterbury RPS policy is that it provides generally strong ecological significance criteria, recognition that modified indigenous vegetation and habitat may be important, and focus on restoration and enhancement of indigenous biodiversity in those parts of the Region where it has been most reduced. Further work on ecological significance criteria should focus on a more explicit definition of representativeness, on how important habitats of indigenous fauna should be defined, and how mobile indigenous fauna should be dealt with. Recent land use consents with potential for adverse effects on indigenous vegetation and habitat have been associated with conditions ensuring protection of significant habitats. Indigenous biodiversity policy in district plans within Canterbury Region is variable, and even policy in the more recent operative plans is not always fully consistent with Canterbury RPS policy. There is concern that the effects of irrigation on dryland indigenous biodiversity are not being addressed adequately in resource consent decision-making, and landholder awareness of vegetation clearance rules appears lacking in Waitaki District. Hurunui District stands out as a district in which there is strong opposition to the identification and protection of significant indigenous vegetation and habitats on private land, but this level of opposition does not appear to be present in the other nine districts.

REFERENCES

Barrell D.J.A., Andersen B.G., and Denton G.H. 2011: Glacial geomorphology of the central South Island, New Zealand. *GNS Science Monograph 27*. GNS Science, Lower Hutt.

Holdaway R.J., Wiser S.K., and Williams P.A. 2012: Status assessment of New Zealand's naturally uncommon ecosystems. *Conservation Biology 26*: 619-629.

Johnson P.N. 1992: The sand dune and beach vegetation inventory of New Zealand. II South Island and Stewart Island. *DSIR Land Resources Scientific Report No. 16.*

MfE and DOC 2007: Protecting our Places. Information about the statement of natural priorities for protecting rare and threatened biodiversity on private land. Ministry for the Environment and Department of Conservation, Wellington. 51 pp.

Walker S., Cieraad E., Grove P., Lloyd K., Myers S., Park T., and Porteus T. 2007: Guide for users of the Threatened Environment Classification. Version 1.1. Landcare Research, Lincoln.

Weeks E.S., Walker S., Dymond J.R., Shepherd J.D. and Clarkson B.D. 2013: Patterns of past and recent conversion of indigenous grasslands in the South Island, New Zealand. *New Zealand Journal of Ecology 37*: 127-138.

Wildland Consultants 2009: Ecological significance criteria for indigenous vegetation and habitats of indigenous fauna and wetlands in Canterbury. *Wildland Consultants Ltd Contract Report No. 2289.* Prepared for Environment Canterbury. 16 pp. plus appendix.

Wildland Consultants 2011: Revised ecological significance criteria for indigenous vegetation and habitats of indigenous fauna and wetlands in Canterbury. *Wildland Consultants Ltd Contract Report No. 2289e*. Prepared for Environment Canterbury. 7 pp.

Wildland Consultants 2012: Assessment of shrubland and wetland condition in the Tekapo Military Training Area. *Wildland Consultants Ltd Contract Report No 2794*, prepared for the New Zealand Defence Force.

Wildland Consultants 2013a: Guidelines for the application of ecological significance criteria for indigenous vegetation and habitats of indigenous fauna and wetlands in Canterbury. *Wildland Consultants Ltd Contract Report No 2289c*. Prepared for Environment Canterbury.

Wildland Consultants 2013b: Discussion document: guidelines for assessment of ecological significance under the Canterbury RPS. *Wildland Consultants Ltd Contract Report No. 2289h*. Prepared for Environment Canterbury. 5 pp.

Wildland Consultants 2014: Vegetation and invertebrates of the Mt Stevenson Block, Tekapo Military Training Area. *Wildland Consultants Ltd Contract Report No. 3056.* Prepared for the New Zealand Defence Force. 61 pp plus five appendices.

Wildland Consultants 2015: Peer review of ecological significance statements for sites in Christchurch City. *Wildland Consultants Ltd Contract Report No. 3642*. Prepared for Christchurch City Council. 8 pp.

Providing outstanding ecological services to sustain and improve our environments

Call Free 0508 WILDNZ
Ph: +64 7 343 9017
Fax: +64 7 3439018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042,
New Zealand

Regional Offices located in
Auckland, Hamilton, Tauranga,
Whakatane, Wellington,
Christchurch and Dunedin

ECOLOGY RESTORATION BIODIVERSITY SUSTAINABILITY

www.wildlands.co.nz

Appendix B

Case Study - Kapiti Coast District Plan in relation to the Wellington RPS

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: KĀPITI COAST DISTRICT

providing outstanding ecological services to sustain and improve our environments

Wildlands

R4153b

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: KĀPITI COAST DISTRICT

Kāpiti Coast District Ecological Site K014-Waitohu River Mouth estuarine wetland; surrounded by other land uses, including farming and housing.

Contract Report No. 4153b

December 2016

Project Team:
Astrid van Meeuwen-Dijkgraaf - Report author
William Shaw - Peer review

Prepared for:
Ministry for the Environment
PO Box 10362
Wellington 6143
New Zealand

WELLINGTON OFFICE: 22 RAIHA STREET, ELSDON, P.O. BOX 50-539, PORIRUA
Ph 04-237-7341; Fax 04-237-7496

HEAD OFFICE: 99 SALA STREET, P.O. BOX 7137, TE NGAE, ROTORUA
Ph 07-343-9017; Fax 07-343-9018, email ecology@wildlands.co.nz, www.wildlands.co.nz

EXECUTIVE SUMMARY

This project considers how biodiversity policy was dealt with in a case study of the Kāpiti Coast District Plan[1] and its relation to the Wellington RPS[2]. Key indigenous ecosystems in Kāpiti Coast are wetlands, coastal ecosystems, and lowland habitats. Current threats include habitat loss caused by urban and rural development, and loss of ecosystem function due to fragmentation and modification of the habitats which remain. Many of the most threatened ecosystems remain largely in private ownership. The project aimed to answer a number of specific questions which are briefly discussed below.

To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

The issues, objectives, and policies of the Wellington RPS appropriately identifies the areas of most concern with regards to historic and potential on-going biodiversity loss. The KCDCPDP seeks to implement the RPS, but could potentially benefit from differentiating between lowland areas where indigenous biodiversity is much reduced and more biodiverse areas.

What approaches were considered but did not make the final cut? And why?

Additional parameters to identify significant ecological values in the KCDC PDP are proposed to be deleted as they potentially exceeded the scope of the RPS. Priority Areas for Restoration (PAR) were withdrawn from the PDP due to significant opposition from landowners and inconsistent description in the PDP. The rules regarding trimming and modification of indigenous vegetation are proposed to be made much less restrictive, after significant concern expressed by urban and rural landowners. Ecological Site buffers are proposed to be further reduced as it was difficult to justify wide buffers around well-defined and mapped Ecological Sites. Landscape and ecological assessments are less co-dependent since visual boundaries may not align with Ecological Site boundaries.

How have different rule settings affected biodiversity outcomes?

The KCDC PDP process illustrates that imposing rules that are too restrictive, and/or do not have incentives to encourage people to undertake biodiversity maintenance on their own land, leads to landholder resentment and potentially an unwillingness to participate in any biodiversity enhancement on their land. Voluntary biodiversity enhancement needs to be acknowledged and encouraged in District Plans.

Are policies being implemented as intended? If not, why not?

The KCDC PDP follows the RPS for identification of potential ecological sites. The threshold for significance is somewhat higher than outlined in RPS Policy 23/Method 21 excluding early successional vegetation and very small habitats. This was deemed more ecologically defendable. The KCDC PDP included regulatory measures to protect biodiversity values, but did not list non-regulatory incentives; although a range of non-regulatory methods are currently used by KCDC. The decisions from PDP hearing are

[1] Hence forth summarised as follows: Kāpiti Coast District (KCDC), Proposed District Plan (PDP) and Operative District Plan (ODP).

[2] Regional Policy Statement.

expected to be considered by Council in October 2017. This means that it will be a few years before there is sufficient information to assess how well the new DP policies are being implemented.

Is there variation in how districts apply regional policy?

Wellington Regional Council has prepared a guide to assist with the consistent interpretation of criteria. Within the Wellington region, RPS Policy 23 is being implemented as intended in the Districts west of the axial ranges. The Combined Wairarapa District Plan was developed before the RPS and is not well aligned with the criteria set out in RPS Policy 23, thus Districts east of the axial ranges would not give full effect to RPS Policy 23.

Comparison of KCDC PDP rules and provisions with other District Plans (including other regions) illustrated that some rules were considerably more restrictive in the Kāpiti Coast District, while other rules were more permissive or not included (e.g. harvesting firewood). These differences reflect the environmental and political pressures in each district, and the history of use and development in each district.

What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

Approximately 3% of resource consent requests in KCDC involve the modification or removal of protected indigenous vegetation. In-house advice is sought to assess the potential adverse effects on biodiversity but there may be insufficient capacity and liaison within and between agencies to ensure resource consent conditions are implemented and achieve the desired biodiversity outcome.

What has been the community response to different approaches?

Identification and protection of the most threatened ecosystems requires cooperation with and support from landholders. Kāpiti Coast Rural landowners, in particular, were opposed to the restrictive measures outlined in the PDP. Recommended changes to the PDP rules, as part of the hearing process, should better enable existing land uses and reasonable use of private land. Environmental lobby groups may have been under-represented in submissions as the Operative District Plan was seen as providing adequate biodiversity protection, and PDP was promoted as "no change". In actual fact, biodiversity protection provisions in the PDP were generally more stringent than in the ODP. We are awaiting the hearing decision, but it appears likely that biodiversity protection will be somewhat more permissive than in the ODP, in part due to changes to the RMA.

CONTENTS

Reviewed and approved for release by:

_____

W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

The Ministry for the Environment is collating information to support the development of National Policy Statement on Biodiversity. As part of this they wish to review how regional, unitary, and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, to what effect.

This project comprises two parts: firstly evaluating how indigenous biodiversity is identified, protected, or otherwise managed in terms of Regional and District Plan objectives, policies, and rules; the second is to consider how these issues are dealt with in real terms, in four case studies. Beca is reviewing the various plans and Wildland Consultants is undertaking the delivery of the four case studies. The Kāpiti Coast District Plan is one of these case studies, and is addressed in this report.

2. ECOLOGICAL CONTEXT

2.1 Vegetation cover

Wellington Region

Greater Wellington region encompasses the axial ranges (Rimutaka and Tararua Ranges) and the Aorangi Range surrounded by the lowlands between the Tasman Sea, Cook Strait and the South Pacific Ocean. The ranges are predominantly covered with indigenous vegetation and habitat types that are relatively unmodified, at least in terms of vegetation. Much of the lowland areas have been cleared for production (farming, horticulture, plantation forestry) with some sizable areas of residential development. The altitudinal height to which lowland vegetation was cleared largely depended on the extent to which topography made clearance of indigenous vegetation more difficult.

Coastal ecosystems are common but most are greatly modified through pest plants, vegetation clearance, or development. Wellington region includes two harbours (Wellington and Porirua) with largely modified shores, although some significant coastal systems remain. Lake Wairarapa is a significant lowland lake within the Region, and while regionally rare, important coastal lagoons and lakes include Lake Onoke, Lake Kohangapiripiri, and Lake Kohangatera. Wetland systems are greatly reduced and modified from their previous extent, but some substantial areas remain including the Wairarapa Moana wetland complex and Kāpiti Coast dune wetland systems. Wellington region contains many significant rivers and streams, most of which carry large volumes rock and gravel eroding from the heavily faulted and broken axial ranges.

Kāpiti Coast District

Kāpiti Coast District is located on the southwest coast of the North Island and comprises a relatively narrow strip of land between the Tasman Sea and the spine of the Tararua Ranges. The western portion of Kāpiti Coast District comprises flat coastal plains while the remainder is part of the foothills and forest covered ranges of

the rugged Tararua Range, with peaks rising to over 1,500 m. The human population is concentrated mainly in coastal settlements along State Highway 1, and little indigenous habitat remains on the coastal plains. Land uses include substantial residential areas, transport infrastructure, horticulture and market gardens, livestock farming, and forestry.

Land Cover

Coastal plains and lowland habitats within Kāpiti Coast District are highly modified with little indigenous vegetation remaining. These areas are largely classified as Acutely Threatened land environments (Walker *et al.* 2007) in which less than 10% of the original indigenous vegetation cover remains.

Forest and indigenous habitat increases in cover in the foothills of the Tararua Ranges, and largely comprises kohekohe (*Dysoxylum spectabile*) and tawa (*Beilschmedia tawa*) dominant lowland forest types which are reduced from their former extent at a regional and district scale. The transition to beech (Nothofagaceae)-dominant forest types occurs at about 600 metres above sea level. The extent of beech-dominant forest types has been reduced slightly from its previous extent. Other higher altitude vegetation and habitat types have changed little in extent.

Two large rivers, the Waikanae and the Otaki, and numerous streams, flow from the Tararua Ranges across the lowland plains to the sea. Several of these have estuarine wetland systems at the mouth of the waterway. Much of the extensive coastal dune system has been severely modified, but some remnants of dune wetland ecosystems and some more or less intact foredune ecosystems remain.

Kāpiti Coast District contains four islands, the largest of which is the forested Kāpiti Island, together with the considerably smaller shrubland-covered Motungarara Island (Fishermans Island), Tahoramaurea Island (Browns Island), and Tokomapuna Island (Aeroplane Island).

The pattern of remaining indigenous vegetation and habitats in Kāpiti Coast District is therefore far from uniform. Examples of vegetation and habitat types in the lowland parts of the District are small and often degraded, but are still nevertheless regarded as being ecologically significant. The Tararua Ranges and foothills comprises more than half of the Kāpiti Coast District and most of this area comprises public conservation land. Indigenous vegetation remnants on privately-owned lower foothills adjoining The Tararua Forest Park are mostly comprised of forest types of which less than 30% remains both at the District and Regional scale, and these areas have therefore been included in the large "K017-Tararua Forest and foothills" Ecological Site. Despite the size and degree of legal protection, "K017-Tararua Forest and foothills" is considered ecologically significant because; it provides habitat for a large number of Threatened and At Risk species; is significant habitat for fauna, including species that require large territories; contains a diverse range of vegetation and habitat types including transitional types (ecotones); the headwaters of many rivers and streams originate there; and many parts of the site are of cultural significance.

Despite the considerable loss of indigenous vegetation cover across lowland Kāpiti District, the area still contains many significant biodiversity features, some of which are described below.

2.2 Key ecosystem types in Kāpiti Coast District

Coastal Ecosystems and Wetlands

Kāpiti Coast District contains a large proportion of one of the most extensive sand dune ecosystems in New Zealand, which has been assigned to a separate ecological district: Foxton Ecological District. The sand-belt runs from Patea to Paekakariki. Within the Kāpiti Coast District this includes several estuaries, and many wetlands and dune lagoons or lakes, foredunes and also one gravel dune. Dune and wetland vegetation has been greatly modified through farming, plantation forestry, and the introduction of exotic plants, but some of the remaining wetlands and dune systems are nevertheless considered to be of regional importance.

Lowland Forest Remnants

Although largely cleared some indigenous forest, remnants remain on the lowland plains, including within urban centres. Around the Otaki River this includes the relatively unusual mix of tōtara (*Podocarpus totara*), titoki (*Alectryon excelsus* subsp. *excelsus*), kohekohe forest on free-draining alluvial gravels, with kohekohe-dominant forest elsewhere. Waikanae township retains many kohekohe-dominant forest remnants, and also some extensive coastal swamp forests containing nīkau (*Rhopalostylis sapida*), pukatea (*Laurelia novae-zelandiae*), and kahikatea (*Dacrycarpus dacrydioides*). Inland parts of Paraparaumu township also retain significant areas of kohekohe forest.

Rivers and Streams

The Otaki and Waikanae Rivers provide habitat for a wide range of indigenous species, including estuarine and shore birds, braided river birds, and large variety of indigenous fish species. Smaller streams provide access to the Tararua Ranges forests for migratory fish species.

Current Threats to Indigenous Biodiversity

Subdivision and infrastructure development is, in places, adversely affecting remaining lowland indigenous ecosystems, especially through fragmentation, increased sediment and nutrient inputs, and increased edge effects. Grazing, pest animals, and pest plants continue to contribute to the degradation of some Ecological Sites.

In the lowland and coastal areas, the remaining biodiversity is fragmented and modified, resulting in loss and modification of ecosystem functions. Many of the most threatened ecosystems remain largely in private ownership, and identification and protection of these ecosystems requires cooperation with and support from landholders. Vegetation clearance for subdivision and plantation forestry in the Tararua foothills could further reduce the extent of those forest types.

3. POLICY FRAMEWORK

3.1 Kāpiti Coast District Plans

Operative District Plan

The 1999 Kāpiti Coast Operative District Plan includes:

- Heritage Register I Table E for Ecological Sites;
- Heritage Register I Table G Geological Sites;
- Heritage Register I Table T for Significant Trees (indigenous and introduced species); and
- A list and map of Nationally and Regionally Rare and Threatened Species in Part I.

Rules for each District Plan Zone are similar, applied to both the urban and rural environment, and govern:

- The disturbance, removal, damage, or destruction ("modification") of naturally-occurring indigenous vegetation; or
- Modification of naturally-occurring indigenous trees greater than specified measurements[1].

Modification of vegetation was not permitted[2] where:

- It formed a contiguous area of more than 100 m^2; or
- Occurred within 20 metres of a waterbody (including within the waterbody itself); or the coastal marine area; or
- Was a nationally or regionally rare or threatened vegetation type.

These protective measures were included in part due to pressure from local conservation groups, such as the Kāpiti Environmental Action Group, to protect natural heritage in the District. Environmental aspirations of Kāpiti Coast District Council (KCDC) staff and Councillors also contributed to the inclusion of measures protective of biodiversity and a range of non-regulatory incentives such as conservation rates relief, establishment of a heritage fund, and encouragement of community care groups to manage local sites. Subsequent to the 1999 District Plan, KCDC employed additional staff to manage the biodiversity and sustainability portfolios.

Proposed District Plan

The Proposed District Plan (PDP) was notified in November 2012. Chapter 3 Natural Environment contains most of the policies and rules to protect and manage effects on biodiversity and includes Schedules of Ecological Sites (3.1), Key Indigenous Tree Species by size and ecological domain (3.2), Rare and Threatened Vegetation Species

[1] Greater than four metres in height, or which have a trunk circumference greater than 95 cm measured at a point no higher than 1.4 metres above the ground.

[2] Vegetation modification rules in the PDP had immediate effect upon notification.

(3.3), landscape protection (3.4, 3.5 and 3.6), Geological Sites (3.7), and rules preventing the trimming and modification of vegetation and habitats. Chapter 10 Historic Heritage contains the Notable Trees register, which includes some indigenous species.

The plan proposed *Priority Areas for Restoration* (PAR) which were areas mapped to link Ecological Sites. Many of the policies and rules pertained to *Sensitive Natural Features* which were identified and listed or mapped in the District Plan and encompassed the features listed in the Schedules to Chapter 3.

Policy 3.2 requires that *sensitive natural features* will be identified and listed or mapped in the District Plan, and these will continue to be identified as further information becomes available through resource consent processes, when considering applications on land containing *locally indigenous vegetation*.

Policy 3.11 outlined the criteria for identification of Ecological Sites, and was broadly aligned with Policy 22[1] of the, then, Proposed Regional Policy Statement (RPS) for the Wellington Region (Greater Wellington Regional Council 2009), although the wording was somewhat different and additional clauses were included in the District Plan policy.

A number of rules in Chapter 3 were deemed to have immediate legal effect upon notification of the PDP under section 86B(3) of the RMA. These rules put limits on (or prevented) trimming or modification of indigenous vegetation (in Ecological Sites or listed in Schedule 3.2) or a Notable Tree, imposed controls on building and earthworks within 10 m (urban) or 20 m (rural) of Ecological Sites, assigned Restricted Discretionary status for subdivisions and earthworks on properties with Ecological Sites, PARs, and *sensitive natural areas*, and in relation to planting of shelterbelts or harvesting of exotic plantation forest near Ecological Sites.

3.2 Regional Policy Statement

The RPS for the Wellington region became fully operative in April 2013 (after notification of the PDP). It outlines that two of the regionally significant issues are the reduction in the extent of indigenous ecosystems, and their ongoing degradation and loss. Indigenous ecosystems have been significantly reduced in extent, include: wetlands, lowland forests, lowland streams, coastal dunes and escarpments, estuaries and eastern 'dry land' forests.

In terms of terrestrial ecosystems, the RPS directs that habitats and features in the coastal environment that have significant indigenous biodiversity values are protected (Objective 3) and those with recreational, cultural, historical or landscape values that are significant (Objective 3), and those with natural character (Objective 4) are protected from inappropriate subdivision, use and development. This includes protection of the high natural character of coastal environments (Policy 3), identification of the landward extent of the coastal environment (Policy 4), protection of historic heritage values (Policy 22), protection of indigenous ecosystems and

[1] This became Policy 23 in the Operative RPS.

habitats with significant indigenous biodiversity values (Policy 24), and protection and management of landscape features (Policies 24, 26, 28), including on a whole-of-catchment basis (Policy 64).

The life supporting capacity of fresh-water water bodies is to be safeguarded (Objective 12) and support healthy functioning ecosystems (Objective 13). Protecting aquatic ecological function of water bodies is to be included in regional plans (Policy 18). Where the natural character of the coastal environment has been degraded then this should be restored and rehabilitated (Objective 5), including on a whole-of-catchment basis (Policy 64).

Objective 16 of the RPS "Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state" responds to these issues by aiming to maintain and, where necessary, restore indigenous ecosystems and habitats with significant biodiversity values in the Wellington region to a healthy functioning state. The RPS includes obligations for district councils to identify significant indigenous ecosystems and habitats and then to protect these.

Objective 16 is implemented through the following RPS policies and methods:

- Policy 23 "Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values - district and regional plans" (refer to Appendix 1 for more detail).
- Policy 24 "Protecting indigenous ecosystems and habitats with significant indigenous biodiversity values - district and regional plans".
- Policy 47 "Managing effects on indigenous ecosystems and habitats with significant indigenous biodiversity values - consideration". This Policy will cease to have effect in a given district once Policies 23 and 24 are in place in an operative district plan, and at a regional level once incorporated into a new regional plan;
- Method 21 "Information to assist with the identification of indigenous ecosystems and habitats with significant indigenous biodiversity values".

A Draft version of Method 21 was made available in September 2015, with a final version in August 2016.

3.3 Blanket tree protection in urban areas

In 2009, the Kāpiti Coast District Council identified that existing Native Vegetation Permitted Activity Rules and Standards in its Operative District Plan were inconsistent with S.76 (4A) of the then operative Resource Management Act's (RMA) - new restrictions on 'blanket tree rules' on urban allotments[1]. To address this, surveys of trees in the urban environment were undertaken in 2010. At the time that

[1] RMA S. 67(4C) an urban allotment is a property that is no greater than 4,000 m^2 and is connected to a reticulated water supply system and a reticulated sewerage system upon which there an occupied is a building and it is not a reserve.

the Proposed District Plan (PDP) was notified (November 2012), the understanding was that the following options were available for tree protection[1]:

- A cluster of trees identified precisely by location (usually by street address and/or legal description);
- All trees of one or more named species in a defined area or zone;
- All trees in a class with defined characteristics in a defined area or zone;
- All trees in a named ecosystem (usually natural rather than artificial) or habitat or landscape (unit) or ecotone.

Ecological sites within the Kāpiti area were already mapped and described as defined areas, and many were already included in the Operative District Plan. Thus the Proposed District Plan Schedule 3.1 included all Ecological Sites within the operative plan, plus additional sites proposed and surveyed during 2007 and 2012 surveys (Wildland Consultants 2007 and 2012). The locations of Rare and Threatened Vegetation Species were also generally known and these species and their locations were included in Schedule 3.3 of the Proposed District Plan.

However the tree protection rules in the Operative District Plan also protect trees outside of Ecological Sites and, in order to continue this protection, Kāpiti Coast District Council developed Schedule 3.2: 'Key Indigenous tree species by size and ecological domain' to identify the trees within the urban environment to which rules would apply for trimming and modification (Rule 3A.1.2 in the PDP). The size criteria for many species were more restrictive (smaller circumference) than the 1999 Operative Plan.

The RMA was further amended in 2013, requiring the description of trees or groups of trees and identification of the allotment by street address or legal description of the land, or both (Sections 76(4A) to (4D) RMA 1991). To address this, a variation to the Proposed District Plan was drawn up with several options for the selection of urban trees that would warrant protection. These options were debated by the Council and one option was put forward for inclusion in the District Plan.

3.4 Does policy address biodiversity state and pressures

This section addresses the following question:

(a) To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

The RPS for Wellington region includes emphasis on ecosystems and habitat that have undergone the greatest historic loss of extent and diversity, such as coastal environments, freshwater habitats and lowland ecosystems. A relatively low bar for ecological significance in Policy 23 enables the inclusion of environmentally modified but relatively unique habitat remnants (largely due to loss of extent), and also successional vegetation types. The RPS appropriately identifies the areas of most concern with regards to historic and potential on-going biodiversity loss. The RPS

[1] Environment Court Declaration in May 2011 (NZEnvC 129).

also appears to be well-aligned with the Proposed National Policy Statement on Indigenous Biodiversity (MfE 2011).

The 2012 PDP seeks to give effect to the RPS through:

- The identification and protection of significant Ecological Sites; and
- Restrictions on trimming and modification of indigenous vegetation:
  - In Ecological Site; and
  - Along waterways;
- And potentially significant trees or groups of trees.

The rules in the 2012 PDP, as notified, did not differentiate between lowland areas where indigenous biodiversity is much reduced, and the foothills and ranges of the Tararua Ranges where indigenous ecosystems and habitats are more common or extensive. The pressures on biodiversity are also somewhat different in areas with different levels of indigenous biodiversity remaining (Table 1) and this is not fully reflected in the PDP.

Table 1: The amount of indigenous biodiversity remaining and the pressures potentially further impacting on biodiversity values differs in different 'zones' of the Kāpiti Coast District. f

'Zone'	**Lowland**	**Tararua foothills**	**Tararua Ranges**
Amount of indigenous biodiversity remaining	**Low**	**Low-Moderate**	**High**
Type of pressure			
Changes to hydrology (wetlands)	√		
Increased sediment run-off/erosion	√	√	
Lack of connectivity	√		
Increased fragmentation	√	√	
Weed impacts	√	√	√
Pest animal impacts	√	√	√
Urban development	√		
Rural subdivision		√	
Agricultural development	√	√	
Farm management		√	
Production forestry		√	
Tree trimming and modification	√	√	
Dumping of rubbish and/or garden waste	√	√	

4. PROJECT PROCESS

4.1 Previous Ecological Site assessments

The 1995 Proposed Kāpiti Coast District Plan contained a Heritage Register and a list of 138 Ecological Sites. These were mainly forest remnants or wetlands identified by the Department of Conservation. That plan became operative in 1999, with 133 sites.

Field inspections of Ecological Sites were undertaken in 2002-2003, 2007, and 2012 to confirm or identify boundaries and to collect ecological information (Wildland Consultants 2003a, 2003b, 2007, 2012). The number of sites assessed and the number recommended for inclusion are provided in Table 2.

The following information was collected during field surveys:

- Vegetation types were mapped using aerial photographs in the field, and key points were verified using a GPS unit.
- Brief site description and main vegetation and habitat types.
- Fauna (indigenous and exotic).
- Threats from invasive plants or fauna.
- The presence of North Island fernbird and spotless crake was surveyed for at wetlands (2002-2003 survey only).
- Human activities (positive/negative effects).
- Management and monitoring requirements.

Table 2: Previous Ecological Site surveys and assessments of significance for Kāpiti Coast District

Survey Year	Reported On	Field Sites Surveyed	Recommended for Inclusion	Comments	Wildlands Report No.
2002-2003	171	166	132		662
2003 Wetlands	69	64	59	Includes some sites from 2002-2003 survey	669
2007	47	47	29	Excluding K017	1684
2012	4	4	3		2984
Included in 2012 PDP			**173**		

The significance assessment and importance ranking criteria are similar for all surveys and reflected best practice methodology at the time of each survey. This has resulted in slight changes in emphasis when assessing site significance (Table 3). The 2012 criteria relate directly to the criteria in the Proposed Regional Policy Statement for the Wellington Region (Greater Wellington Regional Council 2010).

Table 3: Previous Ecological Site significance criteria for Kāpiti Coast District.

Survey Year	2002-2003 and 2003 Wetlands	2007	2012
Significance criteria	• Representativeness • Diversity and pattern • Naturalness • Size and shape • Rarity and special features • Buffering and connectivity • Viability	• Representativeness • Rarity • Diversity • Distinctiveness • Continuity and Linkage within landscape • Cultural Values • Ecological Restoration • Landscape Integrity • Sustainability	• Representativeness: - Representative - Land Environment NZ • Rarity: - Habitats - Flora - Fauna • Diversity: - Communities • Context: - Connectivity - Seasonal patterns

For these previous assessments, all ecologically significant sites were also ranked for importance - usually as Internationally, Nationally, Regionally, or Local - and this information was included in the District Plan schedules listing ecologically significant sites.

The description and Ecological Site boundaries in the 2012 notified PDP were drawn from the previous Wildland Consultants reports referred to above.

4.2 Kāpiti Coast Proposed District Plan process

The Kāpiti Coast Proposed District Plan (PDP) was notified in November 2012 and received numerous submissions on Chapter 3 Natural Environment. The level of opposition, and the three-yearly Council elections, resulted in Council requesting an independent review of the PDP to decide whether to start afresh, or modify the 2012 PDP. After this independent review, Council decided to revise the PDP and to delay formal hearings until 2016, to enable further engagement with submitters on key issues. Recommended decisions on the PDP from the Hearing Panel are expected to be considered by Council in October 2017.

A number of rural submitters who had lodged submission relating to Chapter 3 Natural Environment and Chapter 7 Rural Environment formed a Rural Issues Group (RIG). They, along with Federated Farmers, utility companies, and Friends of Te Hapua Wetland, were some of the key submitters to PDP provisions (objectives, policies, rules, and mapping). Rural landowners were particularly concerned how the provisions associated with landscapes and Ecological Sites in the Tararua Foothills area would affect the use of rural properties.

As part of the engagement process, site visits were undertaken to many of the submitter properties to better understand the particular issues associated with those properties. Reports were prepared and provided to the landowners summarising landowner concerns, ecological values, and any proposed changes to Ecological Site boundaries. A submitters workshop was held to enable face-to-face discussion about some of the proposed changes and findings.

During the period August 2015 to February 2016, pre-hearing meetings and facilitated meetings were held with submitters as required. The hearings took place from April 2016 to April 2017, with decisions expected in October 2017.

Wildland Consultants contributed to the S42A report for Chapter 3 Natural Environment and the S42A report for Urban Tree Variation (Proposed Variation 1 to the PDP), attended the Urban Tree Variation Hearing and part of the Chapter 3 Natural Environment Hearing, and provided feedback to KCDC on the Draft Chapter 3 Closing Statement.

4.3 RPS Policy 23 - assessment of significance

A methodology workshop for experienced ecologists was convened during September 2015 to discuss how the RPS Policy 23 criteria should be interpreted and to define a methodology suitable for determining the ecological

significance of the PDP Ecological Sites. The workshop provided a platform for free and open discussion, on a without prejudice basis, This process and externally peer reviewed outcomes are set out in Wildland Consultants and Kessels Ecology (2015). The key findings with regards to assessment of ecological significance were:

- A site either is, or isn't, significant for a particular aspect or criterion.
- To be significant a site needs to meet one or more of the criteria in RPS Policy 23.
- Ranking of sites (e.g. 5 is best, 1 is least, or high, moderate, least) is different from significance, but may be useful for setting management priorities.
- Two vegetation classification systems should be used to assess the representativeness of vegetation and habitats at national, regional, district, and Ecological District scales: Singers and Rogers 2014, and Leathwick *et al.* 2012.
- The minimum area of forest or scrub dominated by indigenous species (i.e. comprise 50% or more) was set at 0.5 ha. Wetlands were not assigned a lower area limit but should be dominated by indigenous vegetation and/or water.
- Vegetation and habitat types are considered significant if they are representative and either less than 30% of the postulated original extent remains or less than 20% of the current extent is legally protected[1].
- Rarity of features were assessed using the following:
  - The Threatened Environment Classification (Cieraad *et al.* 2015) to assess whether a site occurs in a threatened land environment.
  - Rare geo-physical features, as listed in Kenny and Hayward (1996).
  - Department of Conservation's national threat classification lists, to assess the rarity of flora and fauna.
  - Williams *et al*. (2007), Holdaway *et al*. (2012), and Wiser *et al.* (2013) to assess the status of naturally rare ecosystems.
  - Regionally rare fauna were listed in Appendix 4 of the methodology report (Wildland Consultants and Kessels Ecology 2015) and regionally rare plants as per Sawyer (2004).
- The amount of diversity, and whether this is considered to be significant, is based on professional judgement and is evaluated relative to the particular ecosystem or habitat type, the pre-human baseline condition, and the other remaining similar ecosystems and habitats.
- A site needs to play an important role or function to qualify for the connectivity and buffering criterion, and it does not seem appropriate to identify a site as significant solely on its role as a buffer or corridor.
- Assessment of tangata whenua values is generally outside the expertise of ecological specialists and should be evaluated by a specialist in that field, but information can be noted if known.

[1] i.e. public land managed by the Department of Conservation, Queen Elizabeth II Trust covenants, Nga Whenua Rahui covenants, private covenants under the Conservation Act.

Workshop outcomes required the significance of all Ecological Sites listed in PDP Schedule 3.1 to be re-evaluated in a desktop review to ensure that all sites met PDP Policy 3.11/RPS Policy 23 criteria (hereafter referred to as RPS Policy 23).

The following interpretation issues are noted with the RPS criteria.

RPS Policy 23a: Representativeness: the ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region, and:

(i) Are no longer commonplace (less than about 30% remaining); or
(ii) Are poorly represented in existing protected areas (less than about 20% legally protected).

There was dissension amongst the ecologists about the requirements for 30% of extent or 20% of legal protection qualifiers. Some thought that they were pernicious qualifiers that are not related to the meaning of representativeness; *the ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region*. Other ecologists felt that the RPS criteria were entirely appropriate: firstly assessing if a site is actually representative of its type, and then, if so, assessing its "representativeness' in terms of its current coverage or extent.

Criterion 23c: Diversity: the ecosystem or habitat has a natural diversity of ecological units, ecosystems, species and physical features within an area.

Diversity is still largely a matter of judgement, and opinions may vary amongst professionals.

RPS Policy 23d: Ecological context of an area: the ecosystem or habitat:

- Enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats; or
- Provides seasonal or core habitat for protected or threatened indigenous species.

This criterion is inconsistent with Section 6(c) of the RMA as second bullet point should consider whether the habitat is significant habitat for fauna, not significant habitat for significant fauna.

4.4 Summary

Previous assessments of ecological significance reflected best practice methodology at the time of survey. Slight changes in emphasis occurred as a result of changes to District and Regional Policy criteria, and the availability of new tools (e.g. Threatened Environment Classification, Singers and Rogers 2014 Predicted Ecosystem types). However core criteria have been retained throughout, and were agreed by robust discussion between ecologists. Key criteria are:

- Representativeness
- Rarity of habitats, flora and fauna
- Diversity and uniqueness of communities
- Context and connectivity

Thus the process outlined above illustrates the evolution of ecological significance assessment and case law. A key difference in the most recent assessment was differentiation between ecological significance and the ability to manage or restore a site. It was deemed more appropriate to assess sites for significance in a binary fashion (significant/not significant) for all criteria. Ranking sites (e.g. high/medium/low) and measures of viability or sustainability relate to management (including future management) of a site rather than current ecological significance.
The assessment used for the identification of Ecological Sites in the KCDC PDP is considered current best practice within the bounds of the directives set by Policy 23 of the RPS.

5. RULES AND BIODIVERSITY OUTCOMES

This section addresses the following question:

(b) How have different rule settings affected biodiversity outcomes?

5.1 Known adverse effects on biodiversity

Ecological Sites Identified Between ODP and PDP

In 2007 another 29 sites were suggested for inclusion in the Heritage Register of the Operative District Plan (ODP) (Wildland Consultants 2007). These sites were not put forward as a variation for inclusion in the ODP, but were included in the 2012 PDP. The ODP contains rules to protect trees over a certain dimension and rules to trigger vegetation clearance over a set limit (Section 3.1).

However, these rules were not sufficient to prevent vegetation modification in at least two of the 'newly' identified Ecological Sites. Subdivision clearance was granted for a rare coastal vegetation type, and at another site landowners undertook to modify trees to improve their view. Grazing also affected the margins of a handful of other 'new' sites. Consultation with submitters and other stakeholders identified two issues:

- the lack of formal inclusion of potential Ecological Sites in the District Plan; and
- the lack of landowner knowledge with regards to tree modification rules and Ecological Sites.

5.2 Potentially adverse effects on biodiversity

Some of the rules in the PDP had the potential to adversely affect biodiversity outcomes.

Trimming and Modification

Rules preventing trimming and modification of vegetation also prevented removal of vegetation interfering with fences (including electric fences)[1], impeding movement along tracks and paths (or creating new ones) to access pest plant and animal management sites (e.g. bait lines, weed control), or construction of new fences to keep stock out. In many case the voluntary biodiversity enhancement activities undertaken by landowners were suddenly not permitted, due to some of these rules having immediate effect.

Other landowners were concerned that vegetation modification rules would prevent vegetation clearance in Ecological Sites spanning streams and river mouths, potentially resulting in more frequent flooding of their properties.

Voluntary Biodiversity Enhancement

Some landowners were understandably resentful that their biodiversity enhancement efforts were not being recognised or encouraged through rules or other mechanisms (e.g. rates relief, or funding for control of pest plants or animals, or stock exclusion) in the PDP. They felt that the mix of rules in the PDP actually worked to discourage voluntary biodiversity management.

Priority Areas for Restoration

Priority Areas for Restoration (PAR) were also poorly received by KCDC ratepayers, especially rural landowners. The evidence for the selection was not entirely clear (more details below). Consequently PAR provisions were withdrawn from the PDP on 30 October 2014.

The rationale for the location of PARs in the PDP was not entirely clear, and this came through in the sometimes contradictory terminology used to describe PARs. In broad terms, the concept was to identify isolated ecologically significant areas and identify potential corridors between them which, once restored, would promote species movement and gene flow between the sites. The key focus for this approach was the ecologically depauperate coastal lowlands. In addition, it included a longitudinal corridor along the foreshore, and connections between the Tararua Ranges and the coast, preferably along rivers or streams and/or incorporating Ecological Sites.

However, Ecological Sites were specifically excluded, although many would benefit from restoration efforts such as stock exclusion, control of pest plants and animals, and restoration planting. Landowners objected to the proportions of their properties identified as PAR, and the rule in the PDP requiring that 10% of the area identified on the lot be restored. Landowners felt that this made it difficult to develop the site in the future or continue with existing uses. Also, it potentially duplicated subdivision reserve contributions, and ongoing maintenance of restored areas would still be the landowners' responsibility.

[1] Also other structures and infrastructure, such as keeping vegetation away from building, roads, and power lines.

The idea for PAR has a sound conceptual basis, to identify areas where ecological connections could potentially be improved. However, the actual location of PAR required refinement, such as inclusion and a focus on Ecological Sites, inclusion of public land and riparian strips in preference to private land, identifying key rivers and streams (but possibly not all streams) that would benefit from riparian enhancement or protection, and identification of species and their core habitats that would benefit from improved connectivity. In addition, the connectivity requirements of different species differ, so a one size fits all approach is unlikely to provide benefits for all species.

Moreover, District Plan mechanisms should, to a large degree, be enabling rather than preventative. In other words, when development is proposed for a property where a potential PAR has been identified then the developer/landowner should have options to call on the Council resources (e.g. advice from restoration expert, funds for fencing or planting) to undertake restoration[1]. The exact location of this restoration effort within the property will depend on the values to be enhanced or protected and may depend on the willingness of the landowner to sacrifice a portion(s) of their land for restoration.

Reasonable Use of Private Land

Protection of indigenous biodiversity, by means such as identified Ecological Sites, can reduce or prevent reasonable use of private land. This can occur in both urban and rural areas.

In urban areas, sections tend to be small and trees overhanging a boundary, or just inside a property boundary, can shade or occupy a large proportion of an urban section. Thus the rules in a District Plan should not only protect indigenous biodiversity, but also allow reasonable use of land. This balance can sometimes be difficult to achieve.

Some rural properties in the Tararua foothills are nearly completely covered with indigenous vegetation of sufficient significance to warrant inclusion in an Ecological Site. Again, this can prevent future development of a site, such as building a house and accessway on a 'vacant' lot, development of a tourism operation (building tracks or accommodation), or access to adjacent forestry or blocks subject to commercial activity. Rules may therefore need to allow for these activities.

This issue also highlighted that the rules and non-regulatory mechanisms should be appropriate to the amount of biodiversity remaining in a particular planning zone. Potentially greater areas of vegetation clearance could be permitted where there still are substantial areas of indigenous vegetation, although this needs to be balanced against potential fragmentation and increased vulnerability to pest plants and animals. Options could perhaps include a Restricted Discretionary activity with discretion over the amount and location of indigenous vegetation to be cleared. In urban areas, or where little indigenous vegetation remains, indigenous vegetation clearance should

[1] Many of these services are already available from KCDC.

probably be a Discretionary activity and, if approved, would require an adequate mitigation package.

Imposing rules that are too restrictive, and/or do not have incentives to encourage people to undertake biodiversity maintenance on their own land leads to landholder resentment and potentially an unwillingness to participate in any biodiversity enhancement on their land. KCDC already has a range of financial and development incentives to encourage good biodiversity management, but these were poorly highlighted in the PDP.

5.3 Potentially positive effects on biodiversity

Mapping and Identification of Biodiversity Features

Identification and mapping of areas that are considered to be ecologically significant helps to define these areas for landowners. Additionally, meeting with landowners to talk about ecologically significant features on their land often sparks landowner interest and can lead to the landowner being supportive of that feature being managed, or undertaking biodiversity management themselves.

Increased Publicity About Indigenous Tree Protection

The Urban Tree Variation, and a preceding court case about tree trimming in an Ecological Site, have served to heighten awareness of tree protection within Kāpiti Coast District. However, final decisions on the District Plan are yet to be released, and the wording and intent of a number of tree protection rules is proposed to be changed. Thus it will likely be necessary to undertake a communication campaign, once the hearing decision is released, to ensure that urban and rural landowners understand the new set of rules for indigenous tree protection.

5.4 Summary

- Maintenance of biodiversity values could be enhanced by development or use of a mechanism in District Plans to protect sites that are newly identified as ecologically or environmentally significant. A lag between identification and inclusion in a District Plan can result in ongoing biodiversity loss.
- Imposing rules that are too restrictive, and/or do not have, or highlight, incentives to encourage people to undertake biodiversity maintenance on their own land leads to landholder resentment and potentially an unwillingness to participate in any biodiversity enhancement on their land.
- Voluntary biodiversity enhancement needs to be acknowledged and encouraged in District Plans.
- Identification of ‘potential restoration corridors’ has some merit, but needs to be carefully considered, needs to include existing Ecological Sites and corridors (e.g. rivers and large streams), and should largely be an enabling policy rather than restrictive rules.

- If there are parts of a district that have very different amounts of remaining biodiversity, then it may be appropriate to consider differential policies and/or rules that are more permissive in areas where indigenous ecosystems and habitats are more extensive.
- Mapping and identification of biodiversity values can assist with protection of these values, including through advocacy and publicity.

6. OTHER APPROACHES CONSIDERED

This section addresses the following question:

(c). What approaches were considered but did not make the final cut? And why?

Alignment of KCDC Policy 3.11 with RPS Policy 23

There were some wording differences between the significance criteria of KCDC Policy 3.11 compared with RPS Policy 23:

- Representativeness: "high representativeness values are given to particular ecosystems and habitats that were once typical and commonplace in a district or in the region" (KCDC Policy 3.11a) versus "the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region" (RPS Policy 23a).
- Rarity: addition of "and also species that are endemic to the local ecological district" (KCDC Policy 3.11b).
- Ecological context: addition of "has the ability to be restored (when the difficulty, cost and time of restoration are considered" (KCDC Policy 3.11 g.iii).
- Tāngata whenua values: addition of seven additional factors that were not all focussed on tikanga Māori aspects.
- Additional criteria: Distinctiveness (KCDC Policy 3.11d), Landscape integrity (KCDC Policy 3.11f), and Sustainability and resilience (KCDC Policy 3.11i).

There were a number of submissions that called for Policy 3.11 of the PDP to be identical to that of RPS. Submitters felt that the RPS policy was subject to extensive consultation whereas little opportunity was provided to consult on the PDP, that the KCDC Policy went beyond the direction provided by the RPS, and that the additional clauses in the KCDC Policy were confusing and/or repetitive or were related to the management of a site, not its significance.

Adoption of the exact RPS Policy 23 wording has been recommended to the Commissioners of the PDP hearing.

Priority Areas for Restoration

Priority Areas for Restoration (PAR) were mapped around Ecological Sites and along important features such as rivers and coastal areas. The aim was to identify locations, through subdivision processes, that could be restored to improve ecological connections between sites.

PARs were withdrawn from objectives, policies, rules, and map layers by public notification on 30 October 2014, mainly as a result of objection by landowners to the amount of land included in PARs, especially productive farmland and areas suitable for subdivision.

Some of the additional issues that led to this withdrawal were:

- Priority Areas for Restoration (PARs) were intended to implement Policy 14 of the New Zealand Coastal Policy Statement[1] but also included coastal to inland 'connections'.
- Ecological Sites were not included, although restoration efforts such as control of pest plants and animals would probably benefit most of the Ecological Sites.
- There were three description of PAR which all differed somewhat in their focus in different parts of the District Plan.

Trimming and Modification of Indigenous Vegetation

This is one of the aspects that was of greatest concern to submitters (urban and rural landowners and managers of structures and infra-structure), especially those with existing buildings, access tracks, fences, or other infrastructure, or where trimming or modification was required to ensure ongoing control of pest plants and animals. The rules as they appeared in the PDP essentially prevented the trimming or modification of any vegetation listed in Schedules 3.1, 3.2, and 3.3.

The lifting of blanket tree protection rules in urban areas not only resulted in changes to the PDP rules, but also required additional definitions. There is no definition of 'tree' in the RMA so one had to be developed, which had flow-on implications in other parts of the District Plan and in non-urban areas. Proposed Variation Number 1 (Indigenous Vegetation - Urban) sought to allow trimming, provided that this was done to specified standards, and provided a mechanism to allow modification (including complete removal) of trees under certain circumstances. It also included consideration of maintenance requirements around houses, accessways and roads, and infrastructure such as power lines and other utilities.

A review of the tree protection rules in the rural environment aligned most of the rules with the changes proposed by Proposed Variation Number 1, but also included

1 http://doc.org.nz/publications/conservation/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/

allowance for rural activities such as fencing, farming, market gardening, plantation forestry, and development of access tracks.

A further refinement was proposed (it is uncertain if this has been put before the Hearing Commissioners) that Schedule 3.2 Key indigenous trees, and associated trimming and modification rules, should only apply to lowland planning zones in the District because there are fewer trees there, and not apply to the Rural Hills Zone. Decisions regarding Variation 1 to the PDP, and any refinements to Schedule 3.2, will be released as part of the overall PDP hearing process in early 2017.

Ecological Site Buffer

Where building or earthworks was proposed on a site containing an Ecological Site and a building then building and earthworks were controlled within 10 metres of the mapped Ecological Site boundary in living and working zones and within 20 metres of the mapped Ecological Site boundary in rural and open space zones. Building and development in or within 10 metres of an Ecological Sites was a Discretionary Activity.

The buffer distance in the provisions for Ecological Sites (10-20 m for rural and 5-10 m for residential) was initially 20 metres for all zones, based on consistency with buffers around waterways (20 metres). This was amended through pre-notification consultation and the buffers for residential zones were reduced to 5-10 metres to decrease the likelihood of requiring resource consents imposed by buffering adjacent Ecological Sites.

The buffer provisions were included to prevent edge effects, degradation of Ecological Site margins, and issues such as sedimentation of waterways. However, it was difficult to justify wide buffers around well-defined and mapped Ecological Sites, and especially for the very large K017-Tararua Ranges and foothills site. Landowners, especially the Rural Issues Group, objected to the inclusion of buffers around Ecological Sites.

The rules are proposed to be modified further, in the KCDC Draft Closing Statement (McKay P. 2016a), so that building in and within five metres of an Ecological Site will be a Discretionary Activity.

Landscape Features

The boundaries of *Outstanding natural features and landscapes*[1], *Significant amenity landscapes*[2], and *Areas of high natural character*[3] were often the same as those of Ecological Sites. Rural landowner objected to landscape features on their land because they felt that the features were not visually dominant enough to warrant inclusion. Identification of a landscape feature triggered additional restrictive policies

[1] ***Outstanding natural features and landscapes*** - mapped features with a defined boundary and information in Schedule 3.4 describing the landscape values.

[2] ***Significant amenity landscapes*** - mapped features with a defined boundary and information in Schedule 3.5 describing the landscape values.

[3] **Areas of high natural character** - mapped areas within the coastal environment which in some cases overlap with either *ecological sites* or *outstanding natural landscapes* or *significant amenity landscapes*.

and rules in the PDP. Landscape features were further reviewed and boundaries revised to where they were visually dominant, rather than necessarily contiguous with the edge of the indigenous vegetation canopy.

Simplification of the District Plan

To simplify the District Plan, most of the explanatory text associated with Policies and Rules is proposed to be deleted. Also Schedule 3.2 and the planning maps were simplified by the removal of reference to Ecological Domain (Ecodomains) (GWRC 2002). This was in response to concerns by submitters that, in some instances, private property triggered provisions in more than a dozen District Plan layers and that it was very confusing to determine which policies and rules were relevant and should be applied.

6.1 Summary

- The wording of the criteria in KCDC PDP Policy 3.11 is proposed to be changed to be identical to RPS Policy 23. Submitters felt that the RPS policy was subject to extensive consultation whereas little opportunity was provided to consult on the PDP, that the KCDC Policy went beyond the direction provided by the RPS, and that the additional clauses in the KCDC Policy were confusing and/or repetitive or were related to the management of a site, not its ecological significance.
- Priority Areas for Restoration (PAR) were withdrawn from the PDP due to significant opposition from landowners and inconsistencies in PAR description and application in the PDP.
- The rules regarding trimming and modification of indigenous vegetation are proposed to be made much less restrictive, after significant concern expressed by urban and rural landowners. Proposed amended rules will provide for existing land use, reasonable use of private land, management of structures and infra-structure, and management for the purposes of biodiversity enhancement. A further refinement that may be proposed is more permissive vegetation modification in parts of the district that retain a greater amount of indigenous vegetation cover.
- Ecological Site buffers were initially reduced in size from 20 m to 10 m in urban zones after pre-notification consultation, but in rural areas 20 m buffers were proposed to be retained. Landowners, and especially rural landowner, saw no value in Ecological Site buffers especially around the extensive K017 Tararua Ranges and Foothills site. Ecological Site buffers are proposed to be further reduced for all zones to 5 m as it was difficult to justify wide buffers around well-defined and mapped Ecological Sites.
- The boundaries of landscape features were often the same as the boundaries for Ecological Sites. Some rural landowners felt that some of the landscape features were not sufficiently visually dominant to warrant inclusion. It is proposed to amend landscape feature boundaries to more accurately reflect visual dominance from key viewpoints rather than follow the margins of vegetation types.
- Submitters expressed concern and confusion at the complexity of the PDP and the many different planning map features. It is proposed to simplify the plan by

removing most of the explanatory notes and some of the map features, including Ecological Domains.

7. IMPLEMENTATION OF POLICIES

This section addresses the following question:

(d) Are policies being implemented as intended? If not, why not?

7.1 RPS Policy 23

Within the Wellington region, RPS Policy 23 is being implemented as intended in the Districts west of the axial ranges. The Combined Wairarapa District Plan was developed before the RPS and is not well aligned with the criteria set out in RPS Policy 23.

GWRC has indicated that the RPS criteria deliberately set a low bar for triggering significance for any particular site (McKay 2016a) because, other than vegetation on the ranges, vegetation in the Wellington region is greatly reduced, and remaining remnants are often not in good condition. Nevertheless, they are the last remaining examples and are therefore significant.

The Methodology report (Wildland Consultants and Kessels Ecology 2015) introduces thresholds that are not specifically included in Policy 23 or the Method 21 guidance (GWRC 2016). This has essentially raised the threshold for significance somewhat to a level that was deemed to be more ecologically defendable. Differences between the Method 21 guidance and the Methodology report include:

- Terrestrial sites should have a minimum size of 0.5 ha to be considered significant for Criterion 23a (no lower limit for wetlands).
- Vegetation and habitats should be composed of at least 50% indigenous species or habitats to be considered significant for Criterion 23a.
- A site needs to make an important contribution to connectivity to be considered significant for Criterion 23d.
- Habitat that is important for fauna (regardless of national threat status) could be considered significant under Criterion 23d. So this could also include core breeding habitat for a range of common birds, or fish passage to other better habitat. This amendment is consistent with the second limb of RMA S6c which requires recognition and protection of significant habitats of indigenous fauna. Conversely a threatened species occasionally using a habitat did not necessarily indicate that the habitat was significant.
- For large Ecological Sites (larger than 50 ha) protocols were developed to exclude early successional vegetation types (up to 5 ha per property) and align Ecological Site boundaries with physical or cadastral boundaries where less than 1 ha of more mature vegetation was to be excluded. For smaller sites, smaller alignments to

boundary fences and/or cadastral boundaries were made if these would not adversely affect the long-term viability of the site. The explanatory note to RPS Policy 23 was thought to provide scope to do this as it states that "*Wellington Regional Council and district and city councils will need to engage directly with land owners and work collaboratively with them to identify areas, undertake field evaluation, and assess significance*."

This will result in less early successional vegetation and fewer very small habitats being captured as ecologically significant. These may still be identified through resource consent applications.

7.2 RPS Policy 24

Mechanisms to protect biodiversity in Ecological Sites, to give effect to RPS Policy 24, are yet to be fully developed by Hutt City, Upper Hutt City and Wellington City. Kāpiti Coast District provisions are currently going through the hearing process and protection mechanisms in the PDP are primarily regulatory; non-regulatory methods are not listed in the PDP. This gave the impression that biodiversity protection relied solely on regulatory methods.

Feedback from landowners and submitters on the KCDC PDP strongly suggested that protection mechanisms should include not only rules and restrictive measures but should focus more on enabling mechanisms.

Landowners currently have access to a range of incentives in the Kāpiti Coast District including:

- Financial incentives through the Heritage Grants Fund for ecological improvements through fencing, weed and pest management. The maximum grant is $5,000 per person / per year and a management plan or covenant is required for the site.
- Rates relief is available.
- Access to a seed bank for community groups.
- Subsidy for fencing and planting of riparian areas subject to MOU.
- Support for Community Environmental Restoration Groups.
- Dune Restoration Programme.
- Biodiversity MOU with GWRC (restoring key native ecosystems on KCDC land).
- Funding of other specific restoration projects.
- Education which currently involves:
  - 'Growing Native Plants in Kāpiti' booklet available free from libraries and Council offices and the website.
  - Dedicated biodiversity pages on the website.
- Encouragement of the use of Covenants Eg. QEII Trust, Nga Whenua Rahui and Conservation Act covenants.
- In house ecologists available to provide advice to landowners.

Consultation with submitters identified the following additional potential incentives, and these are likely to be developed further:

- Encouragement and facilitation of collaboration between adjacent landowners.
- Incentivise the legal protection of Ecological Sites or Significant Natural Areas.
- Encourage legal protection via the Development Incentive Guidelines and a 'conservation lot' subdivision rule.
- An option to apply for a 'conservation lot' subdivision, where legal and physical protection (and management) of ecologically significant areas can be traded for additional subdivision rights, e.g. additional lots, greater density of housing elsewhere.

KCDC staff indicate that retaining a regulatory approach to biodiversity protection is deemed necessary, but should be accompanied by non-regulatory incentives to maintain and improve biodiversity.

7.3 KCDC plans

Sites identified to be ecologically significant between the notification of the ODP and the PDP were not added to ODP schedules and were therefore not protected. They also do not appear to have been identified on internal planning maps which, in some instances, has resulted in further fragmentation of rare features, e.g. the last remaining stand of dune kānuka forest.

Little opportunity was provided to provide feedback on the PDP prior to notification. All Ecological Sites and rules relating to these sites took immediate effect, including tree trimming and modification. This resulted in landowners being in breach of the rules if they trimmed vegetation in Ecological Sites for the maintenance of their property, e.g. trimming of branches overhanging a house, or removal of vegetation overhanging driveways or fences. A greater level of pre-notification consultation could have identified and rectified this issue, which would likely have resulted in fewer concerns (and potentially fewer submissions to the plan) from landowners.

Rules in the Urban Tree Variation seek to balance the protection of significant trees (and trees in Ecological Sites in the urban environment), with the impingement on reasonable use of properties. Trimming of these trees is permitted provided that the work meets certain standards, and modification of trees was proposed to require a 'no fees' resource consent and be undertaken by a qualified arborist. The effectiveness of the rules will be tested once the PDP is made operative.

7.4 Summary

- Within the Wellington region, RPS Policy 23 is being implemented as intended in the Districts west of the axial ranges. The Combined Wairarapa District Plan was developed before the RPS and is not well aligned with the criteria set out in RPS Policy 23.
- RPS Policy 23 is being used to identify and assess ecologically significant sites in the Kāpiti Coast District, Upper Hutt City, Hutt City, and Wellington City

districts, but the thresholds for significance are somewhat higher than set out in the GWRC Method 21 guidance. This will result in less early successional vegetation and fewer very small habitats being captured as ecologically significant.

- The KCDC PDP includes regulatory measures to biodiversity values, and does not list non-regulatory incentives; although a range of non-regulatory methods are currently used by KCDC. This gave submitters to the Plan the false impression that there were no non-regulatory methods. To avoid such confusion District Plans should include a section that lists or refers to available non-regulatory incentives. Additional non-regulatory incentives have also been identified through consultation with submitters.
- Pre-notification consultation on the PDP could have identified and rectified several issues, which would likely have resulted in fewer concerns (and potentially fewer submissions to the plan) from landowners.

8. VARIATION IN POLICY IMPLEMENTATION

This section addresses the following question:

(e) Is there variation in how districts apply regional policy?

Nine territorial local authorities occur, wholly or in part, within Greater Wellington region. For two districts, Tararua and Horowhenua, the Greater Wellington region only includes Department of Conservation-managed land in the Tararua Ranges and is therefore not discussed further below.

8.1 Draft Method 21

Wellington Regional Council has prepared a guide to assist with the consistent interpretation of criteria set out in Policies 23 and 24 of the RPS (GWRC 2016). The document is entitled "RPS Method 21: Identifying and protecting biodiversity in the Wellington Region: A guide to interpreting criteria in the Regional Policy Statement" and assists with the interpretation of those policies that require the identification and protection of ecosystems and habitats with significant indigenous biodiversity values.

The guide is primarily for the use of Territorial Local Authorities, but may also be useful for resource consent applicants and planning consultants. The guide outlines the purpose of each criterion of RPS Policy 23, explains the core factor(s) in the criterion, lists resources that may be useful, and provides some examples to illustrate the criterion interpretation. It also provides some guidance on interpretation and preferred outcomes for Policies 24 and 47.

8.2 Kāpiti Coast, Upper Hutt City, Hutt City, and Wellington City Districts

Wildland Consultants and Kessels Ecology (2015) sets out an agreed methodology for the assessment of ecological significance and determination of the boundaries of an Ecological Site for the Kāpiti Coast District (more detail in Section 4.3). This methodology aligns with the recently-released final Method 21 guide (GWRC 2016).

Wildland Consultants is in the early stages of undertaking the identification and significance rankings of areas of potential ecological significance in the Upper Hutt City, Hutt City, and Wellington City districts. The same peer-reviewed assessment methodology is being used for all Districts.

8.3 Porirua City Council

Areas of potential ecological significance and landscape values of urban areas in Porirua City have been assessed by Blaschke *et al.* (2011), building on previous work by Boffa Miskell (2001). Ecological significance criteria used by Blaschke *et al.* (2011) are similar to RPS Policy 23, but pre-date the 2013 Operative RPS. Additionally, riparian vegetation was included where waterways were known to have indigenous fish habitat or values, consideration was given to ecosystem services, and an assessment was made of landscape values.

Subsequent to this assessment there was considerable push-back on some of sites assessed as having significant landscape values. This has resulted in the landscape assessment being withdrawn site-by-site, with unintended consequences for some sites with ecological values. If a site was primarily ranked as important for landscape values with secondary importance for ecological values then this could result in this site being omitted from the heritage schedule. Had the site been ranked purely on ecological values, without consideration of landscape values, then the assessment for some of these omitted sites may have been different and they would have been ranked more highly for ecological aspects. A variation has been prepared to include ecological sites in the District Plan, but it is not yet certain when this variation will be applied to the Plan.

Dr Blaschke is currently working with Porirua City Council (PCC) to assess rural sites. This assessment adheres closely to RPS Policy 23 criteria and the guidance provided in Method 21 (GWRC 2016) with one addition to the connectivity criterion. Special recognition is given to areas that connect or buffer Porirua Harbour, especially riparian areas of streams that flow in to the Harbour. This addition can be justified on the basis of RPS Policy 6 "Recognising the regional significance of Porirua Harbour (including Pauatahanui Inlet and Onepoto Arm)" and various statutory and non-statutory documents and agreements from and between GWRC, PCC, and Wellington City Council.

8.4 South Wairarapa District, Carterton District, and Masterton District

These three councils have collaborated to produce a Wairarapa Combined District Plan to ensure that consistent policies and methods will be used to address the Wairarapa's significant resource management and cross-boundary issues (Wairarapa Combined Councils 2011). Part D-Appendix 1.3 Significant Natural Areas lists those areas considered to be ecologically significant. These mostly comprise coastal areas and some areas of Public Conservation Land.

Section 28.3.1 Recommended Areas for Protection lists Recommended Areas for Protection (RAP) as published in Beadel *et. al* (2000 and 2004). However, the RAP are not part of 'Appendix 1.3: Significant Natural Areas' and are included for

information purposes only. This section will be referred to if a resource consent is required under any rule in the District Plan.

In many other District Plans RAP form the basis for the identification of Significant Natural Areas. Their omission, and the focus on coastal areas, indicates that the selection and assessment of ecologically significant vegetation types and habitats does not align well with RPS Policy 23.

8.5 Review of other plans compared to KCDC PDP

This section is included to provide context for the PDP as notified in 2012. Many of the points raised below have already been addressed in proposed changes to the PDP.

As part of the work on the Kāpiti Coast District Plan, Wildland Consultants (2014) undertook a review of regulatory provisions relating to Ecological Sites (or equivalent) of five district plans: Taupō, Horowhenua, Whakatāne, Wairarapa Combined, and Wellington City. Four of the five districts have similar demographics and land use patterns to Kāpiti Coast District.

Provisions in the 2012 Kāpiti Coast PDP generally fell within the range of the five other plans reviewed, with the following exceptions:

- No clearance of indigenous vegetation was permitted within *Ecological Sites*, which made the PDP more restrictive.
- No specific rules applied to the removal of exotic vegetation in *Ecological Sites*, which made the PDP less restrictive.
- No firewood collection, or activities that require trimming or modification of locally indigenous vegetation, was permitted in *Ecological Sites*, which made the PDP more restrictive.
- Vegetation clearance rules for Ecological Sites in the PDP did not allow implementation of permitted or required actions outlined in a management plan or covenant, or enabled maintenance of the values protected by the purpose of a legal reserve, so were more restrictive.

The Kāpiti Coast PDP Schedules also differed to other plans, for example:

- A schedule of key indigenous tree species by size and ecological domain was only used in the PDP.
- The Whakatāne plan scheduled SNAs based on location and modification levels, with subsequent rules for each schedule.
- The Wairarapa plan had a schedule of significant water bodies.
- The Whakatane plan had a schedule of rare and threatened fauna.

8.6 Blanket urban tree protection and the RMA S76

Another mechanism that can help to protect indigenous biodiversity values are blanket protection rules for tree protection. However, changes to the RMA (refer to Section 3.3) have eliminated the option of using blanket rules in urban environments. This has resulted in variable levels of urban tree protection throughout the Wellington region.

Kāpiti Coast District had blanket tree protection rules. They undertook field work to identify candidate trees and describe these in a manner appropriate to the new legislative requirements. Proposed Variation 1 to the Proposed District Plan 'Urban Tree Variation'[1] will only protect about 1,300 trees[2] on about 400 properties (not including trees in Ecological Sites), compared to over 10,600 protected under the PDP and about 14,000 in the Operative District Plan. Individual or small groups of trees are listed by property in Schedule 3.2A[3] and trees in Ecological Sites listed beneath the description of the Ecological Site in Schedule 3.1. The specific listing of trees within Schedule 3.1, and rules pertaining to this Schedule, may confuse landowners who assume that only trees within Ecological Sites are protected and other non-tree vegetation can be trimmed or modified without limits. The intent of the KCDC policies and rules is to protect all vegetation within Ecological Sites. The 'Urban Tree Variation' is being considered as part of the PDP hearing.

Upper Hutt City Council undertook a Plan Change (Plan Change 41) to ensure ongoing protection of trees in Urban areas. The plan change proposed to move from blanket tree protection rules in the Residential Hill and Residential Conservation sub-zones, to a series of rules that protect Urban Tree Groups, which have been identified due to their amenity, landscape and/or ecological values. The Plan Change included a schedule of Urban Tree Groups and rules for Notable Trees, Urban Tree Groups and rules for activities that may adversely affect these trees. Proposed Plan Change 41 was notified and opened for submissions on 18 December 2015 and made operative on 12 October 2016[4].

Hutt City also had blanket tree protection rules, but has removed these from their District Plan. This variation to the Plan is being appealed.

The Porirua City Plan does not contain any blanket tree protection rules.

Legal opinion may also vary as to the exact requirements to describe a tree or group of trees under S76. KCDC received advice that trees within Ecological Sites in the urban environment need to be described by allotment in sufficient detail to be able to distinguish these from other trees on the property. The advice to Upper Hutt City was: "*it must be possible for an owner, occupier or enforcement officer to determine whether a particular tree is part of a group and potentially subject to tree protection*

1 http://www.Kāpiticoast.govt.nz/urbantreevariation
2 Mainly large, old, established indigenous trees, remnants of the original forests in Kāpiti.
3 http://www.Kāpiticoast.govt.nz/globalassets/sev-pdp-and-utv/utv-september/proposed-variation-no-1-schedule-3.2a-final-for-web-site-02.09--cf.pdf
4 http://www.upperhuttcity.com/planning/trees/

rules." [1] Other Councils may to be receiving different advice, and the answers to some of the questions posed to legal advisors have yet to be tested.

8.7 Summary

- Wellington Regional Council has prepared a guide to assist with the consistent interpretation of criteria set out in Policies 23 and 24 of the RPS (GWRC 2016). The document is entitled "RPS Method 21: Identifying and protecting biodiversity in the Wellington Region: A guide to interpreting criteria in the Regional Policy Statement".
- The methodology for assessing potential Ecological Site in the Kāpiti Coast, Upper Hutt City, Hutt City, and Wellington City districts aligns with the Method 21 guide.
- Areas of potential ecological significance and landscape values of urban areas in Porirua City have been assessed using similar criteria to RPS Policy 23, but additionally included riparian vegetation where waterways were known to have indigenous fish habitat or values, consideration was given to ecosystem services, and an assessment was made of landscape values. Confounding ecological and landscape value assessments has resulted in unintended omissions of some sites with ecological values. Had sites been ranked purely on ecological values then some of these omitted sites may have been ranked more highly for ecological aspects.
- Porirua City urban sites are being assessed currently according to Method 21 guidance with additional recognition given to areas that connect or buffer Porirua Harbour, especially riparian areas of streams that flow in to the Harbour.
- South Wairarapa District, Carterton District, and Masterton District have collaborated to produce a Wairarapa Combined District Plan which pre-dates the Proposed RPS. This plan only identifies mostly coastal areas and some areas of Public Conservation Land as being ecologically significant, which is not aligned with RPS Policy 23.
- Comparison of KCDC PDP rules and provisions with other District Plans illustrated that some rules were considerably more restrictive in the Kāpiti Coast District, while other rules were more permissive or not included (e.g. harvesting firewood). These differences reflect the environmental and political pressures in each district, and the history of use and development in each district.
- Changes to the RMA can also result in significant differences in rules and mechanisms in a District Plan to protect biodiversity values. The removal of 'blanket tree protection' rules has resulted in very variable urban tree protection among the districts of the Wellington region.

[1] Upper Hutt Urban Tree legal opinion: http://www.upperhuttcity.com/wp-content/uploads/2014/09/Legal-advice-summary.pdf

9. CONSENTS WITH POTENTIAL BIODIVERSITY EFFECTS

This section addresses the following question:

(f) What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

Numerous queries are made each day, and when advised that consent is required and/or unlikely to be granted then often no application is made. Generally a small number of consents per year (maybe 10 of *c.*300) involve the modification or removal of protected indigenous vegetation within the Kāpiti Coast District. The Council generally seeks advice from its in-house biodiversity advisor for these consents, which are generally granted with or without mitigation conditions, depending on the case. The Council officer could not recall applications being declined for reasons of biodiversity protection. If the proposed works are significant applicants are required to provide ecological input as part of their AEE.

There are a number of subdivisions per year which involve land containing Ecological Sites. The Kāpiti District Plan requires these sites to be legally (and physically) protected if rural land, as part of the subdivision process. This is typically achieved via a consent notice pursuant to Section 221 of the RMA.

The consenting process in KCDC is generally running relatively smoothly, and even more so where applicants discuss their intentions with the Council prior to lodging an application.

However, it is not entirely clear how well consent conditions are being implemented in KCDC or what the eventual biodiversity outcomes of these conditions are. The main issues are:

- Insufficient capacity to monitor conditions for all consents.
- No capacity or scientific monitoring to measure progress towards desired biodiversity outcomes.
- Infrequent communication and liaison between consents, planners, and biodiversity staff, to ensure that rules and policies are applied to consents and implemented appropriately.
- Little information is conveyed to KCDC for consents in the Kāpiti Coast District that are mainly administered by GWRC. It is therefore not always possible to ascertain if consent conditions have been met, or whether variations to conditions have been implemented correctly.

10. COMMUNITY RESPONSE

This section addresses the following question:

(g) What has been the community response to different approaches?

The S42A report provides a good summary of the community response to the PDP (McKay 2016b). A total of 316 submission points were received on matters relating to Ecological Sites and the indigenous vegetation provisions of Chapter 3, as addressed in this report. Some 52 different further submitters lodged separate further submissions on many of these submission points. The majority of the submissions were from landowners in rural environments, and included some who felt that any District Plan legal protection of biodiversity on their land constituted a violation of private property rights.

Submissions received sought a range of outcomes with the majority of submitters requesting that the provisions of the PDP be less restrictive in terms of the policies and rules seeking to protect indigenous vegetation. There were also some 53 submissions received in relation to specific Ecological Sites as identified in Schedule 3.1 and on the maps of the PDP. Most of these submissions either sought the removal of the Ecological Site from the submitters' property or a reduction in the area of land covered by particular Ecological Sites. A greater emphasis on non-regulatory mechanisms and more encouragement to empower landowners to look after their land and areas identified as significant were also common requests.

Landowners also requested different rules in different Plan zones to reflect the differences in the amount of indigenous habitat remaining. This would enable more permissive rules in the Rural Hills zone, for instance, for trimming and modification (including removal) of trees and vegetation, undertaking specified management to enhance the biodiversity values of a site, enabling the establishment of at least one dwelling and accessway where K017-Tararua Ranges and foothills Ecological Site covers more than 90% of a property, and provision for low impact activities related to tourism.

The 2012 PDP was promoted as "little has changed" and environmental lobby groups appeared to be generally satisfied with how the Operative District Plan was protecting biodiversity values. This may be one of the reasons why there were only a few submissions from environmental lobby groups.

Some landowners were understandably resentful that the PDP appeared not to encourage their biodiversity enhancement efforts through rules or other mechanisms (e.g. rates relief, or funding for control of pest plants or animals, or stock exclusion) in the PDP. They felt that the mix of rules in the PDP actually worked to discourage voluntary biodiversity management

11. KEY FINDINGS

Kāpiti Coast District has included identified Ecological Sites and rules to protect indigenous biodiversity in the District Plan since at least 1999. Identification and

protection of biodiversity values was driven by KCDC staff advocating for this, as well as pressure from the community. Some of the rules to protect biodiversity values in the Proposed District Plan (PDP) are more restrictive than the Operative District Plan (OPD), resulting in significant concern and push-back from mainly rural landowners. Some of the proposed rules had the potential to adversely affect biodiversity as trimming of vegetation was not a permitted activity in Ecological Sites and this had the potential to reduce landowner management of pest plants and animals and fencing stock out of sites. The stance of, and rules in, the PDP are likely to be considerably modified with a more permissive approach as a result of the current PDP hearings process. KCDC is still seeking to protect biodiversity values, but allow reasonable use of land, and to improve non-regulatory methods to encourage biodiversity protection.

One of the changes proposed in the PDP is to adopt the exact wording in the Regional Policy Statement (RPS) for the Wellington region for criteria to identify significant Ecological Sites. The RPS is generally well aligned with the Proposed National Policy Statement on Indigenous Biodiversity. Greater Wellington Regional Council (GWRC) has provided a guide (Method 21) on how to interpret key biodiversity policies in the RPS, but some interpretation difficulties remain. GWRC has indicated that they aim to protect as much remaining biodiversity as possible by setting low thresholds for significance, but this is not borne out by the arbitrary qualifiers for protection status and for extent reduced, within the RPS representativeness criterion.

Within the Wellington region, district councils to the west of the axial ranges are in the process of identifying ecologically significant sites and are therefore aligned with the RPS. Councils to the east of the axial ranges developed a combined District Plan that pre-dates the Proposed RPS, and is therefore not so well aligned with RPS policies.

KCDC receives a small number of consent applications annually that may potentially result in adverse effects on indigenous biodiversity. Potential effects are usually assessed in-house by biodiversity staff, and mitigation is requested if required. More substantial modification triggers the need for ecological input as part of an AEE. There is little capacity within KCDC to ensure that resource consent conditions are fully implemented and result in the desired biodiversity outcomes. It is therefore not entirely clear how well the policies, rules, and consent process are protecting biodiversity values.

Changes to national legislation, such as the RMA, also affect how biodiversity values can be protected within a district. Removal of the option to have blanket tree protection rules in the urban environment has resulted in a variable response from district councils in the Wellington region: from no urban tree protection to lists and schedules identifying individual trees and groups of trees.

ACKNOWLEDGMENTS

Nathan Baker (Beca) invited Wildlands to collaborate on this project. We'd like to thank Matt Muspratt (Principal Policy Planner) and Rob Cross (Biodiversity Officer) from Kāpiti Coast District Council for discussion about how the consenting process works in KCDC. Dr

Paul Blaschke provided a useful summary of ecological site assessment work in the Porirua district. Charlie Hanna and Celina Garcia from the Ministry for the Environment for valuable feedback.

REFERENCES

Beadel S., Bibby C.J., Perfect A.J., Rebergen A., and Sawyer J.W.D. 2004: Eastern Wairarapa Ecological District. *Survey report for the Protected Natural Area Programme*. Department of Conservation, Wellington: 382 pp.

Beadel S., Perfect A., Rebergen A., and Sawyer J.W.D. 2000: Wairarapa Plains Ecological District. *Survey report for the Protected Natural Areas Programme*. Department of Conservation, Wellington: 197 pp.

Blaschke P., Robilliard C., Corbett E., Forsyth F., and Foster C. 2011: Porirua City: Significant urban vegetation identification. *Contract report prepared for Porirua City Council* Prepared by Blaschke and Rutherford Environmental Consultants in association with PAOS Ltd and Environmental Management Services Ltd, Wellington. 93 pp.

Boffa Miskell Ltd 2001: Inventory of Ecological Sites in Porirua City. Prepared for Porirua City Council, Porirua.

Cieraad E., Walker S., Price R., and Barringer J. 2015: An updated assessment of indigenous cover remaining and legal protection in New Zealand's land environments. *New Zealand Journal of Ecology 39(2)*: 309-315.

Greater Wellington Regional Council 2002: Eco-domains for the Wellington Region. Processes and patterns for defining diversity and distinctiveness. Greater Wellington Regional Council, Wellington. 46 pp.

Greater Wellington Regional Council 2010: Proposed Regional Policy Statement for the Wellington Region. *No. GW/EP-G-08/200*. Greater Wellington Regional Council, Wellington. 189 pp.

Greater Wellington Regional Council 2013: Regional Policy Statement for the Wellington region. Greater Wellington Regional Council, Wellington. 201 pp.

Greater Wellington Regional Council 2015: RPS Method 21: Identifying and protecting biodiversity in the Wellington Region: A guide to interpreting criteria in the Regional Policy Statement. Draft report 29 September 2015. Greater Wellington Regional Council, Wellington. 19 plus appendices pp.

Greater Wellington Regional Council 2016: RPS Method 21: Identifying and protecting biodiversity in the Wellington Region: A guide to interpreting criteria in the Regional Policy Statement. Greater Wellington Regional Council, Wellington. 32 pp.

Holdaway R.J., Wiser S.K., and Williams P.A. 2012: Status assessment of New Zealand's naturally uncommon ecosystems. *Conservation Biology 26(4)*: 619-629.

Kenny J.A. and Hayward B.W. 1996: Inventory and maps of important geological sites and landforms in the Manawatu and Wellington regions. Geological Society of New Zealand, Lower Hutt: 40 + maps pp. and http://www.geomarine.org.nz/NZGI/

Leathwick J., McGlone M., and Walker S. 2012: New Zealand's potential vegetation pattern. *Report to accompany GIS layer https://lris.scinfo.org.nz/layer/289-potential-vegetation-of-new-zealand/* Landcare Research. 16 pp.

McKay P. 2016a: Draft Closing statement by reporting officer to matters raised during Chapter 3: Natural Environment Hearing (Ecological Site / indigenous vegetation component) - 25, 26, 27 & 29 July and 1 August 2016. *Ecological Management Services Contract Report* Before the Proposed Kāpiti Coast District Plan Hearings Panel in the matter of the Resource Management Act 1991 and in the matter of Proposed Kāpiti Coast District Plan, Napier. 72 pp.

McKay P. 2016b: Proposed Kāpiti Coast District Plan 2012: s42A Report: Part B - Chapter 3: Natural Environment (Ecological Site/Indigenous Vegetation Component). *Ecological Management Services Contract Report.* Prepared for Kāpiti Coast District Council, Napier. 152 plus appendices pp.

Ministry for the Environment 2011: Proposed National Policy Statement on Indigenous Biodiversity. Ministry for the Environment, Wellington. 13 pp.

Sawyer J.W.D. 2004: Plant conservation strategy, Wellington Conservancy (excluding Chatham Islands), 2004-2010. Department of Conservation, Wellington. 91 pp.

Singers N.J.D. 2014: A potential ecosystem map of the Wellington Region: explanatory information to accompany the map. *Ecological Solutions Contract Report No. 17/2013-2014* Prepared for the Greater Wellington Region. 16 pp.

Singers N.J.D., and Rogers G.M. 2014: A classification of New Zealand's terrestrial ecosystems. *Science for Conservation No. 325* Department of Conservation, Wellington. 87 pp.

Wairarapa Combined Councils 2011: Operative Wairarapa Combined District Plan. Prepared by Masterton, Carterton and South Wairarapa District Councils. 481 pp.

Wildland Consultants 2003a: Kāpiti Coast District Council 2002-2003 Ecological Sites survey. *Wildland Consultants Ltd Contract Report No. 662.* Prepared for Kāpiti Coast District Council. 60 pp.

Wildland Consultants 2003b: Kāpiti Coast District wetlands. *Wildland Consultants Ltd Contract Report No. 669.* Prepared for Kāpiti Coast District Council. 30 pp.

Wildland Consultants 2007: Kāpiti Coast District Council potential Ecological Sites survey 2007. *Wildland Consultants Ltd Contract Report No. 1684.* Prepared for Kāpiti Coast District Council. 30 pp.

Wildland Consultants 2012: Assessment of four potential Ecological Sites or extensions, Kāpiti Coast District. *Wildland Consultants Ltd Contract Report No. 2948.* Prepared for Kāpiti Coast District Council. 32 pp.

Wildland Consultants 2014: Kāpiti Coast Proposed District Plan - benchmarking of regulatory provisions for rural and urban Ecological Sites. *Wildland Consultants Ltd Contract Report No. 3525b.* Prepared for Kāpiti Coast District Council. 16 pp.

Williams P., Wiser S., Clarkson B., and Stanley M. 2007: New Zealand's historically rare terrestrial ecoosystems set in a physical and physiogomic framework. *New Zealand Journal of Ecology 31*(2): 119-128.

Wiser S.K., Buxton R.P., Clarkson B.R., Hoare R.J.B., Holdaway R.J., Richardson S.J., Smale M.C., West C., and Williams P.A. 2013: New Zealand's naturally uncommon ecosystems. In Ecosystem services in New Zealand - conditions and trends JR, D., (Ed.) Lincoln, New Zealand, Manaaki Whenua Press: 49-61.

REGIONAL POLICY STATEMENT POLICY 23

The obligations of the Kāpiti Coast District Council to identify indigenous ecosystems and habitats are set out in Policy 23 of the Regional Policy Statement for the Wellington region. Ecosystems and habitats will be considered significant if they meet one or more of the criteria outlined below.

Policy 23: Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values - district and regional plans

District and regional plans shall identify and evaluate indigenous ecosystems and habitats with significant indigenous biodiversity values; these ecosystems and habitats will be considered significant if they meet one or more of the following criteria:

(a) Representativeness: the ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region, and:
   (i) are no longer commonplace (less than about 30% remaining); or
   (ii) are poorly represented in existing protected areas (less than about 20% legally protected).

(b) Rarity: the ecosystem or habitat has biological or physical features that are scarce or threatened in a local, regional or national context. This can include individual species, rare and distinctive biological communities and physical features that are unusual or rare.

(c) Diversity: the ecosystem or habitat has a natural diversity of ecological units, ecosystems, species and physical features within an area.

(d) Ecological context of an area: the ecosystem or habitat:
   (i) enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats; or
   (ii) provides seasonal or core habitat for protected or threatened indigenous species.

(e) Tangata whenua values: the ecosystem or habitat contains characteristics of special spiritual, historical or cultural significance to tangata whenua, identified in accordance with tikanga Māori.

Providing outstanding ecological services to sustain and improve our environments

Call Free 0508 WILDNZ
Ph: +64 7 343 9017
Fax: +64 7 3439018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042,
New Zealand

Regional Offices located in
Auckland, Hamilton, Tauranga,
Whakatane, Wellington,
Christchurch and Dunedin

ECOLOGY RESTORATION BIODIVERSITY SUSTAINABILITY

www.wildlands.co.nz

Appendix C

Case Study - Rotorua District Significant Natural Areas with a focus on Lakes A zone

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: ROTORUA LAKES ZONE A

providing outstanding ecological services to sustain and improve our environments

Wildlands

R4153d

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: ROTORUA LAKES ZONE A

Contract Report No. 4153d

December 2016

Project Team:
William Shaw - Report author
Astrid van Meeuwen-Dijkgraaf - Report review

Prepared for:
Ministry for the Environment
PO Box 10362
Wellington 6143
New Zealand

99 SALA STREET, WHAKAREWAREWA, 3010, P.O. BOX 7137, TE NGAE, ROTORUA 3042
Ph 07-343-9017; Fax 07-343-9018, email ecology@wildlands.co.nz, www.wildlands.co.nz

EXECUTIVE SUMMARY

This project considers how biodiversity policy was dealt with in a case study of the Rotorua Lakes A Zone in the Rotorua District Plan and its relation to the Bay of Plenty Regional Policy Statement (RPS). Key indigenous ecosystems in the Rotorua Lakes A Zone comprise six lakes of volcanic origin, all associated with Lake Tarawera, and the surrounding primary, modified primary, and secondary forests. Indigenous vegetation is more reduced in the lowland zone, than in higher altitude zones. The Lakes A Zone contains landscapes, of which the lakes and indigenous vegetation and habitats are an integral part, that are considered to be of national importance and many parts are Outstanding Natural Landscapes. Current threats include changes in land use, including vegetation clearance and increases in built developments, pest animals and pest plants, poor land management including grazing and neglect, and drainage and reclamation of wetlands. The project aimed to answer a number of specific questions which are briefly discussed below.

To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

The Lakes A Zone comprises a discrete planning unit within the Rotorua District[1]: Part 20 of the District Plan that contains specific provisions to manage the unique and sensitive attributes of the lakes' environment. The Lakes A Variation arose from an Environment Court decision in 1998 requiring more stringent protection of landscapes, natural character, and indigenous vegetation and habitats. The high degree of intactness of the lakes' environment contributes to the national significance of their catchments. Two primary policy levels have been identified: the Sensitive and Less Sensitive Policy Areas. Some of the policies are specific to identified catchments.

District Plan policy provides a comprehensive framework, rules, and methods for the integrated protection of landscapes, lakes, and indigenous vegetation and habitats. The policy framework reflects the degree of human occupation (the Settlement Zone) and the relative sensitivity of different parts of the Lakes A Zone

The Lakes A Variation addresses the potential effects of land use activities and subdivision such as earthworks, disturbance of indigenous vegetation, stormwater collection and disposal rather than providing a list of specific Permitted or Discretionary Activities, for example household units, farming or tourist accommodation. In this respect the approach in this Variation is different from the current provisions of most District Plans which provide a specified list of Permitted, Controlled, Discretionary, and Non-Complying Activities.

A comprehensive set of methods is provided, including approaches to water quality, aquatic ecosystems, wetlands, indigenous vegetation and habitat, riparian areas, geothermal areas, pests, integrated management with local authorities, and monitoring. The test as to whether an activity is permitted or not is ascertained by determining whether the conditions for a Permitted Activity can or cannot be met. If the conditions cannot be met, then a resource

[1] The Lakes A Zone has not been part of the recent (2012) District Plan review so it remains in its current form in the operative district plan.

consent is required. Similarly, if the standards for a Limited Discretionary Activity cannot be met, then an application as a Discretionary Activity is required, and so on.

What approaches were considered but did not make the final cut? And why?

Less protective measures for the landscape, lakes, and indigenous vegetation and habitats were rejected by the Environment Court in 1998. The Court recognised the close relationships between natural character, landscapes, and indigenous vegetation and habitats (and cultural values), and directed the District Council to address these matters in an integrated fashion. Consultation with individual landowners with Recommended Areas for Protection (RAPs) on their properties was recommended in the late 1990s but was not undertaken. Direct negotiation was undertaken with affected landowners who lodged Environment Court appeals, as part of the Court hearing. This resulted in the establishment of provisions for Tangata Whenua Structure Plans, at specified sites, at suitable low impact locations within RAPs (SNAs).

How have different rule settings affected biodiversity outcomes?

A comprehensive set of rules govern clearance of indigenous vegetation within the Settlement, Bush Settlement, Sensitive Rural, and Protection sub-zones within the Lakes A Zone. A non-statutory revegetation guide has also been developed. Monitoring is undertaken by the District Council to track changes in land use and the progression to or loss of indigenous vegetation. The key Anticipated Environmental Result in Section 7 of the Rotorua Lakes District Plan of "retained or increased land area in indigenous vegetation, particularly in the riparian margins" was met between 2006 and 2011. This indicates that the District Plan provisions for permitted activities are having a positive influence on indigenous vegetation retention and extent. A series of monitoring plots have been established at 10 unprotected sites to assess vegetation composition and structure, birds, pest plants, and the effects of pest animals. This monitoring provides a robust basis for condition monitoring and reporting over time.

Are policies being implemented as intended? If not, why not?

As part of the Environment Court process, an appeal from tangata whenua was resolved during the hearing by direct negotiation of issues and opportunities for localised low impact development of potential new marae and eco-lodges. Sites were identified and are shown in the District Plan as Tangata Whenua Structure Plans. A comprehensive set of assessment criteria was also developed. Policies and rules have been applied, successfully, to consent applications and also to tangata whenua structure plans.

Is there variation in how districts apply regional policy?

The Bay of Plenty RPS didn't exist when the Lakes A variation process started. The first generation of the RPS became operative in 1999 and the second generation became operative in 2014. Ecological evaluation criteria used to select the RAPs recognised in the Lakes A Zone are consistent with the RPS criteria sets in both iterations of the RPS. The RPS has a strong focus on protection and enhancement of water quality, riparian zones, and indigenous vegetation and habitats (and landscapes) and the Lakes A provisions are very consistent with that approach.

What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

The number of resource consents granted in the Lakes A Zone remained steady from 2006/07 to 2010/11 during which time between 15 and 23 consents were granted per year. As expected, the most common policy areas for applications and consents granted are the Settlement Areas, and the least common for the Protection and Less Sensitive Policy areas. Trends show that resource consents in the Lakes A Zone are in keeping with the policy intent.

What has been the community response to different approaches?

Overall, community response has been very good. There is strong support from tangata whenua for protection and enhancement of the lakes and indigenous vegetation and habitats. While there was some initial concern from individuals in the community, there is wide acceptance of the need for strong protective measures. Land subdividers have recognised the need to retain indigenous vegetation and/or plant indigenous vegetation or to promote natural revegetation. Some catchment areas have been protected under Bay of Plenty Regional Council formal agreements with private landowners who have retired stream or lake margins for water and soil conservation purposes.

CONTENTS

Reviewed and approved for release by:

_____

W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

The Ministry for the Environment is collating information to support the development of National Policy Statement on Biodiversity. As part of this they wish to review how regional, unitary, and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, to what effect.

The project comprises two parts: one looking at how significant biodiversity is identified, protected, or otherwise managed in Regional and District Plan objectives, policies, and rules; the second part is to look in more detail at how these issues are dealt with in real terms in four case studies. Beca is reviewing the various plans and Wildland Consultants is undertaking the delivery of the four case studies. The Lakes Zone A in Rotorua District (see Figure 1) is one of these case studies and is addressed in this report.

The Lakes A Zone comprises the area around the eastern lakes catchments. The Lakes A Zone is Part 20 of the Rotorua District Plan (1996) which became operative, as the result of a variation for this zone, in December 2005. It comprises a discrete planning unit within Rotorua District. The Lakes A Zone has not been part of the recent (2012) District Plan review so it remains in its current form in the operative district plan.

Settlements at Lakes Tarawera and Okareka are within the zone, along with many rural properties and associated dwellings. Large proportions of the zone are lakes, indigenous vegetation, and iconic lake landscapes such as Maunga Tarawera (Mt Tarawera).

2. ECOLOGICAL CONTEXT

Wildland Consultants (1998a&b) undertook a field survey of natural areas in the Rotorua District. Two reports were produced. The first (Wildland Consultants 1998a) was for the Rotorua Lakes Ecological District, while the second (Wildland Consultants 1998b) covers all of the Rotorua District and also includes information on natural areas in the four other ecological districts relevant to Rotorua District. Information on the Rotorua Lakes Ecological District (and the Lakes A Zone) is identical in each report in terms of the areas recommended for protection.

The Zone is characterised by the uniquely clustered multiple rhyolite domes of the Okataina Volcanic Centre, the nationally unique close occurrence of several large lakes, significantly large amounts of native forest in a wider landscape otherwise largely devoted to farming and exotic plantation forestry, and recent plant succession on the comparatively recently active Mt Tarawera. There are 11 main lakes in the Rotorua Lakes Ecological District and six of these are in the Lakes A zone:

Tarawera*:* This is one of the three biggest lakes and occupies a large part of the southwestern floor of Haroharo Caldera. The water level is held to 298 m asl by coalescing lava flows from Haroharo and Tarawera volcanic complexes at the eastern end. It is bounded on the west by the irregular caldera margin. The lake floor more

or less flat; with an average depth of 80 metres. Outlet is the Tarawera River, initially crossing a lava flow.

***Okataina**:* Also within the Haroharo Caldera and a former arm of Lake Tarawera cut off *c.*7,000 years ago by a lava flow. Surface 311 m asl and depth generally 60-80 m. Water level believed to have risen *c.*10 metres after the Mt Tarawera eruption. Has a submerged former Māori pa.

***Okareka**:* Headed by a valley cut back in Mamaku Ignimbrite and also a former arm of Lake Tarawera, cut off by 14-21,000 year old domes in caldera embayment.

***Tikitapu (Blue Lake)**:* In a small valley also cut off from Tarawera by the above domes. Lake surface 420 m asl; depth nowhere more than 25 m.

***Rotokakahi (Green Lake)**:* Occupying a long valley floor between rhyolite domes and drained by Te Wairoa Stream down to Lake Tarawera. Surface 394 m asl; 20-30 m deep.

***Rotomahana**:* Previously a smaller lake in a thermally active zone, bounded on opposite sides by the famed Pink and White silica terraces, and overflowing by Kaiwaka Stream into Lake Tarawera. The terraces were destroyed and the lake was enlarged in the 1886 eruption. Maximum depth 125 m; surface 340 m asl in 1972 and slowly rising.

All landforms and mantling tephras (or ash showers) are of volcanic origin and the lakes, too, owe their existence to volcanic events. The Lakes A Zone is within the Okataina Volcanic Centre. There are many domes, while the two main features are the Haroharo and Tarawera composite volcanoes, separated by Lake Tarawera and the upper few kilometres of the Tarawera River.

It is apparent that there have been some striking changes in the relative proportions of some vegetation/habitat types, particularly to relatively unmodified primary forest, wetlands, and geothermal vegetation and habitats. By the early 1800s much of the primary forest had been burned and replaced with a mosaic of fernland, scrub, and secondary forest. Vegetation clearance associated with European settlement resulted in the loss of further primary forest and vast areas of secondary vegetation, most of which has been converted to farmland. Wetlands other than lakes and streams were never formerly extensive in the district except on the margins of Lake Rotorua. The character of remaining wetlands has been changed by alterations to drainage patterns, eutrophication, and invasion by willows.

The degree of change in the wider landscape of the Rotorua Lakes Ecological District by 1840 can be illustrated by the fact that Māori burning had removed most primary forest from the flats landform type in the semi-coastal bioclimatic zone, with only *c.*2.7% remaining. The extent of loss was not as great in the lowland bioclimatic zone, with *c.*13% (540ha) remaining.

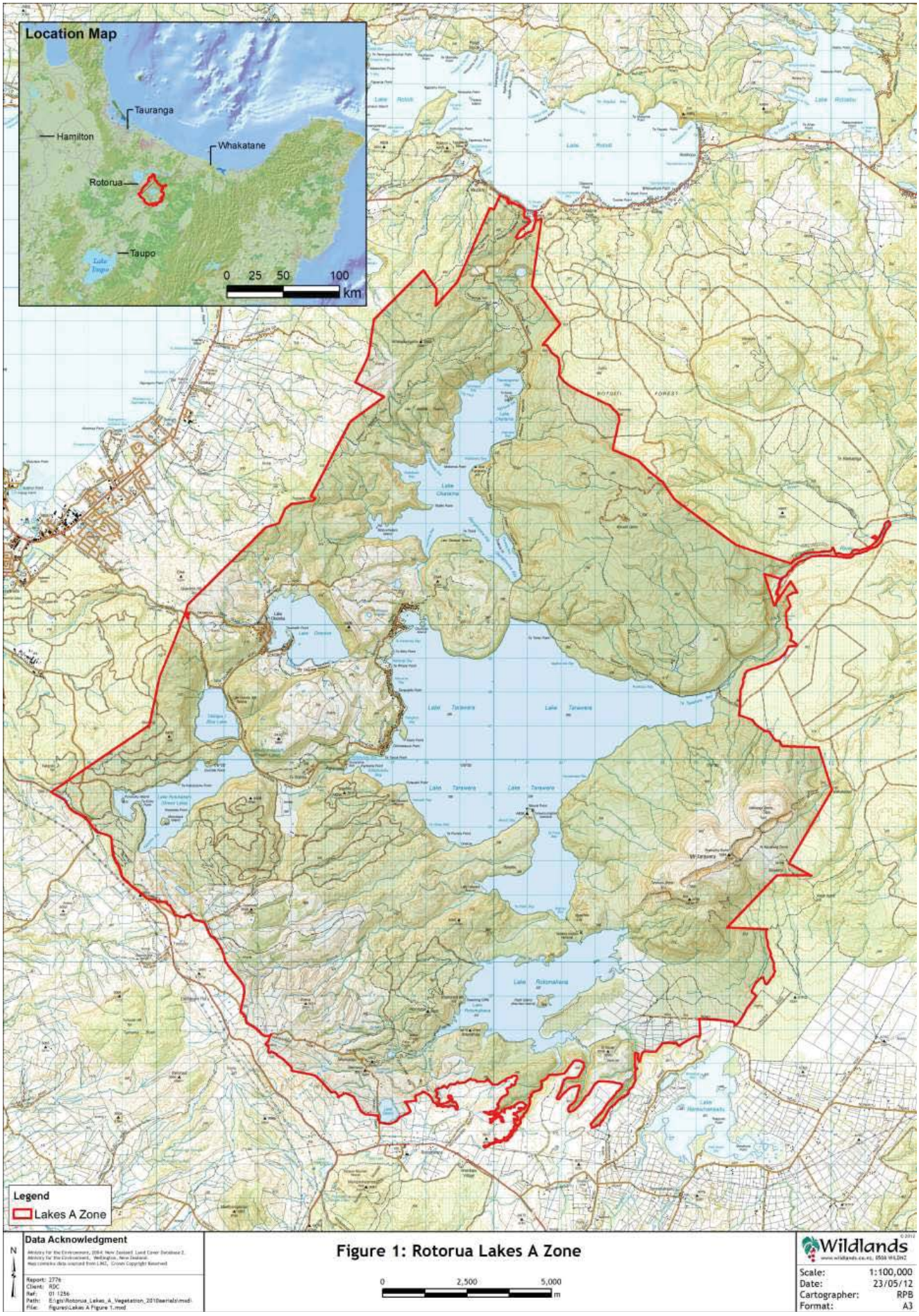


Figure 1: Rotorua Lakes A Zone

No unmodified primary forest remains on semi-coastal and lowland flats, however 0.4% of primary forest and 0.7% of modified primary forest remains on lowland flats. A similar pattern exists for low terraces, high terraces, and alluvial fans as all unmodified primary forest has been lost from these landform units. Relatively little indigenous vegetation of any type remains on these landform units with small areas of modified primary forest (1.4%, <0.1%, and 0.4% respectively) and secondary forest (8.8%, 0.2%, and 0% respectively). Only *c.*2% of unmodified primary forest remains on the lowland flat to undulating landform type, with *c.*4% modified primary forest, and *c.*3% secondary forest.

As land becomes steeper there is typically an associated increase in the relative proportion of remaining indigenous forest. On the lowland 'undulating to hilly' land type *c.*4% of unmodified primary forest remains, with 8.5% of the area covered with modified primary forest, and a further 8.2% is secondary forest. The range between Rotokawa and Lake Okataina retains 57% of its original primary forest, and a further 8.6% and 3.4% of modified primary forest and secondary forest respectively.

Geothermal vegetation and habitat has been reduced by *c.*50%, mainly by the encroachment of urban and commercial Rotorua into the formerly extensive area of geothermal habitat between the lake and Whakarewarewa. All remaining examples are a high priority for protection, including all examples in the Lakes A Zone.

Existing protected natural areas (PNAs) or reserves total 27,000ha, or 19% of the Rotorua Lakes Ecological District. Most protected areas are administered by the Department of Conservation, *c.*25,000 ha of the total area. This is mostly Scenic Reserve, including extensive hill country areas in the vicinity of Lakes Tarawera, Okataina, and Rotoma. There are also smaller Scenic Reserves scattered around lake margins and elsewhere. Most of the protected areas are tawa-dominant indigenous forest but they also include part of Lake Tarawera, local small wetlands, Sulphur Bay in Lake Rotorua, and Lake Rotomahana.

There is an uneven spread of protected natural areas on the various landform types in the semi-coastal, lowland, and submontane bioclimatic zones. In the semi-coastal and lowland bioclimatic zones a greater proportion of protected areas is present on hilly country and in gullies. There is a generally high level of protection in the submontane bioclimatic zone.

Protected areas include a wide range of vegetation and landscape of Lake Tarawera and Mt Tarawera (exhibiting variable recovery following the eruption of 1886), Okataina and Makatiti Dome Scenic Reserves (a complete vegetation sequence from lake shore to dome top), Waimangu Scenic Reserve (botanically the richest of all geothermal areas in New Zealand), and Lake Rotomahana Wildlife Refuge (which contains rare examples of indigenous aquatic communities without invasive aquatic weeds such as *Lagarosiphon*, *Elodea*, or *Egeria*).

Some catchment areas have been protected under Land Improvement Agreements administered by Bay of Plenty Regional Council. These are formal agreements with private landowners who have retired stream or lake margins for water and soil conservation purposes. While these areas often have limited nature conservation

value, they nevertheless play a very important role in the protection of flowing waterways and lake margins.

3. ENVIRONMENT COURT DECISION 1998

The Lakes A Variation arose from an Environment Court decision in 1998 requiring more stringent protection of landscapes, natural character, and indigenous vegetation and habitats.

Key elements of the decision are set out in the following extracts from the Rotorua District Council Section 32 report for Proposed Variation 12, the Lakes A Zone, in 2000.

> "The interim decision of the Environment Court dated 22 January 1998 (A7/98) contained an invitation to Rotorua District Council to prepare a variation to the Proposed Plan. The Court considered that the plan required "significant amendment". Such a Variation being necessary to give appropriate recognition and environmental protection to the Tarawera group of lakes, consistent with their importance both regionally and nationally. Council had indicated that it wished to carry out any future changes to its District Plan in the context of the 'Lakes Management Strategy' that was being prepared. The Court was not persuaded by this approach because it felt the Proposed Plan as prepared ran counter to the concept of sustainability underpinning the RMA as far as the Tarawera Lakes were concerned.
>
> The Court did not make suggestions as to how the Variation ought to be prepared but rather saw that as being the proper role of the Council as a Planning Authority.
>
> The Court stated that it did not "*wish artificially to limit the Council in how it proceeds, nor to express any ultimate view on aspects that might eventually come back via the submission/appeal process following notification of the variation".*
>
> The Court also stated that the views expressed in its interim decision "*are for Council to consider, without .... intending to dictate to Council what the precise contents of the variation should be*".
>
> Further the Court stated that it did not "*wish to confine the Council to the area defined*" by Kaitiaki Tarawera "*as opposed to some wider area embracing further lakes and their catchments that the Council may wish to incorporate within the variation's scope*".
>
> The Environment Court also stated that "*the lakes environment is a precious heritage to be cherished and protected*".
>
> The Environment Court also stated that:
>
> *"the promotion of sustainable management is an ongoing process that requires important value judgments to be made, based on due analysis and research in which the local and wider community ought to have "reasonable confidence" in the process (based on and including due analysis and research) as to the environmental aims and outcomes for an area.*"

The Environment Court expressed the view that "*at the District Planning level … careful consideration must be afforded because of the environment's fragile nature, the ease with which the natural character of the general area can be altered (whether by development sporadically located or by ongoing expansion of existing settlements) and the comparative difficulty of stemming, let alone reversing, established changes and accompanying trends. By these remarks we do not mean to convey that a dead hand must be placed on the Tarawera Lakes and their catchments designed to maintain the status quo at all costs;*" and that

"*what must be done, however, is to analyse and determine the degree of change that can be accommodated within the planning period so that the natural and physical resources of the area will be sustainably managed;*" and that

"*the inherent attributes of the area must not become eroded, either in character or in degree, with an outcome evidencing non-sustainability.*"

A number of specific rules in the Proposed Plan were identified as being inadequate for the purpose of meeting the policy intentions of the Proposed Plan. Among the rules highlighted by the Court were those that addressed vegetation disturbance, earthworks, wetland protection, building controls, and the criteria for assessing applications for land use consent. A key issue in relation to buildings was the effect that such buildings had on the visual landscape.

The approach taken in the Variation has addressed the fundamental matters raised by the Environment Court in its interim decision. The specific rules mentioned have been re-evaluated and new rules were formulated.

The Variation addresses the potential effects of land use activities and subdivision such as earthworks, disturbance of indigenous vegetation, stormwater collection and disposal rather than providing a list of specific Permitted or Discretionary Activities, for example household units, farming or tourist accommodation. In this respect the approach in this Variation is different from the current provisions of the Proposed Plan which provided a specific list of Permitted, Controlled, Discretionary and Non-Complying Activities.

As a response to the Environment Court's concerns, a less prescriptive approach was taken in this respect. The test as to whether an activity is permitted or not is ascertained by determining whether the conditions for a Permitted Activity can or cannot be met. If the conditions cannot be met, then a Resource Consent is required. Similarly if the standards for a Limited Discretionary Activity cannot be met, then an application as a Discretionary Activity is required, and so on.

If there are some levels of effect that the community decides would not be acceptable at any time or in specific locations then standards would need to be set for Prohibited Activities. Any person wanting to exceed these standards would need to apply for a Plan Change in terms of the requirements outlined in the *Resource Management Act 1991*. As an example, if the community considers there should never be any buildings, say on Mount Tarawera or in the Ōkataina Policy Area, then such activities could be included as Prohibited Activities. Extreme care is needed in defining and listing Prohibited Activities because in the example given that would include a hut for hikers or other recreational facilities. In the Draft Variation, the effects of such activities (huts for hikers and other buildings) would be assessed as a Discretionary Activity in terms of the effects it has on the environment.

Where standards that are more critical to the outcomes expected by the Plan cannot be achieved, consent for a Non-complying Activity is required. More importance has been given to specifying the matters that are to be considered as part of an application for resource consent. In the Variation such matters are set out in the section called "*Criteria for the Assessment of Discretionary and Non-Complying Activities*".

A greater focus is placed on the management of land use activities under this Variation. However any site created by way of subdivision is to be done in such a way as to enable compliance with the conditions for land use activities as a Permitted Activity. Otherwise it is likely that the objectives of this Variation will be compromised.

The activities of individuals, businesses, Council and the Crown are treated alike. This could be described as a "level playing field" where activities irrespective of ownership are assessed according to the effects generated by them on the environment. There has been criticism in the past of plans that distinguish between say forestry and farming or tourism and recreation. In making such distinctions there is a risk that resource management objectives become influenced by social or economic aims. The cultural, social and economic wellbeing of people and communities is a valid concern when considering the environmental benefits or costs of a change. However, by treating alike the effects on the environment generated by any sector, there is a more equitable measure of changes to environmental wellbeing. The first consideration is to establish whether the community values features of the environment sufficiently tow arrant intervention. Having intervened then each sector faces the same tests if those values are to be challenged."

4. ECOLOGICAL ASSESSMENT PROCESS

Wildland Consultants (1998a)[1] provided the following assessment of the relative importance protection of lake protection in the Rotorua District:

"The lakes complex continues to be a high priority for protection. It is an internationally significant wildlife habitat and significant indigenous vegetation communities are still present in the lakes. Although there has been extensive water and soil conservation fencing in the catchments of Lakes Rotorua and Rotoehu (and also Lake Rerewhakaaitu) fencing of all lakes and associated wetlands with farmland margins continues to be a high priority."

The first key step in the protection of indigenous biodiversity is the identification of what remains and what is significant and then an objective assessment of any threats to the sustainable management of those features. However, rules in planning documents alone will not retain indigenous ecosystems and species in New Zealand's landscapes. Insidious and less obvious threats such as invasive pest plants and pest animals also need to be addressed.

The process for recognition of indigenous vegetation in Rotorua District stated in the early 1990s when the Department of Conservation produced a schedule of significant natural areas for the District. That schedule was based on a combination of existing

[1] This report was produced jointly for Rotorua District Council and Environment Bay of Plenty.

information and interpretation of aerial photographs and contained many boundary errors. This resulted in considerable concerns being raised by rural landowners in particular. As a consequence, a District-wide survey and mapping exercise was undertaken (Wildland Consultants 1998a) to produce a more accurate version of the schedule including geo-referenced GPS data. Information in the updated and more accurate schedule was used as the basis for a schedule and maps of Recommended Areas for Protection (RAPs) in the Lakes A Variation.

The following process was used for the assessment of indigenous vegetation and habitats:

- Existing ecological information was compiled from published and unpublished sources. A close approximation to the vegetation pattern in about 1840 was mapped at a scale of 1:250,000. Sources of information included very early surveyors' maps, forest type maps published by the New Zealand Forest Service in the 1960s, general historical material, and detailed historical accounts.

- Potential sites for field survey and evaluation were identified using 1:50,000 scale topographic maps, and aerial photographs. Sites were delineated on aerial photographs, and were then inspected on the ground, subject to access approval by landowners. Data was collected using a standard plot sheet. Vegetation types or classes were determined in the field and marked on aerial photographs. Not all sites were visited, but all sites were checked using recent aerial photographs and were viewed using binoculars. Information from earlier studies (such as unpublished file reports from earlier inspections) was used to identify, describe, and evaluate some sites. Lakes *per se* were not assessed as potential RAPs, although wetlands on lake margins were.

- The Rotorua Lakes Ecological District was subdivided into bioclimatic zones and landform units, to provide a basis for the evaluation of ecological data. Three broad bioclimatic zones were recognised and mapped: semi-coastal, lowland, and submontane. Most of the Lakes A Zone (and the Rotorua Lakes Ecological District) is in the lowland bioclimatic zone.

- The Ecological District was stratified into 18 landform units. Sixteen of the 18 units in the Rotorua Lakes Ecological District are represented in the Lakes A Zone.

- Relative ecological values of the survey areas were assessed using the following 'primary' criteria, and a further set of six 'secondary' criteria. The presence of special or rare features was also assessed, and a rating was assigned for each area's relative value as fauna habitat.

Primary Criteria

- **Representativeness** - the primary criterion: One or more of the best examples of the characteristic communities within relevant landform units in each bioclimatic zone were identified as RAPs.

- **Present versus past extent**: An estimate of the relative extent of indigenous vegetation remaining in ecological district compared with that in an 1840 reconstruction.

- **Landscape and ecological diversity**: The diversity of physical and ecological features, and the patterns that exist within the area(s) under consideration.

- **Naturalness**: Most mainland ecosystems are modified (e.g. by animal pests and weeds) but the degree of naturalness is an important consideration.

- **Size**: Areas which are relatively large (i.e. compared to mean size of remaining areas of indigenous vegetation in an ecological district) are preferred to small areas. Larger areas are likely to be more viable in the long term.

- **Shape of area**: Areas which are primarily compact are preferable to areas which are highly convoluted or discontinuous.

- **Surrounding landscape**: The degree to which the area is protected/buffered by the surrounding landscape.

- **Fragility and threat**: An assessment of known or likely threats and the capability of the vegetation or habitat to resist change initiated by the threat agent(s).

- **Ecological viability and long-term sustainability**: The likelihood of an area being able to remain ecologically viable and sustainable in the long term without substantial management input.

An assessment form was designed using these criteria and high, medium and low values were defined and assigned for each criterion.

RAPs were selected using the above criteria, to provide representation of the following:

- The best quality or only remaining representative examples of indigenous vegetation or wildlife habitats on particular landform units not already protected within each bioclimatic zone. They contain some of the largest, best quality, or only remaining examples of indigenous vegetation or wildlife habitat, or intact altitudinal or geographic sequences across the ecological district, or diverse assemblages of landform type, and vegetation within each bioclimatic zone.

- Relatively small sites with vegetation types or plant taxa under-represented or not represented in protected natural areas.

- Relatively large areas with features which are represented in protected areas but which are nevertheless worthy of protection.

- Sites containing vegetation types which would once have been more common in the ecological district and are unrepresented in protected natural areas but which have been degraded by weed invasion or animal damage, or similar.

- Interesting or special features, although the ecological unit(s) may be in a lower quality condition.

- Boundaries of RAPs and constituent vegetation types were initially drawn on 1:25,000 scale aerial photographs. Details were then hand drawn on 1:25,000 scale topographic maps printed from the Rotorua District Council Geographic Information System (GIS), before being digitised. Final versions of RAP maps were generated (in 1998) by the Rotorua District Council from their GIS. RAP maps were all printed to fit on an A4 page. This resulted in the loss of some detail at the scales used, for large sites in particular. This information is, however, available on the District Council GIS.

- Historical context was used to estimate the approximate extent and proportions of vegetation/habitat classes that were previously present on the various landform units in each bioclimatic zone. The baseline used was c.1840 and comparisons were been made with present extent.

A comprehensive evaluation of indigenous vegetation and habitats has been undertaken for the Rotorua District, including the Lakes A Zone part of the District. Indigenous vegetation and habitats for indigenous fauna, protected and unprotected, is a prominent and important feature in this area. RAPs in the Lakes A Zone are significant in terms of Section 6(c) of the Resource Management Act and complement existing protected areas. The classification of an area as an RAP and recognition in the District Plan does not imply absolute protection but rather a level of scrutiny and assessment of proposed land uses to ensure that key elements of these significant areas are retained in our landscapes for future generations.

4.1 Summary

The first key step in the protection of indigenous biodiversity is the identification of what is present and what is significant and then an objective assessment of any threats to the sustainable management of those features. This process started in the 1990s for the Rotorua District and has improved with the advent of better quality aerial photography, improved definition of mapping, and improved biodiversity information, much of which was obtained from field suveys. Recommended Areas for Protection (RAPs) were identified using the following assessment criteria:

- Representativeness
- Present versus past extent
- Landscape and ecological diversity
- Naturalness
- Size
- Shape of area
- Surrounding landscape
- Fragility and threat
- Ecological viability and long-term sustainability

RAPs in the Lakes A Zone are significant in terms of Section 6(c) of the Resource Management Act and complement existing protected areas. The classification of an area as an RAP and recognition in the District Plan does not imply absolute protection but rather a level of scrutiny and assessment of proposed land uses to ensure that key

elements of these significant areas are retained in our landscapes for future generations.

5. DISTRICT PLAN POLICY

This section addresses the following question:

a. **To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?**

As noted above, the Lakes A Zone comprises a discrete planning unit within the Rotorua District: Part 20 of the District Plan. It contains specific provisions to manage the unique and sensitive attributes of the lakes' environment. The high degree of intactness of the lakes' environment contributes to the national significance of their catchments.

The substantial land areas of indigenous vegetation and volcanic landforms provide a unique visual setting to the lakes. The values ascribed to indigenous vegetation include biodiversity and habitats, landscapes, natural character, ecology and water and soil conservation. These values are threatened by ongoing changes in land use, particularly:

- Changes in land use, including clearance and increases in built developments;
- Presence of pest animal and pest plants;
- Poor land management including grazing and neglect;
- Drainage and reclamation of wetlands.

This project involved identification of RAPs, development of the proposed District Plan (including provisions relating to indigenous biodiversity, subdivision, and all Plan provisions relating to indigenous vegetation and fauna), provision of technical advice to staff during hearings (and to a hearings panel), and evidence before the Environment Court. The latter involved discussion and development of agreements with Māori land owner appellants (and other appellants) relating to structure plans for potential future development of marae and eco-lodges within Māori land identified as RAPs. Overall, this process took about eight years to reach completion, and an ecologist was an integral part of the project team for the entire period, working very closely with District Council planners.

There are eighteen objectives for the Lakes A Zone. The objectives are not arranged in any hierarchy or ranking. Two primary policy levels have been identified: the Sensitive and Less Sensitive Policy Areas. All land within the Lakes A Zone has been assessed in terms of whether it is sensitive or less sensitive.

The Lakes A Zone has further been divided into eight secondary policy areas, seven of which have been defined on a catchment basis. Policies at this level focus on the specific landscape character within each of these policy areas.

Methods other than rules are set out in Appendix 1 of this report. A comprehensive set of methods is provided, including approaches to water quality, aquatic ecosystems, wetlands, indigenous vegetation and habitat, riparian areas, geothermal areas, pests, integrated management with local authorities, and monitoring. Various relevant definitions are also provided. These provisions, including monitoring, have a heavy focus on the protection of indigenous vegetation and habitats.

5.1 Summary

The Lakes A Zone comprises a discrete planning unit within the Rotorua District Plan that contains specific provisions to manage the significant, unique, and sensitive attributes of the environment of the lakes. District Plan policy provides a comprehensive framework and methods for the integrated protection of landscapes, lakes, water quality, aquatic ecosystems, wetlands, indigenous vegetation and habitats, riparian areas, geothermal areas, threats, integrated management with local authorities, and monitoring. The policy framework reflects the current human occupation (the Settlement Zone), extensive Māori land ownership, and the relative sensitivity and ecological significance of different parts of the Lakes A Zone (see Section 7 below).

6. OTHER APPROACHES CONSIDERED

This section addresses the following question:

c. What approaches were considered but did not make the final cut? And why?

Other approaches were considered for the Proposed District Plan (1996) as set out in the Section 32 report (2000), but were rejected by the Environment Court in 1998.

Consultation with individual landowners with RAPs on their properties was recommended in the late 1990s but was not undertaken. Rather than consultation, direct negotiation was undertaken with affected landowners who lodged Environment Court appeals against the Lakes A Zone variation, during the Environment Court hearing. This resulted in the establishment of provisions for Tangata Whenua Structure Plans, at specified sites, which may be at suitable low impact locations within RAPs. These structure plan provisions, with discretionary status, require the provision of a structure plan which includes information on:

- Existing features of the site including contour information;
- The type and scale of the activities proposed;
- The location of each activity;
- The composition of any affected vegetation.

6.1 Summary

Other approaches were put forward in the Proposed District Plan but were rejected by the Environment Court. The Court recognised the close relationships between natural

character, landscapes, and indigenous vegetation and habitats (and cultural values), and directed the District Council to address these matters in an integrated fashion.

7. RULES AND BIODIVERSITY OUTCOMES

This section addresses the following question:

b. How have different rule settings affected biodiversity outcomes?

A comprehensive set of rules govern clearance of indigenous vegetation within the Settlement, Bush Settlement, Sensitive Rural, and Protection sub-zones within the Lakes A Zone (see Appendix 2 of this report).

A non-statutory comprehensive indigenous revegetation guide was also developed specifically for the Lakes A Zone and is available on the Rotorua Lakes Council website. This includes site preparation, species selections, planting maintenance, control of weeds and pest animals, and performance standards.

Detailed baseline mapping of indigenous vegetation was undertaken (Wildland Consultants 2009a). A network of vegetation plots was also established throughout representative examples of vegetation and habitat types at the same time (Wildland Consultants 2009b).

Detailed assessments were undertaken of vegetation condition, including evaluations of pest animals and pest plants, and avifauna. Actual and potential restoration projects were also assessed.

The following extracts are from Wildland Consultants (2012).

<u>Indigenous Vegetation Cover and Condition Throughout the Lakes A Zone</u>

In summary, the following changes occurred between 2006 and 2011:

- Indigenous vegetation expanded in extent by 95 ha, but there is also evidence of a loss of 38 ha.
- There was a net increase in indigenous vegetation of 57 ha.

While overall canopy condition was considered to be good, few other conclusions can be drawn about the state of extant vegetation.

Most indigenous vegetation within the Lakes A Zone has not changed between 2006 and 2011. While 38 ha of indigenous vegetation had been 'cleared', it was not feasible, at the scale of analysis utilised for the project, to determine whether this clearance is real, or is a result of mapping error, or was consented clearance. As such loss is a potential cause of concern for the District Council, these data will require further analysis at a more detailed scale (outside of the scope of this project).

Indigenous Vegetation Within the Riparian Zone

Results from the analysis show that indigenous vegetation in the Lakes A Zone, particularly within riparian margins, is being maintained, with a very small increase. In summary, between 2006 and 2011:

- There was no net loss of indigenous vegetation in the riparian zone, and there appears to have been a small increase.
- Indigenous vegetation increased in extent by 12.2 ha, but there is also evidence of a loss of 7.4 ha. This loss is likely to be due to improved resolution of aerial photography, minor clearance, and changes to lake edge vegetation due to increased lake levels (Lake Rotomahana).

Indigenous Vegetation Within the Settlement Areas in the Lakes A Zone

Indigenous vegetation within settlements in the Lakes A Zone has remained stable between 2006 and 2011. In summary:

- There was no change to indigenous vegetation extent in the settlement areas.
- There was a slight increase (3.6 ha) of indigenous vegetation in the Bush Settlement area.

Land Use Changes Within the Lakes A Zone

Land use changes have largely been positive for biodiversity. Approximately 86.3 ha has been reclassified from the 2006 classifications of lifestyle property, housing, roading, livestock farming, recreation facilities, or plantation forest to indigenous vegetation in 2011. Analysis of land use changes between 2006 and 2011 identified *c.*19.6 ha of indigenous vegetation (present in 2006) that has been reclassified, using the 2011 aerial photographs, to reflect some element of human-induced modification, such as lifestyle property, livestock farming, roading, plantation forest, or housing. Most changes have been the result of different legal protection of land (changes from unprotected to reserve or a covenant), inconsistencies when mapping at a scale of 1:10,000, small areas of successional development, restoration planting, better quality maps, or are due to (presumed) retirement of pastoral land, where the land use is now indigenous vegetation.

Summary

- There was no change in land use cover for most of the Lakes A Zone (30,291.3 ha).
- Change to legal protection status affected 3,857 ha.
- About 60 ha changed from livestock farming to some form of indigenous vegetation.

Monitoring

Wildland Consultants (2012) addresses the monitoring requirements provided in Section 7 of the District Plan (Table 1 below). The key Anticipated Environmental Result of "retained or increased land area in indigenous vegetation, particularly in the riparian margins" (see Table 1) has been met.

It is also evident that the natural character of the Lakes A Zone, as reflected in the extent of indigenous vegetation, has also been maintained, which meets another Anticipated Environmental Result (Table 1). Although the 'viability' of rural enterprises was not directly evaluated in this project (as 'viability' could be interpreted to mean economic viability), the overall extent of rural land uses did not change over the monitoring period, which is likely to indicate that such land uses continue to remain viable within the Lakes A Zone (for example, there was no shift from farming to plantation forestry). This means that the remaining Anticipated Environmental Result (Table 1) was also met.

Table 1: Rotorua District Council monitoring requirements, and actual environmental results for the Lakes A Zone for the period 2006-2011.

Project	Monitoring	Anticipated Environmental Result	Actual Result
2006-2011			
4A	To biennially monitor the percentage of indigenous vegetative cover in the settlement zones through the use of aerial photography.	Sustained population levels at the settlements whilst maintaining the natural character of the Lakes A Zone.	Indigenous vegetation cover in the settlement zones (bush and settlement) increased slightly.
5	To biennially survey land uses of the rural area to determine rural production and lifestyle use of land.	Continuing viable rural enterprises in the Lakes A Zone.	Most land uses did not change over the period 2006-2011. Most change was a result of reclassification of reserve areas.
6	To biennially survey, using aerial photography, the indigenous vegetation cover throughout the Lakes A Zone, particularly the riparian margins.	Retained or increased land area in indigenous vegetation, particularly in the riparian margins.	Indigenous vegetation extent increased slightly. Indigenous vegetation in the riparian margins was retained.

One of the goals of the Biodiversity Strategy (Ministry for the Environment, 2000) is that a "net gain has been made in the extent and condition of natural habitats and ecosystems important for indigenous biodiversity". Within the Lakes A Zone, this goal can be considered to have been achieved, at least in relation to the extent of indigenous vegetation for the period 2006-2011. "Threats to indigenous biodiversity from the activities of people are avoided or mitigated through sustainable use regimes and the sustainable management of production landscapes and urban areas" (Ministry for the Environment 2000) can also be considered to have been achieved within the Lakes A Zone for the period 2006-2011, and indicates that District Plan provisions for

permitted activities are having a positive influence on indigenous vegetation retention and extent.

This analysis has been concerned largely with the extent of indigenous vegetation. While some attempt was made to define vegetation condition, by and large, this does not reflect the state of biodiversity or measures of ecological integrity. Factors such as weeds, pest animals, grazing, and other human-induced factors may also be affecting the quality of indigenous vegetation in the Lakes A Zone. Therefore, while it can be concluded that indigenous vegetation in the Lakes A Zone has increased slightly in extent over the period 2006 to 2011, other information should also be assessed before any definitive conclusions are drawn as to the relative quality and condition of that vegetation.

Current Pressures on Indigenous Vegetation Extent

From the analysis undertaken, the following conclusions can be made about the pressures on indigenous vegetation values in the Lakes A Zone:

- Large scale vegetation clearance has not occurred in the Lakes A Zone over the monitoring period 2006-2011.
- Any indigenous vegetation clearance within the Lakes A Zone is likely to be occurring at a very local scale. Such small areas of clearance are not necessarily able to be detected at the scale of analysis (1:10,000) used for this project, and are within the margins of error of mapping. Over time, however, if such clearance is indeed happening, cumulative effects will result in the changes becoming evident.
- Pressures on indigenous vegetation in the Lakes A Zone are likely to be similar to those occurring throughout New Zealand, e.g. threats from pest animals and weeds. Where indigenous vegetation is more fragmented, these threats will be greater. Fragmentation of indigenous vegetation increases vulnerability to wind, erosion, weed invasion, and further clearance. Isolated fragments are, at times, too small or are not sufficiently diverse to support a variety of species, and isolation from other areas of suitable habitat may prevent the movement of species (with limited mobility) between such areas. Succession and ecological development of indigenous vegetation can be placed under pressure from human clearance, modification, and development.

Condition of Indigenous Vegetation and Habitats

The District Council has implemented condition monitoring, with baseline monitoring reported on by Wildland Consultants (2009). This is additional to work undertaken by other parties. Nine main threat types were identified (Table 2). Most threats to indigenous communities and species can be related to the activities of people, either directly (e.g. vegetation clearance and damage), or indirectly (e.g. the introduction of pest animals and weeds). Fire and volcanic activity, although listed for the sake of completeness, were considered to be beyond the scope of this report.

Table 2: Threats to indigenous vegetation, habitats, and species in the Rotorua Lakes A Zone. Source: Wildlands Consultants (2009).

Threat	Description	Pressure Points
Volcanic Activity	Ash, lava, super-heated water.	Beyond the scope of this report.
Pest Animals	Predation, browsing, trampling.	Pest animals are widespread. Examples include possums in pohutukawa forest, and wallabies in indigenous vegetation at Lake Okataina.
	Introduction of exotic fish species.	All lakes.
Weeds	Terrestrial weeds: - lower indigenous biodiversity; - visually unappealing.	For example RAP 66 (willow-leaved hakea, black wattle), Tarawera settlement (old man's beard), Lake Rotomahana (willow), Mt Tarawera (wilding pines), Haumingi Bay, Lake Okataina (wattle), Rapatu Bay (wattle), Lake Okareka (yellow flag, water lily).
	Aquatic weeds: - includes exotic aquatic macrophytes and algae, usually introduced via boating traffic.	All lakes.
Pastoral Farming	Excess nutrients from run-off.	Especially in the catchments of Lake Okareka and Lake Rotomahana, but also Rotokakahi, Tarawera.
	Trampling and pugging of the shoreline.	
	Low dissolved oxygen.	
Clearance of Indigenous Vegetation	Clearance of lakeside emergent vegetation, *e.g. Eleocharis sphacelata* and raupo near lake-edge properties - raising of water temperature - loss of habitat for flora and fauna.	Especially near Lake Tarawera and Lake Okareka settlements.
	Drainage and reclamation of wetlands.	
	Clearance of terrestrial vegetation.	For example Okataina 10 Block.
Harvesting of Exotic Plantation Forest	Sedimentation.	Especially in the catchments of Lake Tikitapu, Lake Rotokakahi, and Lake Tarawera.
	Loss of buffer to indigenous vegetation.	
Current and Potential Residential Development	Sedimentation (e.g. through earthworks).	For example Lake Okareka settlement, Lake Tarawera settlement, roadsides, proposed residential development at Crater Farm and Don Stewart property.
	Stormwater discharges.	
	Septic tank discharges (excess nutrients).	
	Vegetation clearance, increased risk of weed invasion.	
	Dumping of rubbish and weeds. Domestic pets.	
Recreation	Damage to vegetation.	For example mistletoe hosts at Lake Tikitapu.
	Large numbers of people at certain lake shore localities.	All lakes, e.g. Hot Water Beach.
	Development pressure.	
	Disturbance of fauna.	
Fire	Human causes.	Beyond the scope of this report.
	Natural causes (volcanic,	Beyond the scope of this report.

Threat	Description	Pressure Points
	lightning).	
Roading and Infrastructure Development	Vegetation clearance, potential sedimentation, road kills of indigenous fauna, pest movement along roads.	Millar Road, Crater Block.

Ten representative study areas were identified for monitoring, from a subjective assessment of the map of indigenous vegetation and habitats based on the following criteria:

- Land cover of predominantly indigenous vegetation.
- Unprotected.
- High ecological significance of species/habitats present (e.g. rarity, size, representativeness).
- Representation of identifiable threats.
- Not currently monitored.
- Relatively accessible.

A study area comprises an area of indigenous vegetation/habitat, excluding lakes or land administered by the Department of Conservation. When selecting the study areas, priority was given to:

- Recommended areas for protection (RAPs), because they have known high ecological values.

- Areas potentially subject to residential development, because many threats to indigenous species and habitats are a direct result of anthropogenic pressure and managed growth is a major focus of Chapter 20 of the Rotorua District Plan.

Vegetation monitoring plots were established in each of the 10 study areas, along with monitoring of birds, pest plants, pest animals, and an assessment of overall condition. Potential restoration sites were also identified.

Remeasurements were undertaken in 2012.

8. REGIONAL POLICY

This section addresses the following question:

e. Is there variation in how districts apply regional policy?

The Bay of Plenty Regional Policy Statement (RPS) didn't exist when the Lakes A variation process started. The first generation of the RPS became operative in 1999 and the second generation became operative in 2014. Key policies from the latter, relating to significant indigenous vegetation and habitats, relevant criteria, and ecological restoration are set out in Appendix 3. Ecological evaluation criteria used to select the RAPs recognised in the Lakes A Zone are consistent with the criteria set in both iterations of the RPS.

The RPS has a strong focus on protection and enhancement of water quality, riparian zones, and indigenous vegetation and habitats (and landscapes) and the Lakes A provisions are very consistent with that approach.

9. CONSENTS WITH POTENTIAL BIODIVERSITY EFFECTS

This section addresses the following question:

f. What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

The District Council has reported on consent types and numbers in the Lakes A Zone for the period 2006-07 to 2010-11, as available on-line. The following extracts are from that on-line report.

The number of resource consents granted in the Lakes A Zone remained steady from 2006/07 to 2010/11 during which time between 15 and 23 consents were granted per year. In 2011/12 there was a low number of resource consents granted (7) as shown in Figure 2. As expected, the most common policy areas for applications and consents granted during the same time period are the Tarawera Settlement (46) and Okareka Settlement (25). The least common policy areas for consent applications were Okataina Protection (1) and Okaro Less Sensitive Policy areas (1).

The most common Lakes A rule triggered was earthworks, followed by buffers and height rules. This is also reflected in the types of activities granted. The most common (in order) were for external additions and alterations, garage/sleep out/carport, earthworks and new dwellings.

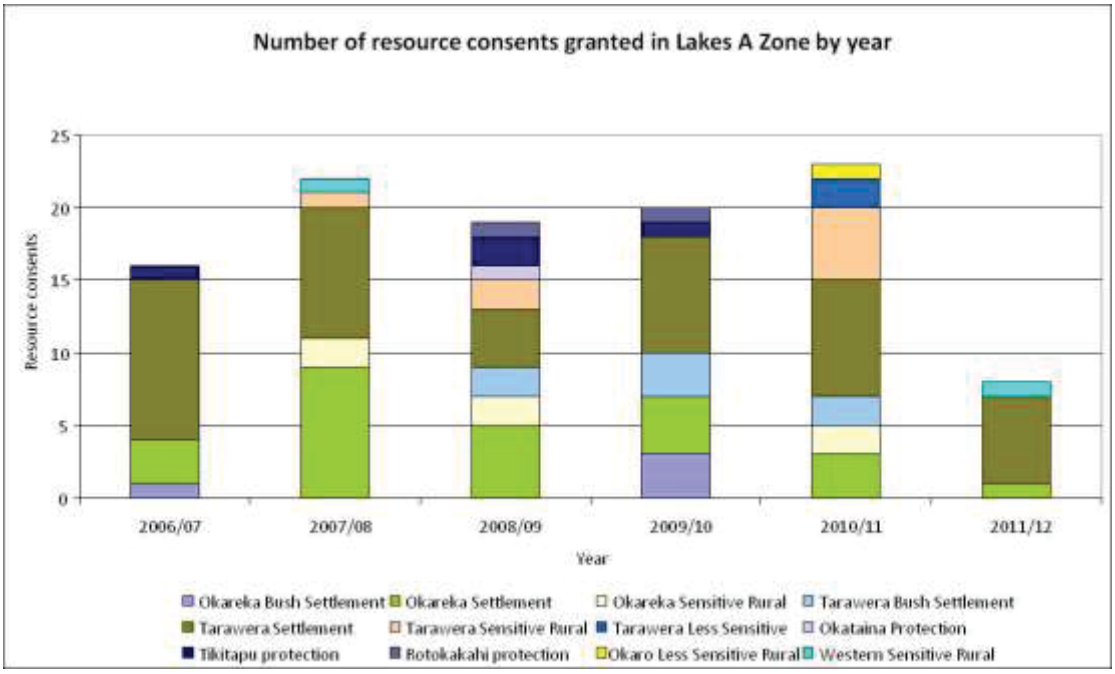


Figure 2: Source: Rotorua District Council

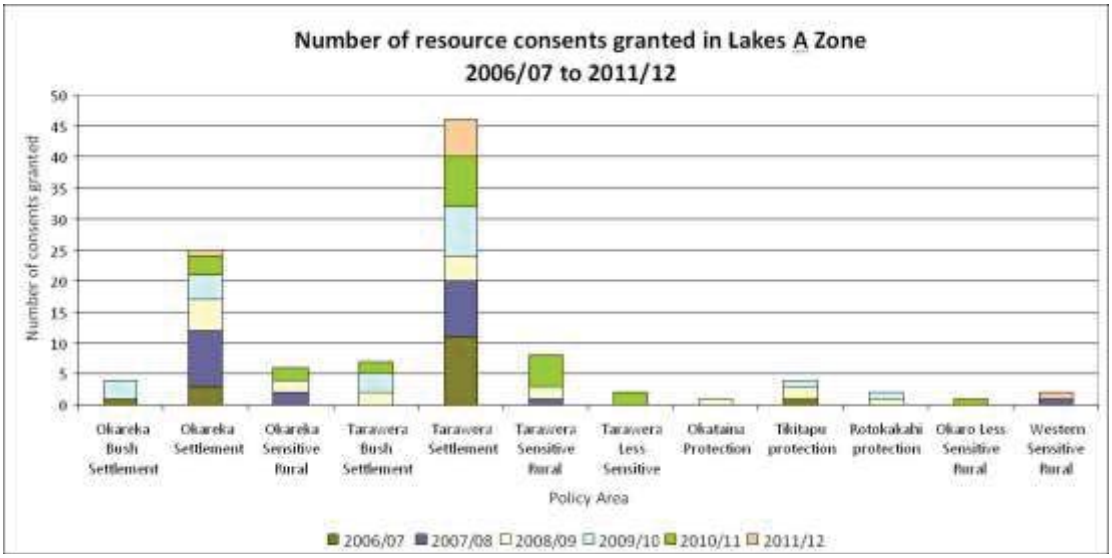


Figure 3: Source: Rotorua District Council

Figure 5 shows half of all subdivision consents were boundary adjustments not resulting in new lots. Eight subdivision consents granted from 2006 to 2012 resulted in 56 new lots granted. Of these only 13 were created (have s224 approval), while the other 43 lots remain as potential lots. The 'Crater Lake' subdivision consent was granted in 2008 however there was an appeal to the Environment Court and the consent took effect in 2009. This consent resulted in 40 potential new lots (Tarawera sensitive rural, Figure 5).

In general, trends in Figures 2 to 5 show that resource consents in the Lakes A Zone are in keeping with the policy intent. Further work will be done as part of District Plan effectiveness reporting to analyse the number of consents granted that triggered earthworks, height and buffer rules.

In Summary

- The most common Lakes A policy areas for resource consents are the Tarawera Settlement (46) and Okareka Settlement (25).
- The least common policy areas for resource consent applications were Okataina Protection (1) and Okaro Less Sensitive (1) policy areas.
- All resource consents applied for in the Lakes A Zone were granted
- The most common Lakes A rule triggered was earthworks, followed by encroaching into buffers and height rules.
- Half of all subdivision consents were boundary adjustments not resulting in new lots.
- There were eight freehold subdivision consents granted from 2006 to 2012 that resulted in 56 new lots granted.
- Only 13 new lots gained certificate of title (have s224 approval)

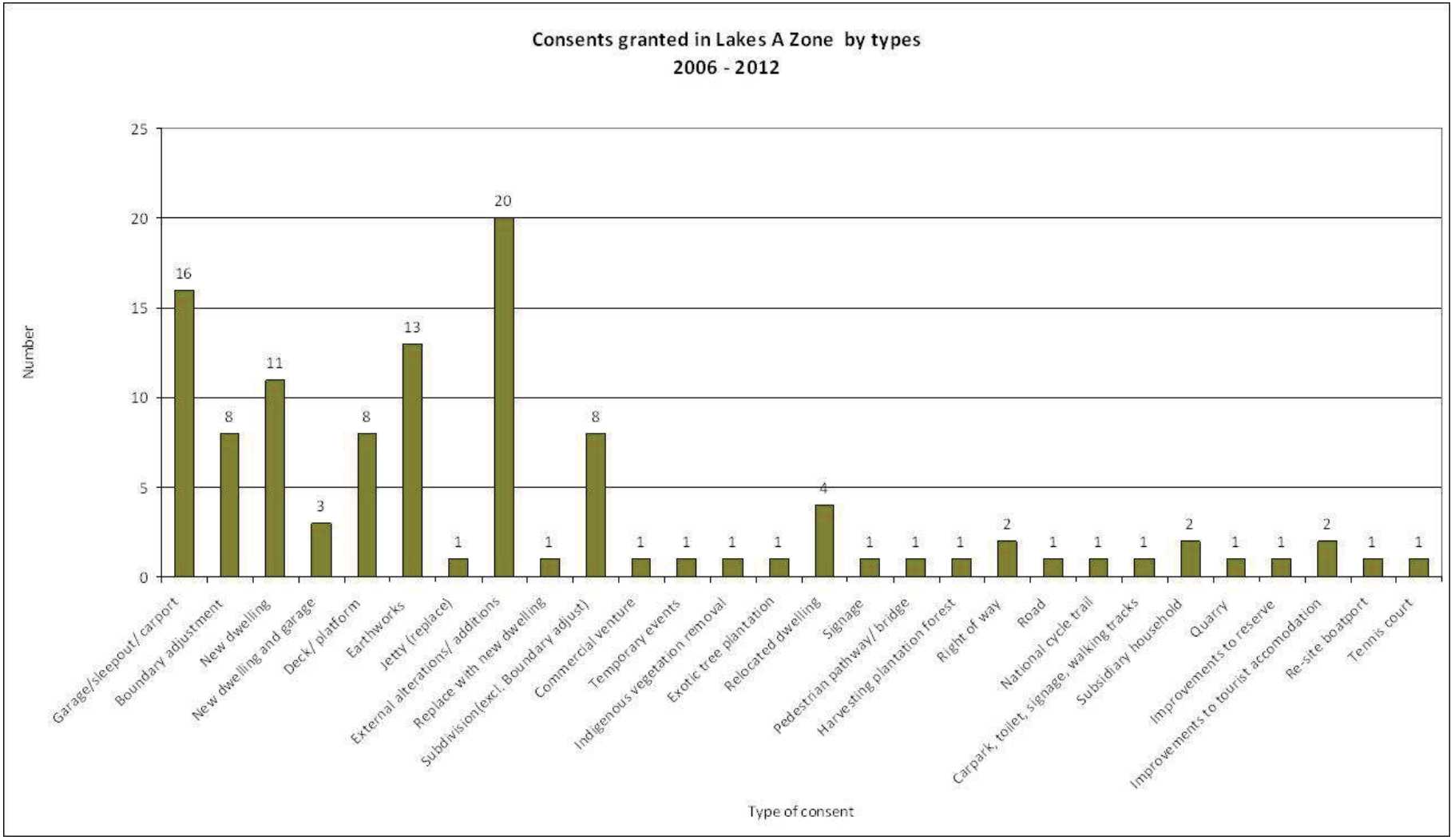


Figure 4: Source: Rotorua District Council

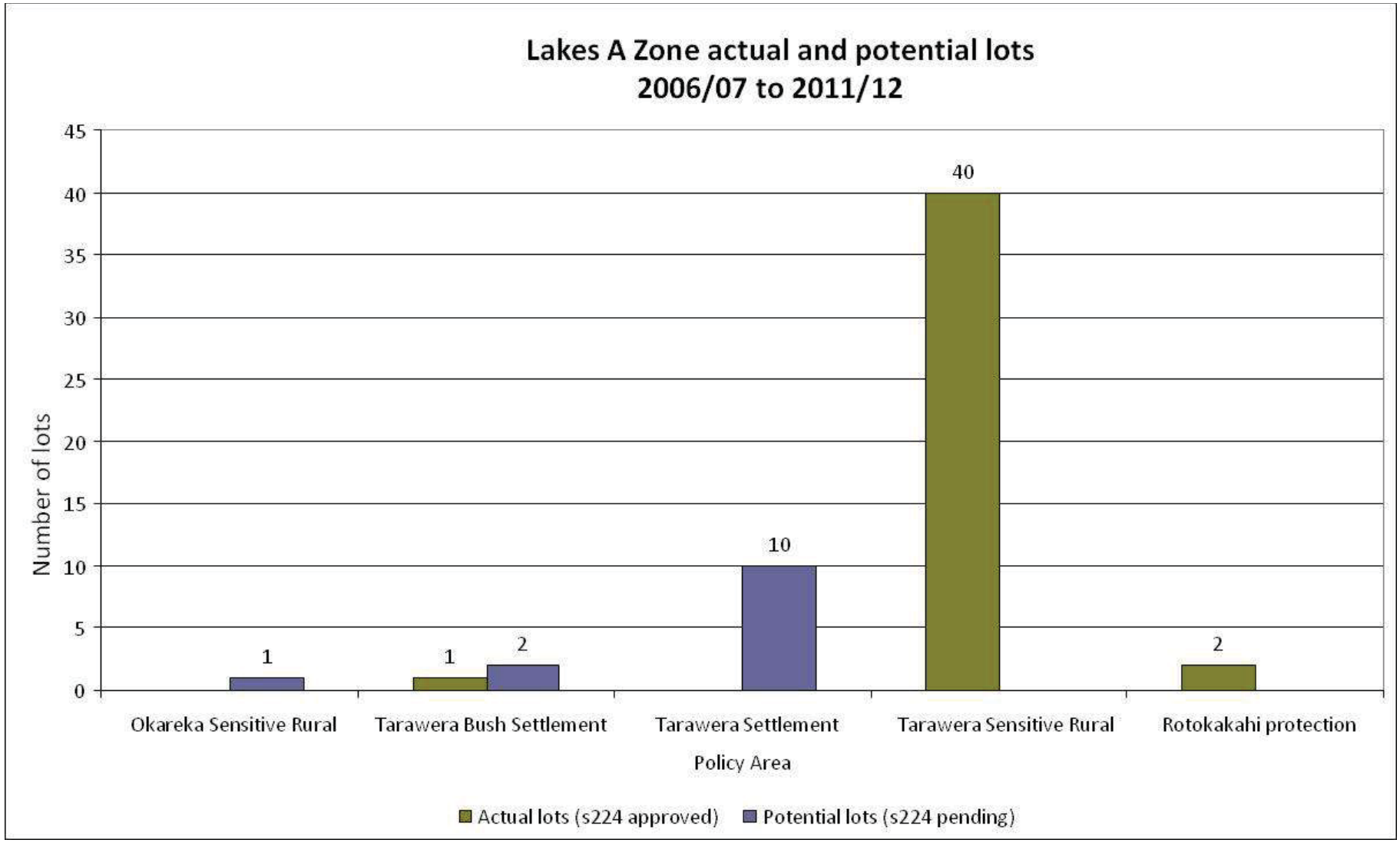


Figure 5: Source: Rotorua District Council

10. POLICY IMPLEMENTATION

This section addresses the following question:

d. Are policies being implemented as intended? If not, why not?

As part of the Environment Court process, appeals from tangata whenua were resolved during the hearing by direct negotiation of issues and opportunities for localised low impact development of potential new marae and eco-lodges. Sites were identified and are shown in the District Plan as Tangata Whenua Structure Plans. A comprehensive set of assessment criteria was also developed (Appendix 4 in this report).

Policies and rules have been applied, successfully, to consent applications and also to tangata whenua structure plans. The provision for Tangata Whenua Structure Plans appears to be working as there is a current proposal for a new marae at one of the identified sites, which appears to be progressing well.

11. COMMUNITY RESPONSE

This section addresses the following question:

g. What has the community response been to different approaches?

Initially there was some community concern about the very prescriptive nature of the District Plan variation but this was limited and the Plan is a fair reflection of the community's values in relation to environmental protection and enhancement

Overall, community response has been very good. There is very strong support from tangata whenua - Tūhourangi and Ngāti Rangitihi - for protection and enhancement of the lakes and indigenous vegetation and habitats. While there was some initial concern from individuals in the community, there is wide acceptance of the need for strong protective measures. Land subdividers have recognised the need to retain indigenous vegetation and/or plant indigenous vegetation or to promote natural revegetation.

Some catchment areas have been protected under Land Improvement Agreements administered by Bay of Plenty Regional Council. These are formal agreements with private landowners who have retired stream or lake margins for water and soil conservation purposes. This illustrates the existence of additional support from landowners to protect indigenous biodiversity. Residents at Lakes Tarawera and Ōkāreka have instigated ecological restoration projects which started may years ago and have continued impetus.

12. KEY FINDINGS

This project involved identification of Recommended Areas for Protection (RAP; also known as Significant Natural Areas), development of the proposed District Plan variation (including provisions relating to indigenous biodiversity, subdivision, and all Plan provisions relating to indigenous vegetation and fauna), provision of technical advice to staff during hearings (and to a hearings panel), and evidence before the Environment Court. The latter involved discussion and development of agreements with Māori landowner appellants (and other appellants) relating to structure plans for potential future development of marae and eco-lodges within Māori land identified as RAPs. Overall, this process took about eight years to reach completion, and an ecologist was an integral part of the project team for the entire period, working very closely with the District Council planners and other specialists (drainage, roading, landscape visual effects, and soil and water management).

Baseline monitoring has been implemented of vegetation extent and condition, birds, and the effects of pest plants and animals. This has been done at 10 representative sites.

District Plan provisions have a strong focus on biodiversity (and landscape) protection, and contain considerable detail on these matters. Initially there was some community concern about the very prescriptive nature of the Plan but this was limited and the Plan is a fair reflection of the community's values in relation to environmental protection and enhancement.

The District Council has implemented monitoring and reporting and it is evident that the Plan provisions are enabling sustainable productive land uses to continue while ensuring that natural values are protected. There are ongoing challenges with water quality and the management of pests and weeds, and these are being addressed through other mechanisms.

ACKNOWLEDGMENTS

Paulina Wilhelm and Anita Galland of Rotorua Lakes Council assisted with the provision of the Section 32 report from 2000.

REFERENCES

Ministry for the Environment 2000: The New Zealand Biodiversity Strategy. Ministry for the Environment, Wellington, New Zealand.

Wildland Consultants 1998a: Rotorua Lakes Ecological District natural area survey. *Wildland Consultants Ltd Contract Report No. 175*. Prepared for Rotorua District Council and Environment BOP. 551 pp.

Wildland Consultants 1998b: Natural heritage of the Rotorua District. *Wildland Consultants Ltd Contract Report No. 176*. 657 pp.

Wildland Consultants (undated): Recommended areas for protection in the Lakes A Zone. *Wildland Consultants Ltd Contract Report No. 391*. 11 pp.

Wildland Consultants 2003a: Statement of evidence of the ecological history of the Lakes A Zone. *Wildland Consultants Ltd Contract Report No. 681*. 78 pp plus maps.

Wildland Consultants 2003b: Indigenous planting in the Lakes A Zone, Rotorua District. *Wildland Consultants Ltd Contract Report No. 686*. Prepared for Rotorua District Council. 7 pp.

Wildland Consultants 2003c: Management of pest animals on private lands in the Lakes A Zone, Rotorua District. *Wildland Consultants Ltd Contract Report No. 612*. Prepared for Rotorua District Council. 31 pp.

Wildland Consultants 2004: *Input into*: Rotorua District Council and Lucas Associates 2004: Lakes A Zone Revegetation Guide. *Wildland Consultants Ltd Contract Report No. 806.* 23 pp.

Wildland Consultants 2004: Statement of Evidence of William Bruce Shaw on the proposed McLean subdivision in the Lakes A Zone of the Rotorua Proposed District Plan. *Wildland Consultants Ltd Contract Report No. 833*. 23 pp.

Wildland Consultants 2009a: Baseline mapping and assessment of indigenous vegetation and habitats in the Rotorua Lakes A Zone. *Wildland Consultants Ltd Contract Report No. 1438*. Prepared for Rotorua District Council. 135 pp.

Wildland Consultants 2009b: Baseline mapping and assessment of indigenous vegetation and habitats in the Rotorua Lakes A Zone - 2007 plot sheets. *Wildland Consultants Ltd Contract Report No. 2202*. Prepared for Rotorua District Council. 118 pp.

Wildland Consultants 2012: Aerial photography analysis of indigenous vegetation and land use in the Lakes A Zone 2012. *Wildland Consultants Ltd Contract Report No. 2776*. Prepared for Rotorua District Council. 34 pp.

DISTRICT PLAN METHODS OTHER THAN RULES

M2.0 WATER QUALITY:

M2.1 To work with Environment BOP and landowners to promote land management in the lake catchments (including human effluent disposal) that enables the standards set by Environment BOP for water quality and discharge and water permits to be met.

M2.2 To work with Environment BOP to manage activities on the surface of water that enable the water quality standards set by Environment BOP to be met.

M2.3 To work with Environment BOP and landowners to establish adequate riparian buffers and wetlands, and to minimise nutrients entering the lake.

M2.4 To promote the upgrading of existing stormwater systems as practicable, having regard to:

a) upgrade opportunities;
b) cost effectiveness
c) availability of land;
d) potential damage to utilities;
e) effects on the environment;
f) protection of water quality.

M3.0 AQUATIC ECOSYSTEMS:

M3.1 To promote the protection of known habitats of indigenous birds and aquatic fauna and trout in lakes and streams.

M3.2 To work with Environment BOP, the Department of Conservation and to identify the distribution of indigenous aquatic habitats and vegetation in the lakes.

M3.3 To protect Rotomahana from further invasion by aquatic weeds by controlling boat access using Council's powers under the Reserves Act 1977 and Lakes' Bylaw delegated by Environment BOP under the Harbours Act 1950.

M3.4 To assist funding to provide informative signs at boat ramps concerning the spread of aquatic pest plants and pest animals, and to provide boat wash-down facilities at boat ramps where practicable.

M3.5 To work with neighbouring Councils and the Department of Conservation (DOC) on co-ordinated approaches for managing the risks of spread of aquatic weeds and pest fish.

M3.6 To rely on the Regional Council to regulate discharges to water and water takes.

M3.7 To work with landowners, Environment BOP and other organisations to rehabilitate streams and wetlands.

M4.0 WETLANDS:

M4.1 To fund assistance for wetland protection in Financial Strategies and Annual Plans.

M4.2 To manage wetlands in Council reserves in ways that retain or enhance their viability and habitats by:

a) retaining water tables;
b) rehabilitation planting;
c) pest plant and pest animal control;
d) removal of exotic plant species;
e) prevention of grazing.

M4.3 To promote the importance and protection of wetlands.

M4.4 To rely on Regional rules to regulate modification of wetlands.

M5.0 *INDIGENOUS VEGETATION* AND HABITATS:

M5.1 To require and facilitate the ongoing management of protected areas of *indigenous vegetation* and habitats.

M5.2 To co-operate with other agencies which have responsibilities relating to indigenous vegetation and promote the control of pest animal and pest plants within protected areas.

M5.3 To work with landowners who own indigenous vegetation on ways of protecting and enhancing indigenous biodiversity including, where relevant, the use of exotic vegetation.

M5.4 To fund assistance for protection and rehabilitation in Financial Strategies and Annual Plans.

M5.5 To use the presence of indigenous vegetation and habitats as criteria for reserves acquisition as a financial contribution.

M5.6 To manage Council reserves with an objective to retain or enhance the viability of existing areas of indigenous vegetation by:
a) planting with locally-sourced indigenous species;
b) controlling pest plant and pest animals;
c) preventing grazing;
d) where appropriate, removal of exotic species.

M5.7 To work with the Ministry of Agriculture and Forestry on the production of sustainable forest management plans and permits that promote the protection of indigenous ecosystems and habitats.

M5.8 To support the QEII National Trust.

M5.9 To invite support for this Plan's objectives from Nga Whenua and New Zealand Nature Heritage Fund and similar bodies.

M5.10 To consider rate rebates for indigenous vegetation and habitat areas that are protected.

M6.0 RIPARIAN AREAS:

M6.1 To manage Council reserves, including esplanade reserves, in ways that protect or enhance riparian values, including:

a) wetlands;
b) reedbeds;
c) areas of indigenous terrestrial vegetation;
d) known habitats of aquatic indigenous fauna and trout, and indigenous birds;
e) aquatic ecosystems;
f) mitigation of adverse effects of the use and development of land on lakes and streams;
g) threatened indigenous species.

M6.2 To allow Council reserves, including esplanade reserves to be privately occupied only by way of a lease or licence and only where it can be shown that:

a) The values in M6.1 are maintained and, where consistent with an operative reserve management plan, enhanced; and
b) Practicable public access is not restricted; and
c) Such occupation is provided for in the Operative Reserve Management Plan, and can be lawfully established under the Reserves Act 1977.

Council may place conditions on the lease to protect these matters, and to control appearance and maintenance.

M6.3 To prefer good land management practises in the catchment through techniques such as Environmental Property Plans over reliance on riparian areas as the sole buffer to the lake's receiving environment.

M6.4 Except in situations where a particular rule applies, to negotiate with developers or subdividing owners with an aim to achieving riparian management of lakes, rivers and wetlands which maintains or enhances the above values. Council will consider esplanade strips or some other suitable covenant or easement.

M6.5 To recommend to the Regional Council the discharge of any LIA (Land Improvement Agreement) as appropriate where it has been replaced by an esplanade instrument of at least the same terms and area.

M6.6 To promote the values of riparian areas and the value of their good management

M7.0 GEOTHERMAL FEATURES:

M7.1 To rely on Regional Rules to control the taking and discharge of geothermal fluids.

M12.0 PESTS:

M12.1 To provide, in conjunction with the SPCA, an euthanasing service for unwanted cats and dogs.

M12.2 To promote, in conjunction with Environment BOP and the Department of Conservation as appropriate, the control of pest plants and pest animals in protected natural areas (PNAs) by:

a) considering funding assistance in Financial Strategies and Annual Plans for community and landowner initiatives;
b) undertaking regular education and advertising programmes;
c) producing and distributing information.

M12.3 To facilitate, in conjunction with other interested parties, a public debate about the threats of cats and dogs to indigenous fauna, and the best way to address those threats.

M16.0 INTEGRATED MANAGEMENT WITH LOCAL AUTHORITIES

M16.1 To liaise with the Regional Council and adjacent District Councils to avoid duplication or overlapping of responsibilities and to provide timely and effective responses to those organisations in environmental management.

M16.2 To ensure there are transparent and clear rules for the respective organisation with statutory responsibilities under the RMA.

MONITORING

- To biennially monitor the percentage of indigenous vegetative cover in the settlement zones through the use of aerial photography.
- Retained or increased land area in indigenous vegetation, particularly in the riparian margins.
- To biennially survey, using aerial photography, the indigenous vegetation cover throughout the Lakes A Zone, particularly the riparian margins.
- Maintained and enhanced quality of indigenous vegetation habitats.
- To carry out five yearly flora and fauna surveys of 10% of vegetated land in 10 pre-set locations to determine quality of flora and fauna.
- To annually monitor changes in riparian management through esplanade reserve, esplanade strip creation or use of other legal mechanisms for protection.
- To monitor conditions of resource consents and complaints.
- Protection of areas with natural or cultural heritage.
- To maintain a register of areas containing natural or cultural heritage that have protective instruments or reserve status.

DEFINITIONS

Indigenous Plant Species: Means any plant found naturally in New Zealand.

Indigenous Vegetation: Means any plant community containing indigenous species (which may include a canopy, subcanopy, understorey and ground cover as structural elements). It includes vegetation that has regenerated naturally or vegetation established with human assistance following disturbance or as mitigation for another activity.

Vegetation Type: Means a particular type of vegetation cover with a similar suite of main species comprising the canopy (the uppermost growth tier), while taking account of overall structure and relative abundance of species in other tiers (subcanopy, understorey, and ground cover). A vegetation type may be represented at more than one site and in more than one vegetation unit.

Vegetation Unit: Means a continuous unit of vegetation that is either predominantly exotic (e.g. plantation forest, pasture) or indigenous (e.g. indigenous forest, scrub, fernland, rushland). A vegetation unit may be as small as a few square metres or may cover extensive areas extending over property boundaries. In the case of indigenous vegetation it may consist of one vegetation type (see definition of vegetation type) or a suite (or any combination) of vegetation types.

DISTRICT PLAN INDIGENOUS VEGETATION CLEARANCE RULES

MANAGEMENT AREA A - SETTLEMENT

2.1 PERMITTED ACTIVITIES

A2.1.1 Indigenous vegetation disturbance complying with any of the following conditions:

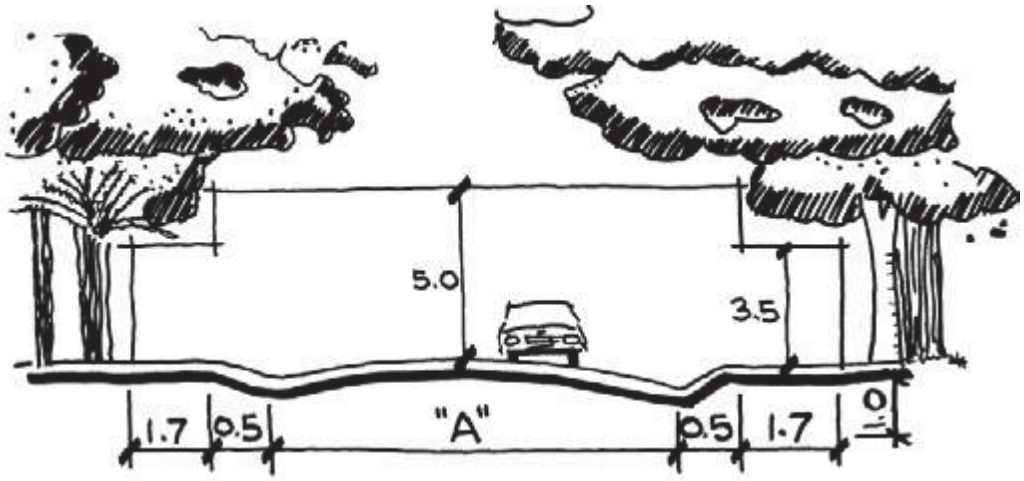
1. It is indigenous vegetation disturbance for the purpose of creating a building platform or vehicle access to it where:

    a) There is no alternative building platform clear of indigenous vegetation; and
    b) The indigenous vegetation is not located within the 2.5 metre buffer from the site boundary; or

2 It is disturbance of indigenous vegetation that does or will within two years obstruct the view obtained from a viewpoint; or

3 It is trimming of the indigenous vegetation, where the vegetation does or will within two years do any of the following:

    a) Interfere with the operation of existing electricity and telecommunication lines that are Permitted Activities under Rules A37.1.1, A37.1.2, B37.1.1 and B37.1.2 or interfere with the safe operation of an existing underground gas pipeline; or
    b) Be within 5 metres vertical height from a carriageway or the shoulder of a public road, private road, private way or an on-site manoeuvring area (i.e. overhanging branches); or
    c) Be within 3.5 metres vertical height above or one (1) metre below the services corridor of a public *road* (Refer Diagram below):



Note

1. ‘A’ - Existing sealed carriageway width, or where the road is to be widened, in accordance with Rule 33.1.1.
2. All vertical measurements are to be taken from the centreline of the carriageway formation (i.e. 3.5m and 5.0m), and apply equally to each side of the road.
3. All measurements are in metres.

but not where:

4. It is disturbance of indigenous vegetation associated with a geothermal feature; or
5. It is disturbance of indigenous vegetation within a RAP or a PNA; or
6. It is disturbance of indigenous mistletoe species (*Tupeia antarctica* and *Ileostylus micranthus*) or disturbance of the host plant on which indigenous mistletoe is present; or
7. It is disturbance of planted or naturally established indigenous vegetation that is protected as a condition of a resource consent.

A2.2 Controlled Activities

There are no Controlled Activities.

A2.3 Restricted Discretionary Activities

There are no Restricted Discretionary Activities.

A2.4 Discretionary Activities

A2.4.1 Any indigenous vegetation disturbance that does not comply with the conditions for Permitted Activities.

A2.5 Non-Complying Activities

There are no Non-Complying Activities.

MANAGEMENT AREA B

- BUSH SETTLEMENT
- SENSITIVE RURAL
- LESS SENSITIVE RURAL
- PROTECTION

Permitted Activities

B2.1.1 Indigenous Vegetation Disturbance complying with any of the following conditions:

1. It is disturbance of indigenous vegetation where:

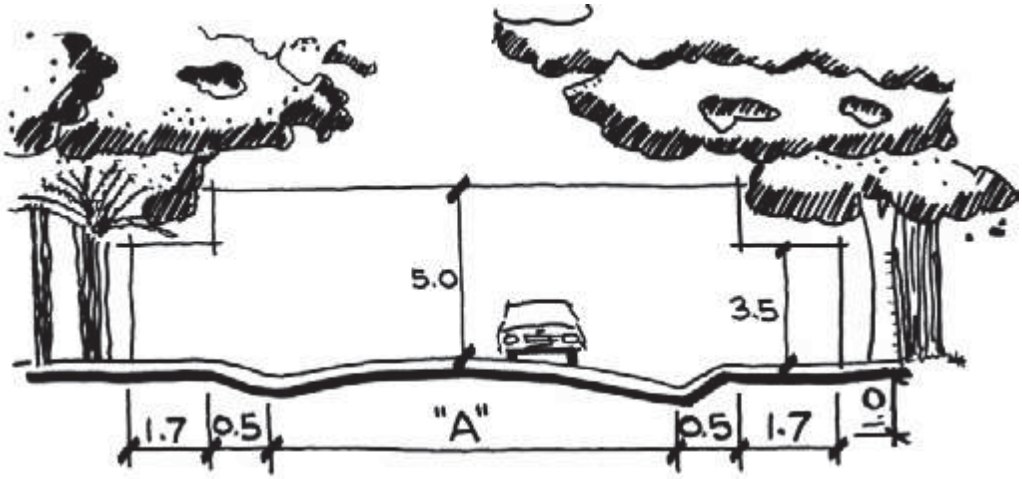
    a. It is an indigenous vegetation unit that is less than 250 m2 in area; or
    b. It is an understorey of indigenous species within an established plantation forest; or
    c. It is natural regeneration of indigenous vegetation that has established on forest road margins and skid sites within an exotic plantation forest since it was planted, and the disturbance is incidental to the management of the plantation forest; or
    d. It is an understorey of indigenous vegetation species beneath a closed canopy of naturally established or wilding exotic tree species (a cover of indigenous vegetation beneath a scattered cover of exotic tree species is not included);
    e. It is an area of indigenous tree species planted and managed as a plantation forest or for other commercial purposes; or
    f. It is indigenous plantings established for landscaping or amenity purposes; or
    g. It is rushes in pasture; or
    h. It is bracken fern (*Pteridium esculentum*) or hard fern (*Paesia scaberula*); or
    i. It is indigenous vegetation that is less than 2 metres in height that has regenerated naturally following repeated clearance for farming purposes and the clearance is to maintain an existing farming operation, but does not include areas of tree fern dominant indigenous vegetation; provided that the disturbance is located outside a riparian area; and is not on a slope that exceeds 25 degrees; or

2. It is disturbance of naturally regenerating indigenous vegetation within 2 metres of a maintained fence; or

3. It is disturbance of indigenous vegetation within 5 metres of a habitable building; or

4. It is trimming of indigenous vegetation where the vegetation does or will within two years do any of the following:

    a. Interfere with the operation of existing electricity and telecommunication lines that are Permitted Activities under Rules A37.1.1, A37.1.2, B37.1.1 and B37.1.2 or interfere with the safe operation of an existing underground gas pipeline; or
    b. Be within 5 metres vertical height from a carriageway or the shoulder of a public road, private road, private way or an on-site manoeuvring area (i.e. overhanging branches); or
    c. Be within 3.5 metres vertical height above or one (1) metre below the services corridor of a public road (Refer Diagram below); or



Note

1. 'A' - Existing sealed carriageway width, or where the road is to be widened, in accordance with Rule 33.1.1.
2. All vertical measurements are to be taken from the centreline of the carriageway formation (i.e. 3.5m and 5.0m), and apply equally to each side of the road.
3. All measurements are in metres.
5. It is disturbance of indigenous vegetation that does or will within two years obstruct a view from a viewpoint; but not where:
6. It is disturbance of indigenous vegetation associated with a geothermal feature; or
7. It is disturbance of indigenous vegetation within a RAP or a PNA; or
8. It is disturbance of a rare or threatened indigenous plant species or vegetation type; or
9. It is disturbance of planted or naturally established indigenous vegetation that is protected as a condition of a resource consent.

B2.2 Controlled Activities

There are no Controlled Activities.

B2.3 Restricted Discretionary Activities

There are no Restricted Discretionary Activities.

B2.4 Discretionary Activities

B2.4.1 Any Indigenous Vegetation Disturbance that does not comply with the conditions for Permitted Activities.

B2.5 Non-Complying Activities

There are no Non-Complying Activities.

Explanation and Principal Reasons

The substantial land areas of indigenous vegetation within the catchments are an essential element of the natural character of the Lakes A Zone and landscape character of the settlements. In addition, these areas have important biodiversity values. Some have been identified as significant, and others are likely to have potential values as ecological corridors. Because of these values the removal of indigenous vegetation is limited to that which is of poor or marginal quality and which is essential for housing purposes within the settlement management areas. In particular, Council wishes to retain all indigenous vegetation in riparian areas to protect the integrity of the land/water interface ecology and natural character of the lakes and lake margins. This protective approach will preserve the natural character of the Lakes A Zone including ecological corridors, indigenous terrestrial fauna and adjacent aquatic habitats.

BAY OF PLENTY RPS POLICIES

Matters of National Importance Policies

Policy MN 1B: Recognise and provide for matters of national importance:

(a) Identify which natural and physical resources warrant recognition and provision for as matters of national importance under section 6 of the Act using criteria consistent with those contained in Appendix F of this Statement;

(b) Recognise and provide for the protection from inappropriate subdivision, use and development of those areas, places, features or values identified in accordance with (a) in terms of natural character, outstanding natural features and landscapes, and historic heritage;

(c) Recognise and provide for the protection of areas of significant indigenous vegetation and habitats of indigenous fauna identified in accordance with (a);

(d) Recognise and provide for enhancing and maintaining public access to and along those areas identified in accordance with (a);

(e) Recognise and provide for the relationship of Māori and their culture and traditions identified in accordance with (a) and Policy IW 2B; and

(f) Recognise and provide for protection to recognised customary activities.

Explanation:

All persons exercising functions and powers under the Act are required to recognise and provide for, as matters of national importance:

1 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 (section 6(a));

2 The protection of outstanding natural features and landscapes from inappropriate subdivision, use and development (section 6(b));

3 The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna (Section 6(c));

4 The maintenance and enhancement of public access to and along the coastal marine area, lakes and rivers (Section 6(d));

5 The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (refer Section 6(e));

6 The protection of historic heritage from inappropriate subdivision, use and development (Section 6(f)); and

7 The protection of recognised customary activities (Section 6(g)).

For the Region's matters of national importance to be sustainably managed, they need to be more reliably assessed. Criteria assist in their identification and evaluation. The criteria contained in Appendix F of this document support consistency at regional, city and district levels, and can avoid duplication.

Evaluation of matters of national importance may need to be undertaken by people who have specialist or technical knowledge, for example, archaeologists. When consistent criteria are applied specialists should reach a similar conclusion. In the event that the conclusions are different, decision makers must weigh the evidence. The involvement of a specialist does not predetermine a decision; decision makers must still exercise judgement.

The Appendix F criteria can be used to assist in identifying elements of the environment that may be so affected. An assessment is to be in such detail as corresponds with the scale and significance of the effects.

The criteria are to be used as a framework for assessment. They are not tests or standards that, by themselves, determine what protection is required. The criteria are to be applied in regional, city and district plans, and in case-by-case consents assessments.

Table reference: Objectives 18, 19, 20, 21, and 22, Methods 1, 2, 3, 8, 11, 12, 41, 42, 46, 48, 64, 65, and 70.

Policy MN 2B: Giving particular consideration to protecting significant indigenous habitats and ecosystems

Based on the identification of significant indigenous habitats and ecosystems in accordance with Policy MN 1B:

(a) Recognise and promote awareness of the life-supporting capacity and the intrinsic values of ecosystems and the importance of protecting significant indigenous biodiversity;

(b) Ensure that intrinsic values of ecosystems are given particular regards to in resource management decisions and operations;

(c) Protect the diversity of the region's significant indigenous ecosystems, habitats and species including both representative and unique elements;

(d) Manage resources in a manner that will ensure recognition of, and provision for, significant indigenous habitats and ecosystems; and

(e) Recognise indigenous marine, lowland forest, freshwater, wetland and geothermal habitats and ecosystems, in particular, as being underrepresented in the reserves network of the Bay of Plenty.

Explanation:

Sustainable management includes safeguarding the life-supporting capacity of ecosystems. The purpose of doing this is to maintain the well-being of the biosphere (i.e. the life-supporting capacity of air, water, and soil). In order to achieve this it is necessary to maintain

ecosystems, providing for their restoration and rehabilitation where appropriate. Such restoration will increase the survival probabilities of species, habitats and ecosystems.

It is the totality of ecosystems presently existing within the Bay of Plenty region that gives it its recognisable character and unique identity. This totality is not only comprised of all significant features and sites but includes remnants of indigenous vegetation and habitat. In order to preserve the regional identity it is important to protect as many of these remnants as possible. Such protection is also in accord with maintaining the well-being and health of the region's ecosystems. In order to achieve this protection it is necessary to exercise control over the activities that may adversely affect them. Efficient means of doing this are through the consent process and through councils ensuring that they integrate their resource management functions with ecological principles and considerations.

Production forestry can provide habitats for significant indigenous fauna. In these areas normal forestry operations should benefit from existing use rights and be able to continue. In such cases management efforts, including codes of practice, to provide for rare and endangered species are encouraged.

Pest plants and animals can adversely affect indigenous vegetation and habitat. The Regional Pest Management Plan addresses the management of pest species in the region and places requirements on landowners.

In order that the region's natural character and indigenous vegetation and habitats of indigenous fauna are sustainably managed for present and future generations, they need to be more reliably assessed.

Policy MN 2B relies on the assessment and identification of natural character and significant indigenous habitats and ecosystems using the Appendix F criteria required by Policy MN 1B. The Appendix F criteria are tools that assist in the identification and evaluation of natural character and indigenous vegetation and habitats of indigenous fauna for the purpose of promoting their preservation and protection. Having criteria in the Regional policy statement supports consistency in the assessment of section 6(a) and 6(c) matters, at regional, city and district levels, and can avoid duplication. Criteria can help agencies identify the range of values that make up our natural character and indigenous vegetation and habitats of indigenous fauna, the threats to them, and options for management.

Criteria can focus attention on the qualities of an area's natural character and the factors that make particular areas of indigenous vegetation and habitats of indigenous fauna significant, raise people's awareness of their importance to the community, and help people understand more about themselves, their origins and their environment.

Table reference: Objective 20, Methods 3, 26, 27, 39, 49, 55, 64, and 65.

Policy MN 3B: Using criteria to assess values and relationships in regard to section 6 of the Act

Include in any assessment required under Policy MN 1B, an assessment of:

(a) Natural character, in relation to section 6(a) of the Act, on the extent to which criteria consistent with those in Appendix F Set 1: Natural character are met;

(b) Whether natural features and landscapes are outstanding, in relation to Section 6(b) of the Act, on the extent to which criteria consistent with those in Appendix F Set 2: Natural features and landscapes are met;

(c) Whether areas of indigenous vegetation and habitats of indigenous fauna are significant, in relation to Section 6(c) of the Act, on the extent to which criteria consistent with those in Appendix F set 3: Indigenous vegetation and habitats of indigenous fauna are met;

(d) Public access to and along the coastal marine area, lakes and rivers in relation to Section 6(d) of the Act, on the extent to which the criteria consistent with those in Appendix F Set 6: Public access are met;

(e) The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga, in relation to Section 6(e) of the Act, on the extent to which criteria consistent with those in Appendix F Set 4: Māori culture and traditions are met; and

(f) Historic heritage, in relation to Section 6(f) of the Act, on the extent to which criteria consistent with those in Appendix F Set 5: Historic heritage are met.

Explanation

In order that the region's matters of national importance are sustainably managed for present and future generations, they need to be more reliably assessed. Criteria are tools that assist in the identification and protection. Having criteria in the Statement supports consistency in the assessment of Section 6 matters, at regional, city and district levels, and can avoid duplication.

Criteria can help agencies identify the range of values that make up our region's matters of national importance, the threats to them, and options for their management. Criteria can focus attention on the qualities and factors that raise people's awareness of their importance to the community, and help people understand more about themselves, their origins and their environment.

The criteria are to be used as a framework for assessment. They are not tests or standards that, by themselves, determine what protection is required. The criteria can be applied in regional and district plans, and in case-by-case consents assessments.

It is acknowledged that some districts come under the jurisdiction of more than one regional council. In such situations other regional criteria not inconsistent with those in Appendix F will be appropriate.

The majority of archaeological heritage in the region is of Māori origin. Accordingly, there are very close links between Māori culture and traditions under Section 6(e) and historic heritage under section 6(f). Therefore with the exception of geothermal features (which are assessed using the Appendix F Set 7 Geothermal features criteria) assessments involving the Appendix F Set 4 Māori culture and traditions criteria should also consider the Appendix F Set 5 Historic heritage criteria.

Table reference: Objectives 18, 19, 20, 21, and 22, Methods 3, 11, 12, 48, and 70.

Policy MN 4B: Encouraging ecological restoration

Encourage ecological restoration and rehabilitation through:

(a) Retention or establishment of vegetation corridors linking otherwise isolated habitats and greater use of buffer zones;

(b) A co-ordinated and co-operative approach;

(c) The protection of remaining habitats from further fragmentation, degradation and invasion by pests;

(d) Non-regulatory initiatives for the restoration or rehabilitation of degraded habitats; and

(e) The protection of ecosystems and habitats identified by the National Priorities for Biodiversity

Protection on Private Land (Ministry for the Environment 2006).

Explanation

A range of complementary tools is needed to ensure that the intrinsic values and processes of ecosystems are safeguarded and might include education, provisions within regional and district plans, the purchase of land for reserves, buffers to adjacent land use, and the acquisition of land through reserves contributions. In addition, the use of heritage protection orders and water conservation orders, covenants and other voluntary agreements are also valid tools. Rates relief, resource consents conditions, and operational works such as fencing could also be used.

There are a number of agencies with various responsibilities for ecosystems management and greater interaction and greater integration of their work would avoid duplication of effort and maximise efficiency.

Table reference: Objectives 20 and 27, Methods 3, 26, 39, 49, 55, 63, and 64.

ASSESSMENT CRITERIA FOR TANGATA WENUA STRUCTURE PLANS

CR 29.1 The extent to which the proposal enables provision for the communal, social, economic and cultural wellbeing of the iwi or hapu.

CR 29.2 The extent to which the applicant has a special relationship in terms of section 6(e) of the RMA with the site or location of the proposed use or development.

CR 29.3 The extent to which the activity may adversely affect identified Recommended Areas for Protection (RAPs) in Beadel SM, Shaw WB, Nicholls JL (March 1998): Rotorua Lakes Ecological District Natural Area Survey.

CR 29.4 The extent to which indigenous vegetation disturbance will adversely affect the integrity of eco-units and the viability, integrity and sustainability of indigenous vegetation, habitats and species in the Rotorua Lakes Ecological District.

CR 29.5 The extent to which the activity may adversely affect a geothermal feature or riparian area including indigenous vegetation associated with a geothermal feature or riparian area.

CR 29.6 The extent to which the activity has the potential to adversely affect water quality and aquatic habitat in adjoining streams and lakes and the recreational values of the streams and lakes.

CR 29.7 The extent to which the disturbance of the indigenous vegetation will adversely affect the naturalness or natural character of the landscape.

CR 29.8 The extent to which the disturbance of indigenous vegetation will adversely affect any heritage feature including historic places, archaeological sites and waahi tapu, both recorded and unrecorded. Where any recorded site will be disturbed, and where there is potential to disturb any unrecorded site, an assessment shall be obtained from a suitably qualified person recognised by the Historic Places Trust.

CR 29.9 The extent to which the disturbance of vegetation would facilitate the permitted site coverage of building under Rule 17.0 on complying building platforms (Rule 6.0) and access to it.

CR 29.10 The extent to which earthworks would facilitate the permitted site coverage of buildings under Rule 17.0 on complying building platforms (Rule 6.0) and access to it.

CR 29.11 The extent to which the location of a building or buildings would detract from or promote natural character or be visually prominent.

CR 29.12 The extent to which the scale of a building or buildings would be compatible with the attributes of the landscape policy area within which it is situated.

CR 29.13 The extent to which a building or buildings would be visible against a skyline.

Providing outstanding ecological services to sustain and improve our environments

Call Free 0508 WILDNZ
Ph: +64 7 343 9017
Fax: +64 7 3439018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042,
New Zealand

Regional Offices located in
Auckland, Hamilton, Tauranga,
Whakatane, Wellington,
Christchurch and Dunedin

ECOLOGY RESTORATION BIODIVERSITY SUSTAINABILITY

www.wildlands.co.nz

Appendix D

Case Study - South Waikato Significant Natural Areas

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: SOUTH WAIKATO DISTRICT

providing outstanding ecological services to sustain and improve our environments

Wildlands

R4153c

DRAFT

BIODIVERSITY PLANNING AND MANAGEMENT RESEARCH CASE STUDY: SOUTH WAIKATO DISTRICT

Contract Report No. 4153c

December 2016

Project Team:

Fiona Wilcox - Report author
Astrid van Meeuwen-Dijkgraaf - Report review
William Shaw - Report author

Prepared for:

Ministry for the Environment
PO Box 10362
Wellington 6143
New Zealand

99 SALA STREET, WHAKAREWAREWA, 3010, P.O. BOX 7137, TE NGAE, ROTORUA 3042
Ph 07-343-9017; Fax 07-343-9018, email ecology@wildlands.co.nz, www.wildlands.co.nz

EXECUTIVE SUMMARY

This project considers how biodiversity policy was dealt with in a case study of the South Waikato District Plan and its relation to the Waikato RPS[1]. South Waikato District is an inland territorial district with relatively little indigenous habitat remaining (11%) and most of this is concentrated on the Mamaku Plateau in the northeastern corner of the District. Most of the District is taken up with farming or forestry, and rural subdivision and conversion to dairy farming are two key environmental pressures. Maintaining and improving water quality is a key concern. The project aimed to address a number of specific questions which are set out below.

To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

The District Plan is based on strong integration of traditional knowledge (matauranga Māori) and values, scientific knowledge, and the approach used to integrate the protection and enhancement of aquatic and terrestrial features and values, including protection and enhancement of the Waikato River and other waterways. As well as rules and incentives for landowners, a 'Local Biodiversity Strategy' is a key integrating component of the Plan. In combination, this is a novel approach which could be applied more widely to integration of cultural values, biodiversity protection, and sustainable land use, in urban, peri-urban, and rural environments across New Zealand.

Due to the highly modified character of much of the District, protection and enhancement of riparian margins and vegetation is a key element of biodiversity management. Riparian protection is an important requirement for subdivision, new farming, and all other land use consents, with a separate section devoted to riparian management. For all land use conversions of forestry to farming, riparian setback widths are prescribed for all streams in the District.

What approaches were considered but did not make the final cut? And why?

Four methods for managing significant natural areas (SNA) were considered. Two relied on SNAs being identified through the resource consent process (using RPS criteria), with evaluation work wholly or partially funded by the landowner or developer. Proposed rules were different for areas considered to be SNA and other areas, but because SNA were not delineated this approach was deemed to be confusing for landowners and council staff alike. The other two options relied on the identification of all SNA in a schedule of the District Plan with rules for vegetation clearance and land modification in SNA and non-SNA areas. The option with pragmatic vegetation clearance and land-management exclusions (e.g. for farming, forestry purposes) was selected to be included in the Operative District Plan (OPD), rather than the more restrictive option.

How have different rule settings affected biodiversity outcomes?

The inclusion of a Schedule of SNAs (lists sites, values and accompanied by maps) and stronger rules to protect SNA values recognises that land-use changes have increased

[1] Regional Policy Statement, hereafter referred to as WRC RPS.

pressures on unprotected areas of indigenous biodiversity. Thus the current ODP is much stronger in protecting those values than the previous ODP.

Are policies being implemented as intended? If not, why not?

The South Waikato District Plan became operative in 2015 and as yet there have not been any significant tests of policy implementation.

Is there variation in how districts apply regional policy?

The Waikato Region contains all or parts of eleven districts, all of which, except for the Thames-Coromandel and Hamilton Districts, have similar environmental pressures as the South Waikato District due to reliance on primary production. All District Plans give effect to the Policies in the RPS, but the policies, rules and incentives differ between Districts and reflect the amount of indigenous biodiversity remaining, and local public concern and opinion.

What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

As yet there have been no resource consent applications that could potentially have adverse effects on significant biodiversity values. This may be, in part, due to the collaborative identification and delineation of SNAs within the District.

What has been the community response to different approaches?

Due to the extensive pre-notification consultation undertaken through development of the District Plan, most issues associated with the identification, assessment, and protection of SNAs were addressed. A small number of submissions to the plan were made, which were mostly resolved through further consultation and additional site assessments. Several appeals with regards to SNAs were made to the Environment Court and all but one were settled between parties and one was settled through mediation. The schedule and rules to protect biodiversity in the South Waikato District appear to be generally well accepted. Input from stakeholders included consultation with the Waikato River Authority to ensure that their Vision and Strategy statement was given effect to.

CONTENTS

Reviewed and approved for release by:

_____

W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

1. INTRODUCTION

The Ministry for the Environment is collating information to support the development of National Policy Statement on Biodiversity. As part of this they wish to review how regional, unitary, and district councils are managing biodiversity through planning documents under the Resource Management Act 1991 (RMA) and, importantly, to what effect.

The project comprises two parts: one looking at how significant biodiversity is identified, protected, or otherwise managed in Regional and District Plan objectives, policies, and rules; the second part is to look in more detail at how these issues are dealt with in real terms in four case studies. Beca is reviewing the various plans and Wildland Consultants is undertaking the delivery of the four case studies. One of the case studies addresses the South Waikato District Plan, which is the subject of this report.

2. ENVIRONMENTAL CONTEXT

2.1 Ecological context

(From Wildland Consultants 2012)

South Waikato District is entirely inland and contains three bioclimatic zones: lowland, submontane, and montane. The lowland zone occurs generally in the central and western parts of the District. In 1840, the vegetation cover in South Waikato District was likely to have been 24.3% primary forest and 74.9% secondary forest and scrub, with less than 0.1% wetland (Leathwick *et al.* 1995). Since then the combined efforts of logging, land clearance, drainage, and fires have reduced total indigenous vegetation cover in the district to approximately 11.5%[1].

Most vegetation clearance has occurred in the lowland bioclimatic zone, where earlier pre-European fires and land clearance had given rise to secondary forest, and where land is generally better suited to agriculture. In general, there are higher ecological values in the eastern half of the District, whilst in the western half, intensive pastoral development and hydro-electric development of the Waikato River have substantially reduced ecological values and fragmented indigenous habitats.

Exotic conifer plantations comprise *c.*51% of land cover in South Waikato District, particularly in the eastern and southern parts of the District. The District is heavily reliant on primary production with dairy farming covering c.68, 091 ha (38%) of the District, dry stock farming covering 12, 678 ha (7%), lifestyle blocks covering 3, 000 ha (2%), and other productive land use covering 1,034 ha (0.6%).

[1] c.f. Leathwick *et al.* (1995) estimated 5.7% indigenous cover remaining, although that study had lower resolution of small sites.

2.2 Environmental pressures

A 2014 State of the Environment report compiled by the South Waikato District Council reports steady pressure for rural subdivision and intensification of land use, and little or no change in indigenous vegetation extent and bacterial water quality, and positive trends in stream water quality and riparian fencing since 2009.

Rural Subdivision

Demand for rural subdivision has increased to 75% of overall subdivisions from 70% in 2009. Land use change from forestry to dairy farming and the creation of lifestyle blocks have contributed to this trend.

Rural Land Use

Land categorised as dairy farmland has increased by 18% since 2009, from 57,944 ha to 68,091 ha, mostly as a result of conversions from exotic plantation forest. Forestry has decreased by 14% since 2009, from 106,944 ha to 91,835 ha. Dairy herd size has increased by 18% and the total number of dairy cows within the District has increased by 24% since 2009. Increased intensification of dairying has produced downstream environmental effects with increased levels of nutrients. Conversion of land has slowed with the change in water allocation limits in the Waikato catchment by the Waikato Regional Council. The introduction of a carbon tax also slowed the clearance of exotic forest, although the cost of carbon is subject to market forces.

Water Quality

Water is an important natural resource within the South Waikato District, not just for its use in primary production industries. The Blue Spring in the upper Waihou River is the source of 70% of New Zealand's bottled water, and is therefore an important economic resource for the District.

Water quality at monitoring sites in the District is generally of average to good quality, although streams in urban areas show consistently poor water quality. Recreational bathing water monitoring sites along the Waikato River show that water quality is consistently high but water quality in tributaries is variable.

There has been a significant push to encourage protection of stream margins through fencing and restoration planting. In 1997 the South Waikato District Council created the South Waikato Environmental Initiatives Fund. From 2006 to 2009, 13,030 metres of stream margin were fenced, with an additional 27,897 meters fenced since 2009. The fund has also contributed to 51,092 trees being planted along stream margins.

3. REGIONAL POLICY

The Waikato Regional Policy Statement (RPS) is a second generation RPS and became operative on 20 May 2016. Regionally significant issues include indigenous biodiversity decline and loss of outstanding natural landscapes and features, and the natural character of the coastal environment and wetlands, and lakes and rivers and their margins.

In terms of terrestrial ecosystems, the RPS contains objectives for the following:

- Resource use and development (Objective 3.2)
- Coastal environment (Objective 3.7)
- Ecosystem services (Objective 3.8)
- Sustainable and efficient use of resources (Objective 3.9)
- Riparian areas and wetlands (Objective 3.16)
- Geothermal (Objective 3.17)
- Ecological integrity and indigenous biodiversity (Objective 3.19)
- Natural character (Objective 3.22)

These objectives include:

- Integrated catchment management of freshwater bodies, including the identification, management, and protection of significant wetlands (Policy 8).
- Sustainable use of geothermal resources whilst avoiding adverse effects on significant geothermal systems (Policy 9.2),
- Maintaining or enhancement of indigenous biodiversity (Policy 11.1),
- Protection of significant indigenous vegetation and significant habitats of indigenous fauna (Policy 11.2), and
- Preservation of natural landscape character (Policy 12.2).

Policy 11 'Indigenous biodiversity' deals specifically with policies and methods for maintaining and/or enhancement of indigenous biodiversity and protection of identified areas of significant indigenous vegetation and significant habitats of indigenous fauna. This policy includes obligations for district councils to identify significant indigenous ecosystems and habitats and to then protect, enhance, and/or maintain these. The indigenous biodiversity policy contains 14 subsidiary policies that specifically relate to indigenous biodiversity policies within district and regional plans, as set out in Appendix 1 of this report.

4. PROJECT PROCESS

4.1 Ecological site assessments

The 1993 Proposed South Waikato District Plan contained a Heritage and Ecological inventory that was prepared by Forest and Bird and the Historic Places Trust. The inventory contained 213 Ecological Sites which included legally-protected (Department of Conservation and South Waikato District Council) and unprotected land. A range of habitat types were represented in these sites, including open water, wetland, forest, and scrub. The plan became operative in 1998.

In 2009, Waikato Regional Council (WRC) undertook a desktop study which identified, mapped, and described 446 potential natural areas covering *c.*23,105 ha within South Waikato District. These were assessed against the Waikato Regional Council significance criteria (Appendix 1), with the result that:

- 291 were identified as significant;
- 42 were identified as likely to be significant. Fifteen of these sites were visited and ten were evaluated as being ecologically significant;
- 81 were identified as having insufficient information to determine significance;
- 31 were identified as not significant (Wildland Consultants 2012).

The following information was collected for each site during surveys:

- Brief site description and main vegetation types.
- Vegetation types were mapped in the field using aerial photographs.
- Fauna (indigenous and exotic).
- Threats from invasive plants or fauna.
- Calls were played at wetlands to elicit responses from North Island fernbird and spotless crake.
- Human activities were asserted (positive/negative effects).
- Management requirements.

4.2 District Plan process

In 2009 a number of workshops were held with South Waikato District councillors, council staff, and with individual stakeholders to scope deficiencies with the Operative District Plan, and to provide direction for improvements during the plan review process. Five 'issues papers' were subsequently released for public comment and feedback on these from stakeholders and the community was used to prepare of the Draft District Plan (DDP). This was made available for informal stakeholder and public comment in June 2011.

Additional consultation was undertaken with various stakeholders with regards to management of SNAs and implementation of the Vision and Strategy for the Waikato River (Waikato River Authority 2011). Key feedback was received from the Royal Forest and Bird Society, Hancock Forest Management, Federated Farmers, Raukawa Charitable Trust, Waikato Biodiversity Forum, the Department of Conservation, and Waikato Regional Council. Whilst the feedback varied between stakeholders, it

generally indicated that the approach used in the Draft Plan was insufficient in relation to indigenous vegetation clearance and the management of SNAs, and it was considered insufficient to meet requirements under the RMA. Specific criticisms were:

- That determination of whether a site was an SNA was left to the landowner to arrange and fund.
- That there was a lack of clarity as to which rule applied to a particular site where it had not yet been determined whether a site was an SNA or not.
- That the vegetation clearance thresholds were considered to be too liberal, particularly for clearance within an SNA.
- That the rules would not achieve the objectives within Chapter 6 of the Draft Plan or adequately address RMA Section 6 matters.
- That the rules would not contribute to the health and wellbeing of the Waikato River.
- That indigenous vegetation clearance should be considered as an activity, rather than something to be managed by way of performance standards.

The Draft Plan relied on the criteria[1] within the Waikato RPS for the evaluation of potential SNAs. Rules in Chapter 14 of the Draft Plan were to control indigenous vegetation clearance and land disturbance within an SNA, and these rules were more restrictive than for areas that did not meet SNA significance criteria. Protection of biodiversity values in the District were also controlled by Rules 28.2.15 and 28.2.16 for the Rural Zone, and Rules 29.2.12 and 29.2.13 for the Rural Residential Zone, regardless of whether the site is an SNA or otherwise.

Wildland Consultants reviewed the feedback received, prepared a document that identified options to address the issues raised and were then commissioned to complete field assessments for the remaining sites that were classified in the WRC desktop study as being of 'likely' or 'not known' significance.

Landowners whose property contained part, or all, of a site identified as being of 'likely' or 'not known' significance (81 sites), or a site deemed as significant but requiring boundary and/or values checks (41 sites) were contacted by District Council planning staff by letter with subsequent contact to arrange permission to view the potential SNA. A Wildland Consultants ecologist surveyed all sites for which access was granted, accompanied by District Council planning staff. Site information was updated, and sites were assessed against the WRC criteria for significance. As a result of the field assessments, 39 sites were considered to meet the WRC criteria for significance, and 87 sites were found to not meet the WRC criteria.

Landowners of the 144 sites that were considered to be significant were sent letters, maps, and information sheets and they were asked to contact the District Council

[1] Waikato RPS criteria for determining whether a site was an SNA were set out in Appendix E of the Draft District Plan.

planning staff to arrange a field survey if they disputed the inclusion of part or all of the proposed SNA on their land. As a result of this methodology, the boundaries for 52 sites that had been determined as significant as a result of the desktop study were also amended based on field survey.

SWDC also undertook further significant landowner and stakeholder engagement including a stand at the Putaruru A&P Show in February 2012, a Federated Farmers-hosted discussion with members about SNAs and implications for land management, discussions on-site during 'ground-truthing' visits, follow-up discussions as requested by landowners, and a workshop with Council elected members and landowners to directly discuss concerns regarding the identification and protection of SNAs.

Once all sites surveys were complete, Wildland Consultants produced a report with revised maps of the SNAs, a list of sites considered, whether and why each site was considered to be ecologically significant, and a description of the methodology used. This information was summarised and included in the Proposed District Plan (PDP) as a schedule in Appendix E, including maps.

The PDP was notified on 7 November 2012. Seven submissions were received relating to 58 SNA sites and the policies and rules to be applied to the schedule of SNAs. Between July and September 2013 hearings were undertaken with councillors, council staff, and submitters, and the Hearings Panel released their decisions on 16 April 2014. After the hearings decisions, fourteen appeals were lodged with the Environment Court.

All appeals were then resolved by Council staff and an ecologist working through each individual ecological issue with each appellant. In some instances these involved site inspections with relevant parties. One appeal went to mediation with two separate mediation sessions before resolution to the satisfaction of all parties.

The South Waikato District Plan became operative on 1 July 2015. With respect to the SNAs identified as significant through the 2009 desktop study but for which no 'ground-truthing' was undertaken of values and boundaries, the following advisory note is provided as part of Appendix E:

> "In cases where SNAs have been mapped but not based on [recent] field survey and individual site assessment as part of the establishment of the inventory for Appendix E, the Council will consider funding to carry out an ecological survey at the time that resource consent is being applied for, prior to determining whether a resource consent is required for any proposed works affecting a SNA."

4.3 Summary

Previous assessments of ecological significance reflected best practice methodology at the time of survey. Slight changes in emphasis occurred as a result of changes to criteria for ecological evaluation, although core criteria have been retained throughout:

- Representativeness.
- Rarity of habitats, flora and fauna.

- Diversity and uniqueness of communities.
- Context and connectivity.

The process followed by South Waikato District Council illustrates best practice liaison with landowners and stakeholder to identify and resolve potential issues in relation to the protection of significant biodiversity values in the District.

The following steps summarise the approach applied:

- Desktop assessment of potential SNA (WRC).
- Workshops to identify deficiencies with the former District Plan.
- 'Issues papers' to garner further public comment and feedback.
- Preparation of the Draft District Plan, including a schedule of SNAs for informal stakeholder and public comment.
- Additional consultation with key stakeholders.
- Addressing issues with the Draft Plan raised by stakeholders and the public.
- Adoption of the SNA evaluation criteria from the Waikato RPS.
- Development of rules to protect biodiversity in general but also specific rules relating to SNA and ONL.
- Undertaking field assessment of sites where composition, values, significance, or boundaries were uncertain.
- Provision of information to all landowners with sites identified as SNAs, and who had requested feedback.
- Undertaking field assessments where the landowner queried the significance or boundaries of an SNA.
- Other landowner and stakeholder engagement, such as workshops and display stands at events.
- Working with landowners to resolve matters raised in submission to the PDP and the subsequent Environment Court appeals, including further site visits where required.
- Mediation process with one submitter.

Addressing all of the issues raised in submissions and appeals resulted in none of the SNAs being challenged at an Environment Court Hearing.

5. DISTRICT PLAN POLICIES, METHODS, AND RULES

The current South Waikato District Plan became operative on 1 July 2015 following a review process that spanned five years. Over-arching policies recognise the importance of traditional knowledge (matauranga Māori), values, and relationships; the management of land use change; protection and enhancement of waterways and terrestrial natural areas; and provide incentives for landowners who protect waterways and natural areas. Key policies and methods are set out below.

3.4.1 Recognise and provide in decision-making for the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu (sacred sites), and other taonga (treasures), including by improving public access to rivers and other waterways.

3.4.2 To achieve the objectives of the Waikato River Vision and Strategy within the catchment area identified on the planning maps by plan provisions relating to:
   a) building setbacks adjacent to waterways
   b) managing the effects of large scale land use change
   c) earthworks and silt control
   d) activities on the surface of water
   e) esplanade reserves/strips
   f) preservation of natural character
   g) bonus lot provisions for Significant Natural Areas and in some cases riparian areas.

3.4.3 Give effect to the Vision and Strategy for the Waikato River when considering resource consent applications and in reviewing, changing and administering the district plan.

Other methods are also to be applied, recognising the connections between cultural values and the protection of natural values:

5.4.2 Other Methods

- Memorandum of Understanding between South Waikato District Council and Raukawa Settlement Trust to ensure the cultural, traditional, economic, social, and spiritual significance of the rural land resource to tangata whenua is understood and safeguarded in Council's resource management decision making.
- Working with the Regional Council to improve the understanding of the characteristics and dynamics of the land and water resources of the catchments in the district for sustainable land uses.
- Standards under the Code of Subdivision and Development that promote low-impact environmental design solutions and consider climate change implications for stormwater networks.
- South Waikato Environmental Initiatives Fund to support landowners undertaking environmental initiatives.
- Support programmes to advance riparian planting in a prioritised manner in the district in conjunction with Tangata Whenua and Waikato Regional Council.
- Support workshops and education programmes with key stakeholder groups to progressively encourage land management and behavioural changes, to complement industry-led programmes and initiatives.
- Support research programmes aimed at understanding the most sensitive areas of the district susceptible to environmental degradation due to the change in and intensification of land use activities.
- Providing special heritage incentives in the form of financial assistance, advice, site identification and other appropriate means specified from time to time in the Council's Long-Term Plan.

- Liaising and co-operating with landowners of heritage sites, tangata whenua and other groups and organisations involved in the protection of features of heritage value.

The Operative District Plan also includes:

- Chapter 6: "Objectives and Policies for Managing the District's Landscapes and Indigenous Biodiversity" including those relating to the identification, maintenance, enhancement, and protection of Outstanding Natural Landscapes (ONLs), Significant Natural Areas (SNAs), the Waikato River, and the Waihou River.
- Chapter 14.4 contains rules and descriptions of permitted, controlled, restricted discretionary, and non-complying activities with regard to disturbance of SNAs.
- Appendix E contains a schedule of identified SNAs and corresponding maps of the extent and location of SNAs and the extent of individual SNAs on individual property parcels.
- Maps showing the locations of SNAs are available on the South Waikato District Council website.

Policies 6.3.7 and 6.3.8 provide a framework for development and works within an SNA or ONL:

6.3.7 Subdivision, use and development shall avoid the loss or degradation of areas of indigenous vegetation and habitats of indigenous fauna, whether these areas and habitats are significant or not, in preference to remedying or mitigating adverse effects on those areas or habitats.

6.3.8 Where it is not practicable or appropriate to avoid significant or more than minor adverse effects of activities on areas of Significant Natural Areas then adverse effects must be remedied or mitigated. Principal elements of this policy are:

a) replacing the indigenous biodiversity that has been lost or degraded;
b) replacing like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);
c) the legal and physical protection of existing habitat, or;
d) the creation of new habitat.

The Operative District Plan:

- Recognises the inherent values of natural areas and waterways;
- Aims to incentivise protection and enhancement of SNAs, esplanade strips, and vegetation along the Waikato and Waihou rivers;
- Provides for additional subdivision rights by use of protective covenants;
- Includes grants for habitat enhancement and/or restoration works.

The Operative District Plan also lists the following methods for the protection and/or enhancement of biodiversity:

- Consent notices will be imposed upon new land titles as a condition of subdivision consent, requiring protection of SNAs and/or appropriate riparian management.
- Esplanade strips and reserves will be created adjacent to lakes and rivers identified as being high priority areas for water quality, natural character, and ecological protection as a provision during the subdivision consent process.
- A District-wide "Local Biodiversity Strategy" will be developed in conjunction with the Waikato Regional Council, iwi, the Department of Conservation, landowners, and other interested parties (e.g. Federated Farmers and Forest and Bird) to maintain and enhance natural areas within the District.

Integration of cultural knowledge and values, protection and enhancement of the Waikato River and other waterways, and protection and enhancement of natural areas is a key theme running through the District Plan (e.g. see District Plan methods in Appendix 3 of this report).

Due to the highly modified character of much of the District, protection and enhancement of riparian margins and vegetation is a key element of biodiversity management. Riparian protection is an important requirement for subdivision, new farming, and all other land use consents, with a separate section (28.4.8) devoted to riparian management. For all land use conversions of forestry to farming, riparian setback widths are prescribed for all streams in the District. Similar provisions also apply to the Rural Residential Zone (Section 29).

Any works undertaken within an SNA require a resource consent which will include an assessment of environmental effects for the proposed works, except for a limited number of exemptions.

Permitted activities within SNAs that could result in biodiversity loss are generally those that are required as part of maintenance of the surrounding permitted land use[1] or will ultimately result in protection and/or enhancement of the SNA[2]. These rules apply irrespective of the District Plan zone.

[1] Examples include damage from adjacent plantation forestry harvesting, vegetation clearance required for fire risk management in a production forest, maintenance of existing roads, tracks, fences, or structures.

[2] Such as vegetation clearance/disturbance required for fence construction to exclude stock or pest animals, disturbance required for the removal or control of invasive weeds.

6. DOES POLICY ADDRESS BIODIVERSITY STATE AND PRESSURES?

This section addresses the following question:

a. To what extent does local biodiversity policy reflect the state, trends, pressures of the local environment?

The RPS and the District Plan both recognise that biodiversity has been reduced significantly. District Plan policies, methods, and rules pertaining to biodiversity place a heavy focus on biodiversity protection and enhancement while recognising the productive potential of land within the District and meeting the obligations to protect indigenous biodiversity under Section 6 of the RMA.

This District Plan is based on strong integration of traditional knowledge (matauranga Māori) and values, scientific knowledge, and the approach used to integrate the protection and enhancement of aquatic and terrestrial features and values. As well as land use rules and incentives for landowners, a 'Local Biodiversity Strategy' is a key integrating component of the Plan. In combination, this is a novel approach which could be applied more widely to integration of cultural values, biodiversity protection, and sustainable land use, in urban, peri-urban, and rural environments across New Zealand.

7. RULES AND BIODIVERSITY OUTCOMES

This section addresses the following question:

b. How have different rule settings affected biodiversity outcomes?

The inclusion of a schedule of significant natural areas and specific provisions for the protection, enhancement, and/or maintenance of indigenous biodiversity within the District Plan reflects, to some degree, provisions in the Waikato RPS. It also responds to pressures from tangata whenua and environmental groups such as Forest and Bird and the Waikato Biodiversity Forum. The Waikato Biodiversity Forum recognises that land use change within large areas of the District have occurred as a result of conversion of exotic plantation forest to land suitable for dairy farms and that subdivision has increased significantly, since the previous version of the District Plan (2009). These changes have placed further pressures on unprotected indigenous biodiversity and other natural values.

The 1998 District Plan contained 213 sites Ecological Sites which included indigenous vegetation and habitat for indigenous fauna within protected and unprotected sites on public and private land. The current plan contains 183 unprotected SNAs on private land. The scheduling of 183 sites on private land represents an increase in potential protection for indigenous biodiversity.

Because the District Plan was only declared operative in July 2015, insufficient time has elapsed to determine whether there have been significant effects on biodiversity

outcomes. It is clear, however, that the Plan has a strong focus on biodiversity protection, integrated with sustainable land use.

8. OTHER APPROACHES CONSIDERED

This section addresses the following question:

c. What approaches were considered but did not make the final cut? And why?

Four methods for managing significant natural areas were considered. Option 1 is the approach that was adopted within the initial 2011 Draft District Options 2-4 are variations developed in response to feedback received on the Draft District Plan from working party groups and council meetings.

8.1 Option 1 - Draft 2011 District Plan approach

This option relied on SNA sites being identified through other processes, such as resource consent applications. Sites would not be listed in a Schedule of the District Plan.

The data that were available at the time were not considered to be sufficiently rigourous to enable the RPS criteria to be applied and there were insufficient funds to survey all potential sites. These data were:

- Previous inventory work[1] that identified potential SNA by central grid-reference points rather than mapping the extent of the SNAs. Supporting data was also variable in quality.
- The WRC desktop identification of SNAs did include mapped extents but values and boundaries had not been confirmed by 'ground-truthing' field assessments.

It was proposed to hold the above data on file at SWDC and to assess resource consent applications on a case-by-case basis, require the landowner to fund the ecological assessment of any potential SNA, and rely on a set of rules in the District Plan to protect biodiversity values.

Rules 14.1.3 and 14.1.4 were proposed to be the primary provisions for managing activities within areas identified as SNAs, with Rules 28.2.15 and 29.2.12 being the cross-references to the Chapter 14 rules with the Rural Zone and Rural Residential Zones respectively. Rules 14.1.3 and 14.1.4 contained thresholds for general clearance of indigenous vegetation and land modification within any SNA. In summary, these were:

- For vegetation clearance of no more than three metres in height:
  - an area of no more than 1,000 m²

[1] Ecological Inventory that the District Council held outside the Operative 2009 District Plan as a GIS layer.

  - or 1% of the area
  - provided such clearance was at least 20 metres from waterways.

- Land disturbance rule thresholds were:
  - a one metre vertical cut or fill,
  - not exceeding 100m^2,
  - more than 20 metres from a waterway,
  - and not within a wetland.

These thresholds were considered too permissive for SNAs given their status as 'matters of national importance' within Section 6(c) of the RMA.

There were also subdivision provisions relevant to management and protection of SNAs:

- Rule 10.1.1(a)(v) provided the possibility of a bonus subdivision lot as a controlled activity where an SNA is covenanted.

- Rule 10.7.3 restricted the location of building platforms to outside of an SNA, and subdivision of land containing an SNA would be a restricted discretionary activity.

- Rule 10.9 required the creation of esplanade strips and/or esplanade reserves in several circumstances, including for conservation purposes with one of the criteria being where land is within SNA.

Vegetation clearance and land modification rules were considered to be relatively permissive, but potentially capable of preventing large-scale vegetation clearance and land modification within the District. However, the following issues were of concern:

- Lack of delineation would result in uncertainty about the location of potential SNA for both landowners and Council staff.

- The SNA inventory was incomplete.

- Front desk staff would be unable to point out the locations of potential SNAs to members of the public.

- Landowners would be unclear as to which set of rules should be applied (SNA rules or general rules), and may choose to not enquire too closely, potentially resulting on loss of significant biodiversity.

- Council officers would need to remember to check the data on file and then request that the landowner arrange for a suitably qualified ecological expert to undertake a site assessment.

- Such assessments would need to be funded by the landowner, and could prove to be prohibitively expensive.

- SNA and indigenous vegetation clearance rules were new to the District and so there was no history of how these might work in reality.

While Council had considered part-funding input from an ecologist and establishing a list of accredited and briefed ecologists able to be engaged by a landowner, and also having a Council ecologist available, most of the cost and the uncertainty associated with having to determine whether a site was an SNA or not, lay primarily with the landowner.

Option 1 was therefore considered to have low to moderate implementation efficiency and low to moderate effectiveness to protect biodiversity values relative to other options.

8.2 Option 2 - 'Enhanced Response'

The only difference between Option 1 and Option 2 was the replacement of Rules 14.1.3 and 14.1.4 with a new rule (14.2) which had more restrictive thresholds for works in an SNA. In this instance, vegetation clearance within an SNA would be a discretionary activity except where required for some specified activities, particularly related to plantation forestry, hydro-electricity generation, and use by tangata whenua, e.g. vegetation harvest for rongoa. In addition, Council would contribute 50% of the costs associated with engaging specialist ecological advice to determine whether a site is an SNA or not.

Replacement Rule 14.2 provided much stronger environmental regulation, but carried a risk that such a 'blanket' rule would have been difficult to enforce. Replacement Rule 14.2 also did not specifically include land disturbance. This was due to the assumption that clearance of indigenous vegetation would generally be due to land disturbance activity. In many instances this assumption will be correct, but the approach was reliant on the Waikato Regional Plan rules to manage wetland drainage and other similar works. Many of the SNAs are along waterways and most of those are tributaries to the Waikato River or are along the river itself.

Inadequate protection of riparian and wetland environments could impinge on the significant cultural values of the river as identified in the Waikato River Vision and Strategy document, affect eco-tourism opportunities such as the Waikato River Trail and potentially have other economic effects. Markets for dairy produce and forest products are beginning to demand measurable progress in environmental matters and environmental performance; it is much easier and less costly to maintain and enhance what already exists rather than recreate ecologically valuable areas.

Like Option 1, this option also required landowner support and education, and the onus would still be with the landowner or resource user to determine whether an area on their property meets criteria for being an SNA, with the resulting uncertainty. The subsequent costs could be greater given the more restrictive nature of Rule 14.2, and there would be an increased economic cost for Council with funding 50% of the cost of SNA identification.

There are some potential social costs where existing use activities, such as collection of firewood from felling of trees, works to improve farm drainage such as construction of culverts, and digging drains with 'wet areas', would not be permitted within SNAs in many cases, and instead would be a discretionary activity given the 'blanket' nature of the rule.

The other points outlined for Option 1 above also still hold, other than Council cost sharing. Option 2 was therefore considered to have low to moderate implementation efficiency and low to moderate effectiveness to protect biodiversity values relative to other options.

8.3 Option 3 - Scheduling and Enhanced Protection of Significant Natural Areas

This is the option that was chosen for inclusion in the 2015 District Plan and is based on, provision of a schedule of SNAs and associated maps showing the extent of each SNA in Appendix E of the District Plan. A key point is that values and site boundaries of most SNA were identified through 'ground-truthing' field work and landowner consultation. This approach avoids confusion and ambiguity about the location and values of each SNA and provides better protection of those biodiversity values. The schedule can also act as a permanent (but evolving) record of biodiversity within the district, can be used to prioritise funded projects, and for public education purposes.

Additionally, Rule 14.2 replaced 14.1.3 and 14.1.4 from Option 1. Rule 14.2 contains Permitted Activities (14.2.1)[1] and Discretionary Activities (14.2.2), and also positions 'clearance of indigenous vegetation, land disturbance and drainage' within an SNA as a separately identified activity, as compared with something managed by way of a performance standard associated with other activities[2].

Changes were also made to Rule 10.8.3 that 'no subdivision of land shall result in any new boundary within 10 metres of any area of indigenous vegetation, or within 10 metres of the edge of any wetland, unless that area is to be protected by a legal covenant or consent notice'. There is a related change to 10.3.1(d) Non-Complying Activities, to state clearly that failure to comply with 10.8.3 results in the subdivision application being a Non-Complying activity.

These changes increased the emphasis on biodiversity protection. The relevant permitted and discretionary activities are also mentioned within each zone chapter[3], again increasing the emphasis on biodiversity protection.

Robust identification of SNAs and a more restrictive rule approach to manage land use within SNAs will result in retention of existing natural values and enable enhancement to be undertaken. It will also be easier to share and communicate information about SNAs and this enables faster and better decision-making.

There were substantial costs to the District Council in preparing a schedule of SNAs as the schedule relied on extensive field work, collaboration with landowners, and detailed reporting. Removal of the general vegetation clearance and land modification thresholds means that it is more likely that resource consents are required for works within an SNA, potentially increasing costs to landowners and

---

1 Providing an increased level of certainty about what works are permitted without a resource consent.
2 Such as farming, forestry, or another listed activity within zone chapters.
3 With the exception of the three town centre zones and the Tokoroa Neighbourhood Retail Centre; but there are no SNAs within these locations.

developers. Existing use activities may be subject to additional social scrutiny where they occur in SNA, or may no longer be permitted in some instances.

Option 3 was considered a significant improvement in implementation efficiency and acceptable effectiveness to protect biodiversity values relative to other options.

8.4 Option 4 - Highly Regulated Regime for Biodiversity Protection

The key difference between Options 3 and 4 was the modification of Rule 14.2. It still includes the two tiers of regulation (14.2.1 Permitted Activities and 14.2.2 Discretionary Activities) but clause 14.2.1(c) is deleted. This clause enables sixteen types of existing use activities to undertake some indigenous vegetation clearance and land modification. As a consequence of this deletion a wider range of works within SNAs would require resource consent, and greater level of scrutiny would be applied to works in SNAs. This option was formulated in response to concerns that Option 3 was too permissive.

The presumption was that all activities in an SNA would adversely affect biodiversity values. However, this is mostly not the case, and landowner management and stewardship of SNAs is essential for good environmental outcomes. The costs and red-tape associated with an overly-restrictive regime, that does not have legitimacy with landowners and resource users, is likely to result in failing to achieve the level of support required for the option to be effective.

Thus, while the benefits of Option 4 may be potentially greater for biodiversity management and protection, landowner resentment and increased costs are significantly higher and would therefore result in a less efficient and effective method than Option 3.

8.5 Summary

Four methods were considered for addressing SNAs.

Option 1 was the approach used in the 2011 Draft District Plan. It was based on using incomplete and desktop biodiversity information for sites deemed potentially ecologically significant under the Waikato Regional Council RPS criteria. Sites would be assessed in more detail as applications for resource consent were submitted, with the cost of assessment to be borne by the landowner or developer. Associated rules were relatively permissive, and combined with the lack of mapped SNAs had the potential to fail to adequately protect significant biodiversity values. Additional issues were the uncertainty around yet-to-be confirmed ecological values, SNA site boundaries and locations, and how to relay pertinent information to landowners and Council staff.

Option 2 was similar to Option 1, but all vegetation clearance in an SNA was proposed to be a Discretionary Activity (more restrictive than Option 1), and the District Council proposed to fund part of the costs of ecological investigation.

These two options relied solely on the RPS criteria to identify and assess potential SNA but the approach was deemed insufficient to adequately identify and protect indigenous and significant biodiversity in the District.

Option 3 included a schedule of SNA and associated maps showing the extent of each SNA in Appendix E of the District Plan. These were identified and evaluated through 'ground-truthing' field assessment and landowner consultation. Rules specifically identify activities that are permitted within or adjacent to an SNA, with the remainder requiring resource consent. This approach avoids confusion and ambiguity about the location and values of each SNA, provides better protection of those biodiversity values, and has increased the emphasis on biodiversity protection. This is the option that was chosen for inclusion in the 2015 District Plan.

Option 4 was a variation of Option 3 that required nearly all existing use activities in an SNA to be evaluated for potential adverse effects through the resource consent process. The costs and red-tape of such an overly restrictive regime was anticipated to result in increased costs for landowners and increased resentment. Thus, although this option potentially had the greatest level of biodiversity protection, it was unlikely to achieve the level of support required to be effective.

9. IMPLEMENTATION OF POLICIES

This section addresses the following question:

d. Are policies being implemented as intended? If not, why not?

Because the District Plan only became operative in 2015 there have not been any significant tests of policy implementation. One application for resource consent has been lodged requiring a trigger of the indigenous vegetation policies within the Plan but, because it was a re-application for an existing consented land use, it is not possible to say whether the policy implementation is effective for biodiversity outcomes as yet.

10. VARIATION IN POLICY IMPLEMENTATION

This section addresses the following question:

e. Is there variation in how districts apply regional policy?

Waikato Region contains most or all of eight territorial districts: Thames-Coromandel, Waikato, Hamilton, Hauraki, Matamata-Piako, Waipa, Otorohanga, South Waikato), large parts of the Waitomo and Taupō districts, and a small part of the Rotorua District. Of the 11 districts within the Waikato Region, all except the Thames-Coromandel and Hamilton Districts have similar environmental pressures as the South Waikato District as a result of heavy reliance on primary production. A comparison of District Plan provisions for all districts against RPS biodiversity policies is provided in Appendix 5.

There is variability across District Plans within the Waikato Region with regards to the identification of SNAs. Some plans rely on identifying and assessing potentially significant areas through the resource management application process, whereas other Districts have identified, mapped and prepared schedules of SNAs and their values. Some districts have prepared schedules but these were not incorporated into the District Plan due to public opposition.

Where schedules of SNAs are missing, blanket rules may be in place to address disturbance and/or removal of indigenous vegetation. In some plans, vegetation clearance rules have different limits in different planning zones reflecting the amount and value of indigenous vegetation remaining in that zone. Some plans have different rules or limits (for clearance and modification) for areas of significant biodiversity compared to not-significant indigenous areas, and in some instances vegetation clearance of not-significant vegetation is a permitted activity.

Most plans provide clear information about which activities are permitted, discretionary, restricted discretionary, or non-complying in relation to vegetation clearance and land modification, and guidance about the factors that must be considered in AEEs for determining whether an area of vegetation could be cleared or not, and/or whether an area could be considered significant under the RPS biodiversity criteria. Two plans (Taupo and Rotorua) list specified vegetation types that may not be cleared. Several other plans include vegetation clearance buffers around waterways, wetlands and/or gully systems.

Priority locations for biodiversity restoration and enhancement are identified in some district plans (e.g. Thames-Coromandel, Waipa), and incentives for subdivision (conservation lots) are offered where a priority location is restored or enhanced and protected. Districts with little indigenous biodiversity have a greater focus on creation of ecological corridors, incentives for restoration of gullies and wetlands, and maintenance and/or enhancement of existing significant remnants, e.g. Hamilton.

Plans with a high level of regulation for areas of significant biodiversity often also have a range of non-regulatory mechanism and incentives to encourage the identification, protection and/or enhancement of biodiversity values. Where SNAs are mapped then the rules usually contain pragmatic permitted activities to enable the landowner to manage the land.

All district plans give effect to the Policies in the RPS, but the policies, rules and incentives differ between districts and reflect the amount of indigenous biodiversity remaining, and local public concern and opinion.

More a summary of each District is provided below.

10.1 Thames-Coromandel District

The operative 2010 plan for Thames-Coromandel District does not have a schedule of significant natural areas provided in the plan, and neither does the Proposed District Plan, which is currently under review. A schedule of proposed SNAs had been

published in the early stages of the District Plan review but was removed due to significant opposition from landowners.

The Proposed District Plan contains a biodiversity section (Section 29) which has legal effect from the time the proposed Plan was published (2010). Priority locations for biodiversity restoration and enhancement have been identified within the Rural Zone and are mapped in the subdivision section (Section 38). These priority locations are areas that were identified as significant using the RPS criteria in a desktop study and assessment of Threatened Land Environments. Incentives for subdivision (conservation lots) are offered where a priority location is restored or enhanced and protected. Subdivision incentives are also provided in the Rural Lifestyle Zone where biodiversity values are restored or enhanced.

Because a schedule of SNAs has not been included within the District Plan, the rules for works requiring disturbance and/or removal of indigenous vegetation and habitats of indigenous fauna are blanket rules pertaining to all indigenous vegetation. Section 29 gives clear information about which activities are permitted, discretionary, restricted discretionary, and non-complying, and also gives clear guidance about the factors that must be considered in AEEs for determining whether an area of vegetation should be cleared or not. These factors fit well with the RPS biodiversity policy, particularly Policy 11.1.2.

10.2 Waikato District

Indigenous vegetation clearance is a permitted activity within all planning zones of the Waikato District as long as the vegetation is not located within an area identified as "significant indigenous vegetation or significant habitat of indigenous fauna". Rules on the extent of 'non-significant' indigenous vegetation clearance are dependent on the planning zone within which the vegetation is located. Each zone sets out the maximum area of indigenous vegetation allowed to be cleared in a three year period. Permitted indigenous vegetation clearance relates clearance required for existing structures, maintenance of utilities and tracks, maintenance of productive land, ancillary damage during plantation harvest, removal of vegetation for safety purposes, clearance associated with conservation or biodiversity enhancement measures, and customary harvest rights.

Any other indigenous vegetation clearance is a restricted discretionary activity and must therefore be subject to the resource consent application process which includes an AEE undertaken by a suitably qualified ecologist. The rules also contain provisions within subdivision rules to ensure any area identified as significant is not fragmented through subdivision and housing allotment and includes provisions to protect certain areas of gully vegetation which are identified on planning maps.

10.3 Hamilton District

Hamilton District has a very small number of remnant natural areas within which the District's biodiversity is concentrated. Consequently provisions within the Hamilton District plan focus on creation of ecological corridors, incentives for restoration of gullies and wetlands, and maintenance and/or enhancement within existing significant remnants. The Plan acknowledges the important role of healthy waterways for

amenity values, the health of residents, wildlife, and the food chain and recognises the pressures urban development lends to biodiversity protection, historical loss, and potential for future modification.

Protection and enhancement of indigenous biodiversity and ecological processes will primarily be achieved through the Environmental Protection overlay which specifies permitted, restricted, restricted discretionary, and non-complying standards for specific areas (peat lakes and peat lake catchments, gullies, and significant remnant or regenerated indigenous vegetation) and outlines a number criteria that must be considered when determining resource consent compliance within each of the specific areas. The District Council will also use also district-wide plans and strategies, and plans and strategies for specific areas e.g. Rotokauri and Waiharakeke Natural Heritage Park to educate, promote, and enhance existing natural areas and prevent inappropriate development. The council also intends to create a database of important ecological sites.

10.4 Hauraki District

Indigenous biodiversity within Hauraki District is to be managed, protected, and enhanced through a combination of regulatory and non-regulatory methods. Development that may affect identified Significant Natural Areas (SNAs) will be managed through the resource consent process. Indigenous biodiversity not captured within SNAs is addressed through other methods in the District Plan, including the Coastal Zone, Karangahake Gorge Zone, and the Outstanding Natural Landscape Area and District Amenity Landscape Area. A schedule of SNAs is presented within the District plan and the location and extent of SNAs are identified on planning maps. Clearance of indigenous vegetation, the extraction or placement of fill, and the construction of buildings all require resource consent approval. Because this approach provides Council with a considerable measure of control over private property rights, the District Plan approach also needs to be supported by other methods at both district and regional level such as rates relief and grants for materials. In addition, incentives are provided through subdivision and development with accompanying covenanting or other protections.

10.5 Matamata-Piako District

Indigenous biodiversity within the Matamata-Piako District is to be managed, protected, and enhanced through a combination of regulatory and non-regulatory methods. Development and disturbance that may affect scheduled SNAs and unscheduled indigenous vegetation and habitats of indigenous fauna will be managed through the resource consent process. A schedule of SNAs is presented in the District Plan and the location and extent of SNAs are identified on the planning maps. Regulatory methods in the District Plan will be supported by non-regulatory methods such as rates relief, grants for fencing and planting, potential waiving of development levies in return for protection of indigenous biodiversity, landcare plans, and transferrable development rights. Esplanade strips and/or reserves will be taken during the development and subdivision process where required.

10.6 Waipa District

Indigenous biodiversity within the Waipa District is to be managed, protected, and enhanced through a combination of regulatory and non-regulatory methods. Development and disturbance that may affect scheduled SNAs, scheduled 'bush lots', and indigenous biodiversity within identified ecological corridors will be managed through the resource consent process. Determination of activity level (permitted, restricted, restricted discretionary, controlled, and non-compliant) within the resource consent process for these areas is dependent on the priority level of the relative areas for protection and enhancement. Development and disturbance affecting indigenous biodiversity that falls outside the areas mentioned above is a permitted activity.

A schedule of SNAs and significant 'bush lots' is presented within the District Plan and the location and extent of SNAs are identified on the planning maps. Key ecological corridors are also identified on planning maps. Regulatory methods in the District Plan will be supported by non-regulatory methods including 'Environmental benefit lots'. Non-regulatory methods are still in development and are therefore not addressed in detail in the District Plan. Esplanade strips and/or reserves will be taken during the development and subdivision process where required.

10.7 Otorohanga District

The operative 2014 Otorohanga District Plan does not have a schedule of SNAs. Indigenous biodiversity within Otorohanga District is to be managed, protected, and enhanced through a combination of regulatory and non-regulatory methods. Regulatory methods include managing disturbance and development within or adjacent to indigenous biodiversity through the resource consent process and incentivising protection and enhancement of significant habitats of indigenous fauna and areas of indigenous vegetation through awarding of additional subdivision rights ('environmental lots') if the area in question meets certain criteria.

Because the Plan does not provide a schedule of SNAs, an assessment of environmental effects that accompanies a resource consent application must contain an assessment of whether the vegetation in question is significant under the Waikato Regional Plan criteria. If the vegetation is determined to be significant then any activities not listed as permitted in the plan are restricted discretionary activities. Clearance of vegetation that is determined to not be significant is a permitted activity to certain area limits within a 12 month period depending on which zone within the District the vegetation in question is located. Clearance outside of the size parameters is a restricted discretionary activity. Non-regulatory methods are mentioned but are not addressed in detail in the Plan. Esplanade strips and/or reserves will be established during the land development and subdivision process where required on identified priority rivers, streams, and lakes.

10.8 Waitomo District

The 2009 Waitomo District Plan does not have a schedule of SNAs. Indigenous biodiversity within Waitomo District is to be managed and protected through a combination of regulatory and non-regulatory methods. Indigenous vegetation clearance within the District is considered to be a discretionary activity and thereby

triggers the consent process whereby criteria within the plan are used to determine significance on a case by case basis. Appropriate protection measures will then be developed where significant indigenous vegetation is identified. Policies and objectives in the plan seem to centre around the value of indigenous biodiversity for water quality, erosion protection, and amenity although their intrinsic value as habitat for indigenous plants and fauna are noted.

10.9 Taupō District

As with the South Waikato District, a schedule of SNAs has been published as an Appendix to the District plan. Taupō District Plan does not seek to prohibit appropriate use of, and development within SNAs, rather it aims to manage proposed development and activities within SNAs by use of the resource consent process in order to assess potential effects on a case-by-case basis. Taupō District Plan aims to use a range of regulatory and non-regulatory methods to meet the objectives of the District Plan and to meet requirements of the RMA and the Waikato Regional Plan.

Incentives for the protection and enhancement of SNAs within the District include awarding of limited 'bonus lots' during subdivision where all or part of a nominated SNA (being not less than 10 ha per Bonus Lot created) is protected in perpetuity.

As for the South Waikato District Plan, vegetation clearance within an SNA is permitted where it is associated with the maintenance of existing structures and/or facilities or is required for the protection and/or enhancement of the SNA, e.g. fencing, weed control, pest animal control). However, in contrast to the South Waikato Plan, the Taupō District Plan restricts such permitted clearance to no more than three metres in height and no more than 700 m^2 in area per allotment, or 1% of the total area of the identified SNA on that allotment, whichever is the lesser. The Taupō District plan also specifies that monoao or frost flat vegetation is to be excluded from such permission for clearance.

10.10 Rotorua District

As with the South Waikato District, a schedule of Significant Natural Areas has been published as an appendix to the District plan. The Rotorua District Plan discourages disturbance of and development within SNAs. Where disturbance of vegetation within an SNA is unavoidable, due to existing land use rights, the Plan aims to manage proposed development and activities by use of the resource consent process in order to assess potential effects on a case-by-case basis. The Rotorua District Plan aims to use a range of regulatory and non-regulatory methods to meet Plan objectives and to meet requirements of the RMA and the Waikato Regional Plan.

Incentives for the protection and enhancement of SNAs within the District include granting of limited 'bonus lots' during subdivision where all or part of a nominated Significant Natural Area is protected in perpetuity. As with the South Waikato District Plan, vegetation clearance within an SNA is permitted where it is associated with maintenance of existing structures and/or facilities or is required for the protection and/or enhancement of the SNA, e.g. fencing, weed control, pest animal control. No policies or rules are provided for clearance of indigenous vegetation that has not been identified as an SNA unless it is geothermal vegetation, vegetation

located within 20 m of a water body, or vegetation located within a gully system; clearance and/or disturbance of vegetation in all of the locations mentioned will be subject to an assessment of environmental effects through the resource consent process.

11. CONSENTS WITH POTENTIAL BIODIVERSITY EFFECTS

This section addresses the following question:

f. What is the demand for consents that impact on biodiversity and how is the consenting process functioning in practice?

To date there have not been any resource consent applications lodged under the operative 2015 South Waikato District Plan that have been determined as having a more than minor adverse effect on indigenous biodiversity. The one resource consent application that has been processed went through the consent process without a hitch (Patrick McHardy, South Waikato District Council, pers. comm.).

12. COMMUNITY RESPONSE

The wider South Waikato community, outside of landowners potentially directly affected by the changes to indigenous biodiversity policy, has been muted to non-existent. No submissions were made by the general public to the district plan process or the rules contained in the plan. The Council ensured that the rules were sensible and pragmatic and reassured landowners about existing use rights, including stock grazing.

Landowner response was highly variable but generally accepting of the need for tighter rules surrounding indigenous biodiversity protection as long as existing use rights were not impinged and proposed rules did not make every day legitimate land use impossible without significant 'red tape'.

South Waikato District Council feels that the community engagement process went well because they were open with all landowners. Landowners were provided with information from the desktop study undertaken by the Regional Council about potential significant sites. South Waikato Council then requested permission to access sites in order to rule any sites that were not of sufficient value. This process resulted in two-thirds of the desktop sites being eliminated. South Waikato District Council also agreed to set aside funds to engage an ecologist for those instances where further on-site assessment of values was required in the future.

<u>Waikato River Vision and Strategy</u>

The Waikato River Authority has given it an important role as the custodian of the Waikato River. It has produced a Vision and Strategy statement that includes enabling legislation. The Authority has two main aspects to its work:

- It is the sole trustee of the Waikato River Clean-up Trust which funds projects that contribute to the health and wellbeing of the river.
- It also advocates for policy to safeguard the Vision and Strategy (Waikato River Authority 2011) where it relates to the health of the rivers (Waikato and Waipa Rivers).

The Waikato River Authority has been one of the key stakeholders consulted throughout the preparation of the District Plan. Many of the SNA are along the Waikato River corridor, and the identification, assessment and inclusion of rules to protect these sites has gone a long way towards meeting the Vision and Strategy.

13. KEY FINDINGS

South Waikato District is an inland district with relatively little indigenous habitat remaining (11%) and much of this is concentrated on the Mamaku Plateau in the northeastern corner of the District and along the main stem or tributaries of the Waikato River. Most of the District is taken up with farming or forestry, and rural subdivision and conversion of exotic plantation forest to dairy farming are two key environmental pressures. Maintaining and improving water quality is a key concern.

The District Plan underwent significant consultation with stakeholders and ratepayers, which resulted in significant revisions of the Draft District Plan including a schedule of SNAs and rules that seek to protect biodiversity values but do specify a limited range of permitted activities to enable sustainable land management. The process followed by South Waikato District Council illustrates best practice liaison with landowners and stakeholder to identify and resolve potential issues with regards to protecting significant biodiversity values in South Waikato District. The South Waikato Operative District Plan:

- Recognises the inherent values of natural areas and waterways.
- Aims to incentivise protection and enhancement of SNAs, esplanade strips, and vegetation along the Waikato and Waihou rivers.
- Provides for additional subdivision rights by use of protective covenants.
- Includes grants for habitat enhancement and/or restoration works.

The District Plan is aligned with the Waikato RPS in that it uses the significance criteria in the RPS to identify and evaluate potential SNAs and seeks to protect and enhance those values, including riparian areas along rivers.

The inclusion of a schedule of SNAs (with values and accompanied by maps) and stronger rules to protect biodiversity values recognises that land-use changes have increased pressures on unprotected areas of indigenous biodiversity. The current District Plan is therefore much stronger in protecting those values than the previous version.

Four methods for managing significant natural areas were considered. Two relied on SNAs being identified through the resource consent process (using RPS criteria), with

evaluation work wholly or partially funded by the landowner or developer. Rules were different for areas considered to be SNAs and other areas, but because SNAs were not delineated this approach was deemed to be confusing for landowners and Council staff alike. The other two options relied on identifying all SNAs in a schedule of the District Plan with rules for vegetation clearance and land modification in SNAs and non-SNA areas. The option with pragmatic vegetation clearance and land-management exclusions (e.g. for farming, forestry purposes) was selected to be included in the ODP rather than the more restrictive option.

This Plan is based on strong integration of traditional knowledge (matauranga Māori) and values, scientific knowledge, and the approach used to integrate the protection and enhancement of aquatic and terrestrial features and values, including protection and enhancement of the Waikato River and other waterways. As well as rules and incentives for landowners, a 'Local Biodiversity Strategy' is a key integrating component of the Plan. In combination, this is a novel approach which could be applied more widely to integration of cultural values, biodiversity protection, and sustainable land use, in urban, peri-urban, and rural environments across New Zealand.

Due to the highly modified character of much of the District, protection and enhancement of riparian margins and vegetation is a key element of biodiversity management. Riparian protection is an important requirement for subdivision, new farming, and all other land use consents, with a separate section devoted to riparian management. For all land use conversions of forestry to farming, riparian setback widths are prescribed for all streams in the District.

The District Plan became operative in 2015 and as yet there have not been any significant tests of policy implementation or rules.

The Waikato Region contains all or parts of eleven districts, all of which, except for the Thames-Coromandel and Hamilton Districts, have similar environmental pressures as the South Waikato District due to reliance on primary production. All district plans give effect to the policies in the RPS, but the policies, rules and incentives differ between districts and reflect the amount of indigenous biodiversity remaining, and local public concern and opinion. There is variability in relation to:

- Identification of SNAs. Some plans rely on the resource management application process, others include schedules of SNA.
- Where schedules of SNAs are missing, blanket rules may be in place for disturbance and/or removal of indigenous vegetation.
- Vegetation clearance rules may have different limits in different planning zones and SNA or not-SNA sites reflecting the amount and value of indigenous vegetation remaining.
- Two plans (Taupo and Rotorua) specify vegetation types that may not be cleared.
- Several plans include vegetation clearance buffers around waterways, wetlands and/or gully systems.

- Priority locations for biodiversity restoration and enhancement are identified in some District Plans, e.g. Thames-Coromandel, Waipa.
- Incentives for subdivision (conservation lots) are offered in some districts.
- Districts with little indigenous biodiversity have a greater focus on creation of ecological corridors, incentives for restoration of gullies and wetlands, and maintenance and/or enhancement of existing significant remnants.
- The range of non-regulatory mechanism and incentives to encourage the identification, protection and/or enhancement of biodiversity values was generally greater in Districts with a more regulated approach.

Due to the extensive pre-notification consultation most issues were addressed in relation to the identification, assessment, and protection of SNAs. A small number of submissions were made on the Proposed Plan, which were mostly resolved through further consultation and additional site assessments. Several appeals with regards to SNAs were made to the Environment Court. All but one were resolved between the parties. One appeal was settled through mediation. Schedules and rules to protect biodiversity in the South Waikato District appear to be generally well accepted. Input from stakeholders included consultation with the Waikato River Authority to ensure that their Vision and Strategy statement was given effect to.

ACKNOWLEDGMENTS

Nathan Baker (Beca) invited Wildlands to collaborate on this project, and we would like to thank Patrick McHardy (Senior Planner) and Andrew Thomas (Biodiversity Officer) from South Waikato District Council for discussion about how well the consenting process is working in the District.

REFERENCES

Hamilton City Council 2016: Hamilton City Proposed District Plan. Accessed on 18 November 2016 from http://www.hamilton.govt.nz/our-council/council-publications/districtplans/PODP/Pages/default.aspx.

Hauraki District Council 2014. Hauraki District Plan. Accessed on 18 November 2016 from http://www.hauraki-dc.govt.nz/our-council/district-plan/dp-text#text.

Matamata-Piako District Council 2016: Matamata-Piako Operative District Plan. Accessed 17 November 2016 from http://www.hauraki-dc.govt.nz/our-council/district-plan/dp-text#text.

Otorohanga District Council 2014: Otorohanga Operative District Plan. Accessed 17 November 2016 from http://www.otodc.govt.nz/assets/Uploads/PDFDocuments/Plans/ODC-Operative-District-Plan-On-Line-Version.pdf.

Rotorua District Council 2016: Rotorua District Operative District Plan. Accessed 23 November 2016 from http://www.rotorualakescouncil.nz/our-services/planningservices/districtplan/Pages/default.aspx.

South Waikato District Council 2012: *Shaping South Waikato: District Plan review Section 32 report to accompany the proposed South Waikato District Plan*. South Waikato District Council, Tokoroa. 402 pp.

South Waikato District Council 2014: *Draft State of the Environment Report 2014*. South Waikato District Council, Tokoroa. 51 pp.

Taupo District Council 2007: Taupo District Plan. Accessed 17 November 2016 from http://www.taupodc.govt.nz/our-council/policies-plans-and-bylaws/district-plans/current-version/Pages/current-version.aspx.

Thames-Coromandel District Council 2016: Thames-Coromandel Proposed District Plan. Accessed 16 November 2016 from http://www.tcdc.govt.nz/Your-Council/Documents-incl-Bylaws-Policies-and-Strategies/District-Plan/District-Plan-Proposed/.

Waikato District Council 2016: Waikato District Proposed District Plan. Accessed 16 November from http://districtplan.waidc.govt.nz/pages/plan/book.aspx?exhibit=WS.

Waikato Regional Council 2016: Waikato Regional Policy Statement. *Document# 3647993 Policy Series 2016/01*. Waikato Regional Council. 305 pp.

Waikato River Authority 2011: Restoring and protecting the health and wellbeing of the Waikato River. Vision and Strategy for the Waikato River.

Waipa District Council 2016: Waipa Part Operative District Plan. Accessed 17 November 2016 from http://www.waipadc.govt.nz/our-council/Waipa2050/wdc-part-operative/Pages/Waipa%20District%20Plan%20(part%20Operative).aspx.

Waitomo District Council 2009: Waitomo District Plan. Accessed 18 November 2016 from http://www.waitomo.govt.nz/publications/district-plan/.

Wildland Consultants Ltd 2002: A survey of natural areas in selected parts of Kinleith Forest - progress to March 2002. *Wildland Consultants Ltd Contract Report No. 478.* Prepared for Carter Holt Harvey Forests. 54 pp.

Wildland Consultants 2004: A survey of natural areas in Kinleith Forest. *Wildland Consultants Ltd Contract Report No. 607.* Prepared for Carter Holt Harvey Forests. 206 pp.

Wildland Consultants 2006: Project Orca: Indigenous vegetation and fauna, and habitats of trout, salmon, and game birds in Carter Holt Harvey Forests, Northland, Central North Island, and Nelson. *Wildland Consultants Ltd Contract Report No. 1379.* Prepared for Carter Holt Harvey Forests. 324 pp.

Wildlands Consultants 2012: Significant Natural Heritage of the South Waikato District - Volume 1. *Wildland Consultants Contract Report No. 2109a*. Prepared for Environment Waikato. 67 pp.

WAIKATO RPS BIODIVERSITY POLICIES AND SIGNIFICANCE CRITERIA

Policy 11.1 Maintain or enhance indigenous biodiversity

Regional and district plans must 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, with a particular focus on:

a) working towards achieving no net loss of indigenous biodiversity at a regional scale;
b) the continued functioning of ecological processes;
c) the re-creation and restoration of habitats and connectivity between habitats;
d) supporting (buffering and/or linking) ecosystems, habitats and areas identified as significant indigenous vegetation and significant habitats of indigenous fauna
e) providing ecosystem services;
f) the health and wellbeing of the Waikato River and its catchment;
g) contribution to natural character and amenity values;
h) tāngata whenua relationships with indigenous biodiversity including their holistic view of ecosystems and the environment;
i) managing the density, range and viability of indigenous flora and fauna, and;
j) the consideration and application of biodiversity offsets.

Policy 11.1.1 Maintain or enhance indigenous biodiversity

Regional and district plans shall maintain or enhance indigenous biodiversity, including by:

a) providing for positive indigenous biodiversity outcomes when managing activities including subdivision and land use change;
b) having regard to any local indigenous biodiversity strategies developed under Method 11.1.11, and;
c) creating buffers, linkages and corridors to protect and support indigenous biodiversity values, including esplanade reserves and esplanade strips to maintain and enhance indigenous biodiversity values.

11.1.2 Adverse effects on indigenous biodiversity

Regional and district plans shall recognise that adverse effects on indigenous biodiversity within terrestrial, freshwater, and coastal environments are cumulative and may include:

a) fragmentation and isolation of indigenous ecosystems and habitats;
b) reduction in the extent and quality of indigenous ecosystems and habitats;

c) loss of corridors or connections linking indigenous ecosystems and habitat fragments or between ecosystems and habitats;
d) the loss of ecological sequences;
e) loss or disruption to migratory pathways in water, land, or air;
f) effects of changes to hydrological flows, water levels, and water quality on ecosystems;
g) loss of buffering of indigenous ecosystems;
h) loss of ecosystem services;
i) loss, damage or disruption to ecological processes, functions, and ecological integrity;
j) changes resulting in an increased threat from animal and plant pests;
k) effects which contribute to a cumulative loss or degradation of indigenous habitats and ecosystems;
l) noise, visual, and physical disturbance on indigenous species, particularly within the coastal environment, and;
m) loss of habitat that supports or provides a key life-cycle function for indigenous species listed as 'Threatened' or 'At Risk' in the New Zealand Threat Classification System lists.

11.1.3 Avoidance, remediation, mitigation, and offsetting for indigenous biodiversity that is not significant

Regional and district plans:

a. for non-significant indigenous vegetation and non-significant habitats of indigenous fauna (excluding activities pursuant to 11.1.4):
    i. shall require that where loss or degradation of indigenous biodiversity is authorised adverse effects are avoided, remedied, or mitigated (whether by onsite or offsite methods).
    ii. should promote biodiversity offsets as a means to achieve no net loss of indigenous biodiversity where significant residual adverse effects are unable to be avoided, remedied, or mitigated.
    iii. when considering remediation, mitigation, or offsetting, methods may include the following:
        i. replacing the indigenous biodiversity that has been lost or degraded;
        ii. replacing like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);
        iii. the legal and physical protection of existing habitat;
        iv. the re-creation of habitat, or;
        v. replacing habitats or ecosystems with indigenous biodiversity of greater ecological value.
b. for significant indigenous vegetation and significant habitats of indigenous fauna Method 11.2.2 applies

11.1.4 Recognition of activities having minor adverse effects on indigenous biodiversity

Regional and district plans should include permitted activities where they will have minor adverse effects in relation to the maintenance or protection of indigenous biodiversity. They may include:

a. the maintenance, operation, and upgrading of lawfully established infrastructure, regionally significant infrastructure, and lawfully established activities using natural and physical resources of regional or national importance;
b. existing lawfully established uses of land where the effects of such land use remain the same or similar in character, intensity, and scale;
c. activities undertaken for the purpose of maintenance or enhancement of indigenous biodiversity;
d. the collection of material for maintaining traditional Māori cultural practices, and;
e. actions necessary to avoid loss of life, injury, or serious damage to property.

11.1.8 Plan development

Local authorities should consider (including when developing regional and district plans):

a. offering incentives for indigenous biodiversity enhancements or protection, and;
b. using financial contributions and other economic instruments to maintain or enhance indigenous biodiversity.

11.1.10 Funding and assistance

When preparing long-term plans and annual plans, local authorities should ensure that appropriate funding is provided for the protection and enhancement of indigenous biodiversity. This could include provision for:

a. developing and implementing complementary biodiversity advocacy and protection programmes (including the development of on-site biodiversity plans) focused on landowner liaison and community partnership;
b. the promotion of voluntary legal protection, restoration, or enhancement of indigenous biodiversity, including through the operation of contestable funds, incentives, rates relief, and grants;
c. land acquisition, and;
d. biodiversity restoration and enhancement on public land such as local purpose reserves.

Policy 11.2 Protect significant indigenous vegetation and significant habitats of indigenous fauna

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.

11.2.2 Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna

Regional and district plans shall (excluding activities pursuant to 11.1.4):

a. protect areas of significant indigenous vegetation and significant habitats of indigenous fauna;
b. require that activities avoid the loss or degradation of areas of significant indigenous vegetation and significant habitats of indigenous fauna in preference to remediation or mitigation;
c. require that any unavoidable adverse effects on areas of significant indigenous vegetation and significant habitats of indigenous fauna are remedied or mitigated;
d. where any adverse effects are unable to be avoided, remedied, or mitigated in accordance with (b) and (c), more than minor residual adverse effects shall be offset to achieve no net loss;
e. ensure that remediation, mitigation, or offsetting as a first priority relates to the indigenous biodiversity that has been lost or degraded (whether by on-site or off-site methods). Methods may include the following:
    i. replace like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value);
    ii. involve the re-creation of habitat;
    iii. develop or enhance areas of alternative habitat supporting similar ecology/significance, or;
    iv. involve the legal and physical protection of existing habitat.
f. recognise that remediation, mitigation and offsetting may not be appropriate where the indigenous biodiversity is rare, at risk, threatened, or irreplaceable, and;
g. have regard to the functional necessity of activities being located in or near areas of significant indigenous vegetation and significant habitats of indigenous fauna where no reasonably practicable alternative location exists.

11.2.3 Assess significance

Where regional and district plans require an assessment of significant indigenous vegetation and the significant habitats of indigenous fauna that have not been identified by Waikato Regional Council as part of Method 11.2.1, the criteria in section 11A shall be used. The identification of the characteristics of any area will be undertaken prior to any modification of the area or site and will inform the decision-making process as to whether the proposed activity or modification is appropriate. The characteristics that have contributed to an area being significant should also be communicated to the relevant landowners and kept on record by the local authority.

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.

11.3.1 Working with tāngata whenua

Local authorities should recognise tāngata whenua relationships with indigenous biodiversity. This could include involving tāngata whenua when identifying opportunities for re-creating habitat and providing opportunities for tāngata whenua involvement in implementing local indigenous biodiversity strategies.

Policy 11.4 Safeguard coastal/marine ecosystems

Protect indigenous biodiversity in the coastal environment by:

a. avoiding adverse effects on:
    i. indigenous taxa listed as 'Threatened' or 'At Risk' in the New Zealand Threat Classification System lists or taxa listed as threatened by the International Union of Nature and Natural Resources;
    ii. habitats of indigenous species where the species are listed as Threatened or At Risk, are at the limit of their natural range, or are naturally rare;
    iii. areas containing nationally significant examples of indigenous community types;
    iv. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare, and;
    v. areas set aside for full or partial protection of indigenous biological diversity under legislation.

b. maintaining or enhancing:
    i. areas used by marine mammals and wading/coastal birds including breeding, feeding, roosting, and haul-out sites (areas where marine mammals come ashore);
    ii. whitebait spawning areas and shellfish beds;
    iii. habitats, corridors, and routes important for preserving the abundance and diversity of indigenous and migratory species;
    iv. indigenous habitats and ecosystems that are unique to the coastal environment and vulnerable to modification and the impacts of climate change, including estuaries, lagoons, coastal wetlands, dunelands, rocky reef systems, seagrass, and saltmarsh;
    v. habitats of indigenous species that are important for recreational, commercial, traditional, or cultural purposes; and
    vi. areas of predominately indigenous vegetation in the coastal environment.

11.4.1 Regional and district plans

Regional and district plans shall:

a. protect marine habitat in the coastal marine area that has been identified as an area of significant indigenous biodiversity in Method 11.2.1, and;
b. control the adverse effects, including cumulative effects, of activities within the coastal environment to protect and enhance indigenous biodiversity so as to give effect to Policy 11.4.

11 INDIGENOUS BIODIVERSITY

11.1 Criteria for determining significance of indigenous biodiversity 11A

The following criteria are to be used to identify areas of significant indigenous vegetation and significant habitats of indigenous fauna as they exist at the time the criteria are being applied.

Table 111: Criteria for determining significance of indigenous biodiversity

Previously assessed site	
1	It is indigenous vegetation or habitat for indigenous fauna that has been specially set aside by statute or covenant for protection and preservation unless the site can be shown to meet none of criteria 3-11.
2	It is indigenous vegetation or habitat recommended for protection by the Nature Heritage Fund, or Nga Whenua Rahui committees, or the Queen Elizabeth the Second National Trust Board of Directors, unless the site can be shown to meet none of criteria 3-11.
Ecological values	
3	It is vegetation or habitat that is currently habitat for indigenous species or associations of indigenous species that are: o classed as threatened, at risk, or data deficient; or o endemic to the Waikato region.
4	It is indigenous vegetation or habitat type that is under-represented (20% or less of its known or likely original extent remaining) in an Ecological District, or Ecological Region, or nationally.
5	It is indigenous vegetation or habitat that is, and prior to human settlement was, nationally uncommon such as geothermal, chenier plain, or karst ecosystems.
6	It is wetland habitat for indigenous plant communities and/or indigenous fauna communities (excluding exotic rush/pasture communities) that has not been created and subsequently maintained for or in connection with: • waste treatment; • wastewater renovation; • hydro electric power lakes (excluding Lake Taupo); • water storage for irrigation; or • water supply storage; unless in those instances they meet the criteria in Whaley et al. (1995).
7	It is an area of indigenous vegetation or naturally occurring habitat that is large relative to other examples in the Waikato region of similar habitat types, and which contains all or almost all indigenous species typical of that habitat type. Note this criterion is not intended to select the largest example only in the Waikato region of any habitat type.
8	It is aquatic habitat (excluding artificial water bodies, except for those created for the maintenance and enhancement of biodiversity or as mitigation as part a consented activity) that is a portion of a stream, river, lake, wetland, intertidal mudflat or estuary, and their margins, that is critical to the self sustainability of an indigenous species within a catchment of the Waikato region and which contains healthy, representative populations of that species. In this context “critical” means essential for a specific component of the life cycle and includes breeding and spawning grounds, juvenile nursery areas, important feeding areas and migratory pathways.
9	It is an area of indigenous vegetation or habitat that is a healthy and representative example of its type because: • its structure, composition, and ecological processes are largely intact; and • if protected from the adverse effects of plant and animal pests and of adjacent land use (e.g. stock, discharges, erosion), can maintain its ecological sustainability over time
10	It is an area of indigenous vegetation or habitat that forms part of an ecological sequence, that is either not common in the Waikato region or an ecological district, or is an exceptional, representative example of its type.

Role in protecting ecologically significant area	
11	It is an area of indigenous vegetation or habitat for indigenous species (which habitat is either naturally occurring or has been established as a mitigation measure) that forms, either on its own or in combination with other similar areas, an ecological buffer, linkage or corridor and which is necessary to protect any site identified as significant under criteria 1-10 from external adverse effects.

http://www.waikatoregion.govt.nz/Council/Policy-and-plans/Regional-Policy-Statement/Regional-Policy-Statement-Review/Section32/11Indigenousbiodiversity/11ACriteria-for-determining-significance-of-indigenous-biodiversity-/

DISTRICT PLAN POLICY FRAMEWORK

6 Objectives and Policies for Managing the District's Landscapes and Indigenous Biodiversity

6.1 Introduction

The South Waikato District has landscapes and indigenous vegetation and habitats of indigenous fauna ('natural areas') that have been identified as being outstanding or significant. Their protection is to be recognised as a matter of national importance in terms of Sections 6b) and 6c) of the RMA. One of Council's functions under Section 31(b)(iii) of the RMA is to control any actual or potential effects of the use, development or protection of land for the purpose of maintaining indigenous biological diversity. The landscapes and natural areas of the District and the value of indigenous biodiversity underpin the local tourism industry, form an important part of the identity and character of the district, and require special approaches to their management. These landscapes and natural areas are located in rural parts of the district. These rural areas also support the primary production economic base of the district, with farming and production forestry being the predominant rural land uses. Many of the outstanding landscapes and significant natural areas (SNAs) are therefore associated with farming and forestry land uses. The hydro-electric power stations on the Waikato River are another important part of the district's economy. The Waikato River valley is also the location of outstanding landscape areas, very significant cultural landscapes, and significant natural areas.

The district plan seeks to manage this 'working rural environment', whilst also providing protection to the outstanding or significant landscapes and natural areas. Outstanding natural features and landscapes, areas of significant indigenous vegetation, and significant habitats of indigenous fauna, are all recognised in the RMA as 'matters of national importance'. Section 6(c) of the RMA establishes as a 'matter of national importance' the "protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna". In respect of landscape values, Section 6(b) provides for the "protection of outstanding natural features and landscapes from inappropriate subdivision, use and development". The "preservation of the natural character" of wetlands, lakes and rivers and their margins (section 6(a)), and promoting public access to lakes and rivers (Section 6(d)) are also recognised as matters of national importance.

Section 7 of the RMA identifies several 'other matters' that Council 'shall have particular regard to' and includes Section 7(c) 'the maintenance and enhancement of amenity values', section 7(d) 'the intrinsic values of ecosystems', Section 7(f) 'maintenance and enhancement of the quality of the environment', and 7(g) 'any finite characteristics of natural and physical resources'. These values of indigenous biodiversity need to be recognised in a broader sense, and management approaches adopted consistent with meeting these obligations under the Act.

Safeguarding the physical and cultural landscapes of the Waikato River and its catchment are essential for the district plan to give effect to the Vision and Strategy for the Waikato River,

as required under the Ngāti Tūwharetoa, Raukawa and Te Arawa River Iwi Waikato River Act 2010.

The Proposed Waikato Regional Policy Statement ('the RPS') prepared by the Waikato Regional Council also provides specific policy direction on protecting outstanding natural features and landscapes, and significant natural areas. Section 11 'Indigenous Biodiversity' of the RPS outlines a number of implementation methods that the district plan must give effect to. The focus of these provisions is the identification and protection of significant natural areas, and the protection and enhancement of indigenous biodiversity.

Section 12 'Landscape, Natural Character and Amenity' of the RPS similarly contains policies and a series of implementation methods for identifying and protecting landscape values. There is no regionally significant natural feature or landscape identified in the RPS that is located within the district. However, the RPS does encourage district councils to identify outstanding or significant natural features and landscapes at a district level. This identification has been done for the South Waikato District, and is recorded in Appendix C – Schedule of Outstanding Natural Features and Landscapes and in the Natural Values overlay on the planning maps.

6.1.1 Landscape Assessment

A landscape assessment of the South Waikato district has been conducted by Isthmus Group on behalf of Council. The Isthmus report identifies the landscapes and natural features in the district that are 'outstanding' and those that have 'significant amenity' values. The criteria used in Isthmus' assessment are consistent with the criteria set out in Table 12.2 of the Proposed Waikato Regional Policy Statement (Decisions Version). The outstanding natural landscapes (ONLs) that have been identified are the broad scale landscapes in the District considered to have outstanding landscape values at a district or regional level. The outstanding natural features (ONFs) identified are also outstanding at a district level, but involve a smaller geographical area. These are an element or group of landscape elements, rather than an entire landscape. Significant Amenity Landscapes (SALs) are areas whose status is related to Section 7(c) of the Act. These landscape areas have high amenity, however are not outstanding. The criteria used to identify them were the same as used for the ONLs and ONFs.

Landscape values are also linked to the presence of significant areas of indigenous vegetation and habitat within identified landscape areas, given the contribution indigenous vegetation makes to landscape attributes. Some ONL areas within the district do not however have indigenous vegetation cover, but are still outstanding for other reasons such as bold topography or high cultural values.

The particular areas identified as ONLs, ONFs, and SALs are detailed in Appendix C and are displayed on the Natural Values overlay of the planning maps. Specific rules have been formulated to manage land use within these areas to protect landscape attributes.

It is important to realise the cultural dimension of landscapes, and the fact that Tangata Whenua's historical association with places in the district provides a different appreciation of landscape values to that provided by landscape architects. The Waikato River is of course a significant area for Raukawa, but so too are the Mamakus, Te Waihou, Pohaturoa, and Tirau, for example.

6.1.2 Indigenous Biodiversity in the South Waikato

Areas of significant indigenous vegetation and significant habitats perform vital roles in maintaining the District's biodiversity and therefore warrant responsible management.

Since 1840, the combined effects of logging, land clearance, drainage and fires have reduced indigenous vegetation cover in the district to approximately 11.5%. Once indigenous habitat thresholds fall below 20%, loss of indigenous species (and therefore ecosystem functions and processes) occurs at an exponential rate. The greatest amount of clearance has occurred in the lowland areas. The largest, oldest and best quality indigenous habitats within the South Waikato District occur in the higher parts of the eastern side of the district. In the western part of the District ecological values have been substantially reduced, fragmented and disconnected from those in the east. Management of the rural area including the predominant land uses of plantation forestry and farming can play an important role in maintaining indigenous biodiversity.

These significant natural areas are vulnerable to legal and physical fragmentation, stock browsing, introduced weeds and pest animals, land modification, and vegetation clearance. Adverse effects on indigenous biodiversity include:

- Fragmentation and isolation of indigenous ecosystems and habitats.
- Reduction in the extent of indigenous ecosystems and habitats.
- Loss of corridors or connections linking indigenous ecosystems and habitat fragments or between ecosystems and habitats (ecological sequences from mountains to sea).
- Loss or disruption to migratory pathways in water, land or air.
- Effects of changes to hydrological flows, water levels, and water quality on ecosystems.
- Loss of cultural activities associated with biodiversity (e.g. as a source of food, weaving, medicines or building materials).
- Loss of buffering of indigenous ecosystems.
- Loss of ecosystem services,
- Loss, damage or disruption to ecological processes, functions and ecological integrity.
- Changes resulting in an increased threat from animal and plant pests.

Long-term protection and sustainable management of indigenous vegetation and habitats requires active management regimes, rather than simply prevention of development in these areas. Re-creation and restoration of habitats historically found in the district is also important in protecting local biodiversity. The district has been highly modified by land clearance in the past, except in eastern parts of the district, and highly modified pastoral and plantation forestry environments are now dominant. For many habitat types in lowland areas, only small remnants remain and these habitat types are under-represented in the network of legally protected areas and the land administered by the Department of Conservation (DOC). Accordingly, they face the greatest threat of further loss. These habitats warrant different management effort than habitat types that make up large areas of the public estate. Indigenous habitats remain vulnerable to land modification, weed invasion, stock browsing, and pest animals.

Large landholdings in the district are owned by several forestry owners with exotic plantation forests being the dominant land use. As at 2013, approximately 50% of the South Waikato District is in plantation forests. Within these plantation forests are a number of significant

natural areas, landscapes identified as being outstanding or significant, and sites of significance to tangata whenua. Some of these large forestry landholdings are managed by companies with Forestry Stewardship Council ('FSC') accreditation, which the Council supports as being an audited certification system. FSC requires forests to be managed sustainably and include features on protection of natural, landscape and cultural sites and values. The work of the FSC certified foresters is audited by FSC accredited certification bodies. Environmental Non-Governmental Organisations (ENGOs) such as the Royal Forest and Bird Protection Society are involved in setting the FSC national standard, and all stakeholders including ENGO's are consulted as part of the audit. This programme provides public accountability that important natural values are well-managed within plantation forests. The forestry industry has made significant efforts to document and retain the SNAs on their land, and the plantation forest in the District is an important habitat for indigenous species including bats (pekapeka) and the NZ falcon (karearea).

The Mamaku Plateau in the east of the district contains large areas of indigenous forest and fauna habitats, much of which is land administered by DOC. Water from the Mamaku Plateau is of high quality, and is the source of a number of natural springs and rivers, including Te Waihou (meaning source of the water or 'new river'), and the Pokaiwhenua and Oraka Streams. Water is an important natural resource and is used by the water bottling plants at Putaruru as a commercial asset. The Blue Spring along Te Waihou River is the source for 70% of New Zealand's bottled water, and is an important economic resource for the district.

The Waikato River valley contains significant historical, cultural, landscape, ecological, and recreational values. It is New Zealand's longest river and delineates much of the southern and western boundaries of the district. The Waikato River is a key defining feature of the district and has five hydro-electric power generating facilities along the section of the river within the South Waikato District. Whilst modified through damming and land use changes along the margins of the river, the Waikato River and other local waterways are an important recreational fishery, with trout (taraute) and eels (tuna) being the most prominent species (although indigenous fish migration is severely limited by the hydro dams).

A close working relationship must be maintained with Raukawa, adjoining territorial authorities, resource users and the Regional Council to address water quality and water management issues that affect the district and to ensure implementation of the Vision and Strategy for the Waikato River.

The land administered by DOC contains some of the most significant fauna and flora of the district, including kokako and native bats, and includes many of the outstanding landscapes of the district. The remaining natural areas are located on private land, and are predominantly located in small pockets of indigenous habitat along the margins of streams, lakes and rivers, remnant wetlands, and indigenous forest in farmland and the exotic plantation forests. There are also some larger remaining areas of remnant indigenous shrubland and forest located on private land.

6.1.3 Inventory of Natural Areas

In 2009 the Regional Council undertook a desktop exercise to identify areas of possible indigenous vegetation and habitat within the district that may have qualified as significant in terms of the RPS criteria. These areas were identified at a regional scale using aerial photographs and other information, and so needed to be checked.

The necessary "ground-truthing" ecological site assessments were completed by the District Council in 2012, and resulted in the Schedule of Significant Natural Areas (SNAs) listed in Appendix E of the plan. These SNA sites are shown on the Natural Values overlay of the planning maps.

The information collected on the sites in Appendix E, plus the Regional Council data on sites that field checks showed did not meet the RPS criteria, comprises an Inventory of Natural Areas with information on over 400 sites in the district, covering approximately 22,000 hectares of land. The Inventory is held by Council as an information resource available to landowners and the public to promote the protection of significant natural areas and indigenous biodiversity in the district. The inventory will also be used for prioritising Council resources to assist landowners to actively protect and manage these areas.

6.1.4 Consultation

Council recognises the importance of involving the community when developing the District plan approaches for the ongoing active management and any future identification of the areas affected by this chapter (for example, including Significant Natural Areas and Outstanding Landscapes). To achieve this Council will undertake consultation approaches that reflect best practice. This will include: involving potentially directly affected landowners and/or leaseholders early in the development of a project to identify the nature and scope of fieldwork that needs to be undertaken, seeking feedback on the potential impacts the conservation of the area/site might have on landowner and/or leaseholder activities, and discussing with the landowner and/or leaseholder the approaches that could be adopted to promote the long term protection of the area/site.

6.2 Objectives for the District's Landscape and Natural Values

6.2.1 To recognise the outstanding natural features and landscapes in the district and protect the landscape values within these areas from inappropriate subdivision, use and development.

6.2.2 To safeguard the significant historical, cultural, landscape, ecological, indigenous biodiversity, natural and recreational values of the Waikato River and its margins while enabling existing rural land uses and electricity generating infrastructure and electricity transmission and distribution lines.

6.2.3 To safeguard the significant historical, cultural, landscape, natural and recreational values associated with the high quality water resources of Te Waihou River and its tributaries.

6.2.4 To preserve the natural character of wetlands, lakes and rivers (and their margins) in the district, and protect them from inappropriate subdivision, use and development.

6.2.5 To identify, and maintain or enhance the values of the district's indigenous biodiversity including by protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna.

6.2.6 To maintain and enhance public access to lakes and rivers in the district, particularly those locations identified as being of high priority due to their ecological or recreational values, where public access is compatible with protecting ecological values.

6.2.7 To maintain and enhance amenity values within outstanding natural landscapes and features, and significant amenity landscapes.

6.2.8 To recognise and provide for the relationship Raukawa and the Te Arawa River Iwi as Tangata Whenua have with the Waikato River, sites of significance, taonga, wāhi tapu, and the landscapes of the district.

6.2.9 To recognise and promote the intrinsic values of indigenous biodiversity and ecosystems.

6.3 Policies

The objectives will be achieved through the following policies:

6.3.1 Identification of outstanding natural features and landscapes, and active management to ensure that the landscape values are recognised and protected from the adverse effects of inappropriate subdivision, use and development.

6.3.2 Subdivision, use, and development should avoid, remedy or mitigate adverse effects on the values that contribute to an area being an outstanding natural feature or landscape, in particular by avoiding, remedying or mitigating the adverse effects of activities such as indigenous vegetation clearance, wetland drainage, large-scale landform modification, and construction of large or otherwise visually prominent structures, buildings and earthworks that will adversely affect those values identified.

6.3.3 Have regard to the locational and operational requirement of utilities or infrastructure proposed within an outstanding natural feature and landscape in the district.

6.3.4 Ensure that regard is had to the local, regional and national benefits (social, economic and environmental) to be derived from the use and development of infrastructure proposed within an outstanding natural feature and landscape in the district.

6.3.5 Ensuring that earthworks and buildings within identified significant amenity landscapes are of a compatible scale that maintains the attributes that contribute to the landscape values of these areas.

6.3.6 Significant indigenous vegetation and habitats of indigenous fauna in the district are identified in accordance with criteria in section 11A- “Criteria for determining significance of indigenous biodiversity” of the Regional Policy Statement, and protected through avoiding, mitigating or remedying the effects of clearance of significant indigenous vegetation and land modification within such areas.

6.3.7 Subdivision, use and development shall avoid the loss or degradation of areas of indigenous vegetation and habitats of indigenous fauna, whether these areas and habitats are significant or not, in preference to remedying or mitigating adverse effects on those areas or habitats.

6.3.8 Where it is not practicable or appropriate to avoid significant or more than minor adverse effects of activities on areas of Significant Natural Areas then adverse effects must be remedied or mitigated.

Principles of this policy are:

a) Replacing the indigenous biodiversity that has been lost or degraded
b) Replacing like-for-like habitats or ecosystems (including being of at least equivalent size or ecological value)
c) The legal and physical protection of existing habitat, or
d) The creation of new habitat.

6.3.9 The effects on the cultural and spiritual relationships of Raukawa and the Te Arawa River Iwi as Tangata Whenua with the outstanding natural features and landscapes identified, and with significant indigenous vegetation and habitats in the district, shall be recognised and provided for in considering resource consent applications for subdivision, use, and development, including involving Tangata Whenua when identifying opportunities for re-creating habitat and implementing the local indigenous biodiversity strategy.

6.3.10 Subdivision, use and development should be of a density, scale, intensity and in a location that preserves the natural character of wetlands, lakes and rivers and their margins, protects significant natural areas and maintains indigenous biodiversity in the district. In particular, consideration should be given to existing indigenous vegetation and habitat values, the restoration potential of an area, the ecological linkages with other significant natural areas and their potential for enhancement.

6.3.11 Subdivision incentives are encouraged where the use of covenants by landowners provides statutory protection for land containing significant indigenous vegetation and habitats.

6.3.12 Subdivision that results in the legal fragmentation of indigenous vegetation including Significant Natural Areas should be avoided, as it can affect the ability to actively and comprehensively manage these areas.

6.3.13 Landowners will be encouraged to manage indigenous biodiversity including Significant Natural Areas in a manner that protects and potentially enhances long-term ecological functioning and wetland hydrology.

6.3.14 Esplanade reserves and esplanade strips shall be created in identified high priority locations, to provide ecological linkages, improve water quality and enhance public access to lakes and rivers and their margins within the district.

6.3.15 Enable the Department of Conservation to manage public conservation lands under the Conservation Act 1987, without a duplicated regime of district plan provisions applying to those areas.

6.3.16 To implement the Objectives of the Vision and Strategy for the Waikato River by managing subdivision and land use within areas with natural values and located within the

River catchment in a way that restores and protects the health and wellbeing of the Waikato River, including by:

a) Identifying the Waikato River as an Outstanding Natural Landscape.
b) Protecting Significant Natural Areas and indigenous vegetation.
c) Requiring building setbacks from waterways, including standards for earthworks, riparian management, silt and stormwater control.
d) Creating esplanade reserves or strips.
e) Managing activities within natural areas.
f) Protection lot subdivision provisions for Significant Natural Areas.
g) Promoting the restoration and re-creation of habitats and connectivity between habitats, including, buffering and linking areas identified as SNAs.

6.4 Methods to Achieve Objectives and Policies

The objectives and policies contained in 6.2 and 6.3 will be implemented through the following methods:

6.4.1 District Plan Methods

- Identification of outstanding natural landscapes and outstanding natural features within the Natural Values overlay on the planning maps.
- Identification of significant amenity landscapes within the Natural Values overlay on the planning maps.
- Identification of significant natural areas within the Natural Values overlay on the planning maps.
- Rules 14.3.1 and 14.3.2 to control the scale of buildings, and land modification within Outstanding Natural Landscapes and Features, and Significant Amenity Landscapes.
- Rule 14.4 to control indigenous vegetation, land disturbance and land drainage within significant natural areas identified in Appendix E.
- The Conservation Area overlay within the Rural Zone to identify the land administered by the Department of Conservation.
- Rules in Chapter 28 Rural Zone and Chapter 29 Rural Residential Zone, to control the proximity of buildings to water bodies.
- Rules in Chapter 29 Rural Residential Zone that require buildings close to the Waikato River to be designed in sympathy with the significant landscape attributes of the areas concerned.
- Subdivision provisions relating to the Rural and Rural Residential Zones that prevent any new boundaries being created within or adjacent to significant natural areas, unless those areas are covenanted to protect and enhance the natural values present. The subdivision provisions also establish incentives to enable the protection of significant natural areas by covenanting through “protection lot” provisions.
- Consent notices imposed upon new land titles as a condition of subdivision consent, requiring protection of SNAs and/or appropriate riparian management.
- Identification of items of built heritage within significant amenity landscapes (e.g. the Okoroire hot springs hotel) in the Heritage Inventory to recognise and protect the heritage, natural and landscape attributes of these sites.
- Provisions requiring the creation of esplanade strips and reserves adjacent to lakes and rivers identified as being ‘high priority” areas for water quality, natural character and ecological protection, and to provide public access, in Chapter 10 Subdivision.

- Rules to manage the use of the surface of the water contained within Chapter 16 Activities on the Surface of the Water.
- Rules within Chapter 30 Electricity Generation Zone to manage activities related to the existing hydroelectric power stations on the Waikato River.
- Assessment criteria listed in Chapter 8 Administration of the Plan to enable consideration of the potential impacts on areas identified in the Inventory of Natural Areas when resource consent applications are being assessed and consent conditions formulated.

6.4.2 Other Methods

- Develop a District or Local Biodiversity Strategy in collaboration with Iwi, the Regional Council, Department of Conservation, landowners and special interest groups such as Federated Farmers, the Royal Forest and Bird Protection Society and the Waikato Biodiversity Forum, to identify areas of significant natural conservation value and the options for their protection, in order to maintain or enhance local indigenous biodiversity. A summary of the content and timing for undertaking the strategy is outlined in Chapter 14, Section 14.1.2.
- Maintain an Inventory of Natural Areas as an information resource detailing the location, extent and significance of indigenous vegetation and habitats, and a description of the features present at the identified sites. This Inventory will be used for Land Information Memorandums where a natural area is identified.
- Management programmes will be developed in conjunction with landowners for natural areas identified in the District or Local Biodiversity Strategy initially focusing on the most significant sites in the district. Council will provide an advisory service to assist landowners to manage and enhance natural areas on their land, with a focus on improving ecological linkages between areas, undertaking weed and pest control, replanting with indigenous vegetation, and fencing of natural areas to exclude stock
- Grants to landowners implementing the management programmes described above, such as fencing of natural and riparian areas to exclude stock and replanting to improve indigenous biodiversity
- Funding and support for Waikato Biodiversity Forum initiatives encouraging agencies and groups to network, share ideas and work together to protect and enhance biodiversity
- Grants will also be available to community conservation groups such as land care groups, stream care groups, and other community environmental groups, through contestable funds at national, regional, and local levels
- Negotiation of access strip agreements to provide public access to lake and river margins in a priority case where a subdivision is not proposed.
- Council will promote the use of Queen Elizabeth II National Trust covenants, Nga Whenua Rahui Kawenata, and other private covenants by landowners as a means to protect significant natural areas within privately-owned land in the district.
- Council will collaborate with the Department of Conservation to protect and enhance the indigenous biodiversity and landscape values located within the conservation estate, pursuant to statutory protection under the Conservation Act 1987.
- Development of a Cultural Landscape Plan in conjunction with Raukawa, including consideration of a cultural landscape protection plans for the Waikato River Valley and for the hills north of Tīrau, in consultation with affected landowners.
- The development of a Te Waihou /Blue Spring Co-Management Plan involving Raukawa, the Regional Council, and the Department of Conservation.

- A monitoring programme for biodiversity and ecological health and wellbeing of the Waikato River and the district as a whole, including mātauranga Māori (Māori knowledge) as a key aspect.
- Collaboration with the Regional Council and the Waikato River Authority in developing targets and programmes for improving the health and wellbeing of the Waikato River.
- Council administered land (particularly riparian margins and areas of remnant indigenous vegetation) will be managed to enhance indigenous biodiversity values through restoration planting programmes, pest control, minimising land disturbance and indigenous vegetation clearance.
- Acknowledge the rate of uptake amongst the district's forest operators of independently-audited "best practice" programmes such as certification under either Forest Stewardship Council, or Programme for the Endorsement of Forest Certification to inform the Local Biodiversity Strategy.

6.5 Reasons

6.5.1 Protection of Landscape Values

Rules are included within Chapter 14 to manage activities and land uses that may adversely affect the landscape attributes within these landscape areas and features.

Some regulatory methods are considered necessary to protect outstanding natural features and landscapes, and significant amenity landscapes. Council has sought to apply a set of rules that enable development and land use change to occur, but in a manner that protects the identified landscape values of particular areas. In this context, protection does not mean that no development or land use change will occur, but rather those particular activities such as clearance of vegetation, modification of the landform, and the scale of buildings and structures, that are likely to detrimentally affect landscape attributes need to be managed.

6.5.2 Protection of Natural Areas

The primary threats to the natural areas in the district are considered to be neglect (i.e. an absence of active management including pest control), cumulative effects such as intensive development in close proximity to waterways, stock access, clearance of indigenous vegetation (which can occur incrementally), and extensive land modification. The focus is therefore to identify the significant natural areas in the district, formulate management programmes, and collaborate with landowners and stakeholders to implement those management programmes.

A framework of rules in Chapter 14 that focuses on indigenous vegetation clearance, land disturbance and land drainage has been formulated to address these aspects. The plan provisions have sought to recognise that many of the significant natural areas identified are within ‘working environments’ such as exotic plantation forests and farms, and along the margins of lakes and rivers associated with hydro-electric power stations.

Information on the location, size and values of the district’s significant natural areas is held within the Inventory of Natural Areas. This data will be updated over time as specific information is collected in connection with individual resource consent applications. Typically, the sites identified are wetlands, river or stream margins, areas of remnant indigenous forest, or smaller indigenous forest fragments.

For a significant natural area to remain ecologically viable in the long term, 'buy-in' from landowners is crucial, requiring active management of weeds and pests, fencing to prevent stock entry, and replanting to enhance the vegetative cover and provide shelter along the edges of remnants. Enhancing connections between remnants to provide the necessary ecological corridors is also essential for their long-term viability. District plan rules and scheduling of all significant natural areas, are unlikely on their own to achieve the level of landowner 'buy in' required to achieve positive results in maintaining and enhancing the district's natural values.

Much of the biodiversity and landscape protection being undertaken in the district is within conservation land administered by DOC under the Conservation Act 1987. DOC manages the activities of other parties through their concessions process. Accordingly, the district plan provisions relating to this land do not seek to overlap or duplicate the Conservation Act provisions. The land administered by DOC is within the Rural Zone with an overlay shown on the planning maps to demarcate it, and specific provisions drafted to manage these areas. Forest owners and managers such as Hancock Forest Management Ltd also have a significant role to play.

Achieving conservation objectives over the long-term also depends on establishing and maintaining effective partnerships. Council will partner with Raukawa, the Regional Council, DOC, Fish and Game NZ, Royal Forest and Bird Protection Society, Queen Elizabeth II National Trust, local environmental groups such as Landcare and Streamcare groups, and landowners. Indigenous biodiversity enhancement programmes will be undertaken with funding provided by the Council and the WRC, and supplemented with corporate funding as available. Council will also provide support services to local environmental and community groups to increase their effectiveness.

Public education, advocacy and provision of management programmes for individual significant natural areas are important to the success of these programmes.

6.5.3 Preservation of Natural Character and Public Access

The preservation of the natural character of wetlands, lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development is a matter of national importance under the Act.

Preservation of the natural character of these areas and their protection is also necessary in order to give effect to the Vision and Strategy for the Waikato River. So is the maintenance and enhancement of public access to and along lakes and rivers. Rules to control the extent of earthworks and land modification close to wetlands and watercourses, are included within the Rural Zone and the Rural Residential Zone, along with specific building setbacks from watercourses to manage these activities. Whilst these rules apply to all of the Rural Zone and the Rural Residential Zone, the Inventory of Natural Areas held outside the district plan will enable Council and the community to strategically manage these areas, given that they have the most significant natural values in the district.

The district plan has also identified the land parcels around water bodies that are considered to be a high priority for creation of esplanade strips or esplanade reserves to enhance conservation values and/or public access.

Many of the significant natural areas identified in the district are related to waterbodies, wetlands and riparian vegetation. Council will link the natural habitat corridors where possible through esplanade strips and reserves, and covenanting private land during the subdivision process.

Subdivision provisions within the Rural Zone and Rural Residential Zone also incentivise the covenanting of significant natural areas by providing for protection allotments to be created. These provisions seek to enable a landowner to subdivide a property, whilst also creating a statutory protection mechanism for protection of significant natural areas. Economic instruments, including subdivision incentives, are considered an effective way of encouraging landowners to retain and enhance significant habitats.

Council also has a leadership role by protecting outstanding or significant amenity landscapes and natural features, and avoiding adverse effects on significant natural areas, through land disturbance activities on land administered by Council.

DISTRICT PLAN METHODS

6.4.1 District Plan Methods

- Identification of outstanding natural landscapes and outstanding natural features within the Natural Values overlay on the planning maps.
- Identification of significant amenity landscapes within the Natural Values overlay on the planning maps.
- Identification of significant natural areas within the Natural Values overlay on the planning maps.
- Rule 14.4 to control indigenous vegetation, land disturbance and land drainage within significant natural areas identified in Appendix E.
- The Conservation Area overlay within the Rural Zone to identify the land administered by the Department of Conservation.
- Subdivision provisions relating to the Rural and Rural Residential Zones that prevent any new boundaries being created within or adjacent to significant natural areas, unless those areas are covenanted to protect and enhance the natural values present. The subdivision provisions also establish incentives to enable the protection of significant natural areas by covenanting through "protection lot" provisions.
- Consent notices imposed upon new land titles as a condition of subdivision consent, requiring protection of SNAs and/or appropriate riparian management.
- Provisions requiring the creation of esplanade strips and reserves adjacent to lakes and rivers identified as being 'high priority" areas for water quality, natural character and ecological protection, and to provide public access, in Chapter 10 Subdivision.
- Rules within Chapter 30 Electricity Generation Zone to manage activities related to the existing hydroelectric power stations on the Waikato River.
- Assessment criteria listed in Chapter 8 Administration of the Plan to enable consideration of the potential impacts on areas identified in the Inventory of Natural Areas when resource consent applications are being assessed and consent conditions formulated.

6.4.2 Other Methods

- Develop a District or Local Biodiversity Strategy in collaboration with Iwi, the Regional Council, Department of Conservation, landowners and special interest groups such as Federated Farmers, the Royal Forest and Bird Protection Society and the Waikato Biodiversity Forum, to identify areas of significant natural conservation value and the options for their protection, in order to maintain or enhance local indigenous biodiversity. A summary of the content and timing for undertaking the strategy is outlined in Chapter 14, Section 14.1.2.
- Maintain an Inventory of Natural Areas as an information resource detailing the location, extent and significance of indigenous vegetation and habitats, and a description of the features present at the identified sites. This Inventory will be used for Land Information Memorandums where a natural area is identified.
- Management programmes will be developed in conjunction with landowners for natural areas identified in the District or Local Biodiversity Strategy initially focusing on the

most significant sites in the district. Council will provide an advisory service to assist landowners to manage and enhance natural areas on their land, with a focus on improving ecological linkages between areas, undertaking weed and pest control, replanting with indigenous vegetation, and fencing of natural areas to exclude stock.

- Grants to landowners implementing the management programmes described above, such as fencing of natural and riparian areas to exclude stock and replanting to improve indigenous biodiversity.
- Funding and support for Waikato Biodiversity Forum initiatives encouraging agencies and groups to network, share ideas and work together to protect and enhance biodiversity.
- Grants will also be available to community conservation groups such as land care groups, stream care groups, and other community environmental groups, through contestable funds at national, regional and local levels.
- Council will promote the use of Queen Elizabeth II National Trust covenants, Nga Whenua Rahui Kawenata, and other private covenants by landowners as a means to protect significant natural areas within privately-owned land in the district.
- Council will collaborate with the Department of Conservation to protect and enhance the indigenous biodiversity and landscape values located within the conservation estate, pursuant to statutory protection under the Conservation Act 1987.
- A monitoring programme for biodiversity and ecological health and wellbeing of the Waikato River and the district as a whole, including mātauranga Māori (Māori knowledge) as a key aspect.
- Collaboration with the Regional Council and the Waikato River Authority in developing targets and programmes for improving the health and wellbeing of the Waikato River.
- Council administered land (particularly riparian margins and areas of remnant indigenous vegetation) will be managed to enhance indigenous biodiversity values through restoration planting programmes, pest control, minimising land disturbance and indigenous vegetation clearance.
- Acknowledge the rate of uptake amongst the district's forest operators of independently-audited "best practice" programmes such as certification under either Forest Stewardship Council, or Programme for the Endorsement of Forest Certification to inform the Local Biodiversity Strategy.

DISTRICT PLAN RULE FRAMEWORK

14.1.2 Natural Areas and Indigenous Vegetation

Council utilises the Inventory of Natural Areas ('the inventory') as an information resource to inform landowners and the public generally of the possible location and likely extent of significant natural areas in the district, and as a basis to prioritise Council's own resources for indigenous biodiversity protection.

A Local Indigenous Biodiversity Strategy will be developed using this information and aiming to maintain and enhance indigenous biological diversity in the South Waikato, including Significant Natural Areas (SNAs) as well as areas of indigenous vegetation and habitats of indigenous fauna that do not qualify as significant.

This Strategy will adopt a catchment-based approach to address the following:

1. Protection and enhancement of waterways - the strategy will use the river and stream network as the fundamental framework for biodiversity planning, implementation and long term management.
2. Ecological connectivity across the District.
3. Physical protection and enhancement of SNA's and their place in an 'ecological network' across the District.
4. Key implementation methods to achieve an integrated approach using regulatory (where relevant) and non-regulatory methods

South Waikato District Council with assistance from Waikato Regional Council will develop the Strategy. In developing the Strategy the South Waikato District Council will work closely with the community, including iwi and key stakeholders to:

- Set the overarching outcome for the Local Indigenous Biodiversity Strategy including identifying achievable objectives and priority tasks and programmes.
- Determine the roles and responsibilities for key stakeholders in relation to undertaking the identified priority tasks and programmes.
- Establish timeframes for implementation.
- Identify potential for shared resourcing and funding sources to achieve the overarching outcome of the Local Indigenous Biodiversity Strategy.
- Establish mapping and monitoring programme to support decision-making and compliance assessments (as required).
- Identify information gaps and priorities for commissioning further work (as required).
- Determine the frequency for reporting on progress and review of the Local Indigenous Biodiversity Strategy.

The list set out above is a 'minimum' prescription, and other matters can be included as required.

Development of the Local Indigenous Biodiversity Strategy will commence before 31 December 2016.

A Significant Natural Area (SNA) for the purposes of district plan provisions is land containing areas of indigenous vegetation and habitat that meets the criteria from the Waikato Regional Policy Statement (RPS).

The areas from the Inventory that qualify as significant under RPS criteria are listed in Appendix E, and shown on the planning maps. Rule 14.4 sets limits on the clearance, drainage or other disturbance of the listed areas, and requirements for land use consent to otherwise be obtained.

The purpose of this rule and the non-plan methods set out in Chapter 6, is to manage the form of development within significant natural areas to protect existing natural values, and to promote the maintenance or enhancement of indigenous biodiversity outcomes in the district generally.

The subdivision provisions in Chapter 10 Subdivision, Financial Contributions, and Esplanade Reserves and Strips also form part of the regulatory framework. The subdivision rules for all zones control the fragmentation of areas of indigenous vegetation, and proposals for building sites on new lots in such areas. Council has reserved control so that subdivision conditions can be imposed requiring consent notices or covenants on the titles of newly-subdivided allotments that require ongoing protection and maintenance of significant natural areas or wetlands. Conditions can also be imposed requiring riparian margins or wetlands to be fenced to exclude stock, to assist with maintaining water quality and to improve biodiversity values of those areas.

The subdivision rules also provide for protection allotments as a discretionary activity where significant natural areas are being covenanted. This is intended to encourage covenanting as a protection mechanism by creating an incentive, but also to avoid the creation of new allotments that result in the fragmentation of significant natural areas. Fragmentation of natural areas makes their effective management more difficult, and will be avoided by a subdivision rule precluding new boundaries being created through these habitats.

14.2 Anticipated Environmental Results

The landscape and natural area rules are intended to achieve the following anticipated environmental results:

- That the indigenous biodiversity of the district is maintained or enhanced.
- That Significant Natural Areas in the district are managed to ensure that ecological processes are maintained or enhanced, and that the significant habitat values are retained.
- That the adverse effects of activities within Significant Natural Areas are avoided, remedied or mitigated to maintain the biodiversity values of such areas, except where necessary for cultural reasons, for minor works, for SNA enhancement, for existing farming or forestry operations, or for the existing hydro-electric power generating infrastructure and activities within the Electricity Generation Zone
- That buildings and structures are setback from waterways a sufficient distance to avoid modification of waterways and riparian margins, except where located within the Electricity Generation zone.

- That the adverse effects of earthworks and of new buildings, are managed to avoid, remedy or mitigate their impact upon the landscape values that have been identified as being outstanding or significant in the district, except where earthworks and structures are necessary within the Electricity Generation zone, for the purposes of providing, maintaining or operating strategic transport infrastructure, or for the management and harvesting of an existing plantation forest.

The landscape and natural values rules are a method to implement the objectives and policies contained within Chapter 5 (Objectives and Policies for the District's Rural Areas) and Chapter 6 (Objectives and Policies for Managing the District's Natural Values).

14.4 Disturbance of Significant Natural Areas

14.4.1 Permitted Activities

Vegetation clearance, land disturbance and land drainage is a permitted activity throughout the District, where:

(a) The land disturbance, land drainage and vegetation to be cleared is not within a Significant Natural Area identified in Appendix E.
(b) The land disturbance, land drainage and vegetation to be cleared is within a Significant Natural Area identified in Appendix E, but is in an area which is:
    (i) Subject to a Queen Elizabeth II covenant, Nga Whenua Rahui Kawenata, Heritage Protection Order or covenant under the Reserves Act 1977 or Conservation Act 1987, and the clearance is consistent with the covenant or order applying to that place.
(c) The land disturbance, land drainage and vegetation to be cleared is within a Significant Natural Area identified in Appendix E, but land disturbance, drainage or vegetation clearance is:
    (i) Ancillary damage as a result of adjacent plantation forestry harvesting where the damage is temporary in nature, the extent of the indigenous remnant remains unchanged and the vegetation will recover readily.
        (ia) Clearance of exotic vegetation associated with harvesting production forest first planted prior to 7 November 2012.
        (ib) Clearance of indigenous vegetation understorey and soil disturbance associated with harvesting and replanting of production forest first planted prior to 7 November 2012.
    (ii) Required for fire risk management in a production forest.
    (iii) Necessary as part of the maintenance of lawfully established roads, tracks, earth dams, structures, or fences, all provided the clearance is within 2 metres of the road, track, earth dam, structure or fence.
    (iv) Maintenance of existing drains that is necessary to prevent inundation of productive pasture land.
    (v) Necessary to protect, maintain or upgrade hydro-electric power generating infrastructure, or to prevent or remedy erosion that may adversely affect the operation of hydro-electric power generating infrastructure, and where the works are within the Electricity Generation Zone.
    (vi) Limited to use by Tangata Whenua for culturally appropriate purposes such as rongoa, waka, traditional buildings or marae-based activities,

(vii) Required for construction of fencing for conservation purposes to exclude stock or pest animals.
(viii) Required for the removal or control of invasive weeds, or
(ix) Removal of vegetation that endangers human life or existing structures, or that poses a risk to the integrity of, the safe use of, or access to existing network utilities.
(x) Required for the operation, maintenance and upgrading of existing electricity lines.

ADVISORY NOTE - The SNAs identified in Appendix E do not include significant areas of plantation forest or pasture land, areas of indigenous vegetation which has been planted and managed specifically for the purposes of the harvesting or clearance or domestic gardens or shelterbelts.

14.4.2 Controlled Activities

a) Removal of vegetation including harvesting in a Significant Natural Area in accordance with an approved Sustainable Forest Management Plan or Permit or personal use approval issued by the Ministry for Primary Industries under the Forests Act 1949. The application is to include the entire area covered by the approval issued by the Ministry for Primary Industries.

The specific matters of control are identified in Rule 8.3.1h) and shall be used when considering a resource consent application for a controlled activity under this rule.

14.4.3 Restricted Discretionary Activities

The land disturbance, land drainage and indigenous vegetation to be cleared is within a Significant Natural Area identified in Appendix E and:

a) is for the establishment of new tracks or fences, where the clearance is no more than 4 metres in width and the track or fence is constructed to farming best practice, and provided that the indigenous vegetation to be cleared lies more than 20 metres from any water body.

The specific matters where discretion is reserved are identified in Rules 8.3.3 and 8.3.4, and shall be used when considering a resource consent application for a restricted discretionary activity under this rule.

14.4.4 Non-Complying Activities

Indigenous vegetation clearance, land disturbance or drainage within a Significant Natural Area identified in Appendix E, except as permitted by Rule 14.4.1 above, or a controlled activity by Rule 14.4.2, or a restricted discretionary activity by Rule 14.4.3, shall be a non-complying activity throughout the District.

The objectives and policies contained within Chapter 6 (Objectives and Policies for Managing the District's Landscapes and indigenous Biodiversity) shall be used when considering a resource consent application for a non-complying activity, with the performance standards for the zone concerned used as a guide for assessment purposes.

ADVISORY NOTE: The Waikato Regional Plan should also be consulted to ensure that there are no additional resource consents required from the Regional Council for indigenous vegetation clearance, land disturbance, structures within or in close proximity to waterways, or the modification of waterways. The Waikato Regional Plan can be viewed at www.waikatoregion.govt.nz.

COMPARISON OF THE APPLICATION OF WAIKATO REGIONAL PLAN REGIONAL POLICY STATEMENT INDIGENOUS BIODIVERSITY POLICIES ACROSS DISTRICT PLANS WITHIN THE REGION

	District Plan Provisions					
District Plan	**South Waikato**	**Thames-Coromandel**	**Waikato**	**Hamilton**	**Hauraki**	**Matamata-Piako**
Status	**Operative 2015**	**Proposed - Decisions Version 2016**	**Waikato/Franklin District 2010**	**Partly Operative 2016**	**Operative 2014**	**Rolling review**
WRC Indigenous Biodiversity Policy						
11.1. Maintain or enhance indigenous biodiversity	A range of provisions for promoting positive indigenous biodiversity outcomes in the district particularly for biodiversity contained within identified SNAs. Most items in this policy generally accounted for except for the consideration of biodiversity offsets. However biodiversity offsets may be considered during the resource consenting process when and where it is triggered.	Maintenance and enhancement of ecological processes, biodiversity, habitat connectivity, and protection of populations of threatened flora and fauna are key criteria for consideration in applications for resource consent.	Maintenance and enhancement of ecological processes, biodiversity, habitat connectivity, and protection of populations of threatened flora and fauna are key criteria for consideration in applications for resource consent.	Limited in some respects due to the paucity of existing indigenous biodiversity within the city. However the aspects of this policy that focus on re-creation and restoration of habitat, connectivity between habitats, and health and wellbeing of the Waikato river are provided for.	A range of provisions for promoting positive indigenous biodiversity outcomes in the district particularly for biodiversity contained within identified SNAs. Most items in this policy generally accounted for except for the consideration of biodiversity offsets. However biodiversity offsets may be considered during the resource consenting process when and where it is triggered.	Maintaining or enhancing the full range of ecosystem types and function is not specifically provided for within the plan.
11.1.1 Maintain or enhance indigenous biodiversity	Positive biodiversity outcomes when managing subdivision and landuse change will be provided for through methods such as additional subdivision rights when SNAs are protected. QEII and NWR kawenata will be promoted as an avenue of protection. Enhancement of SNAs through weed and pest control and enhancement planting will be championed by the council. Esplanade strips and reserves will be created in key areas.	Esplanade strips or reserves mentioned in the proposed district plan in terms of where and when esplanade strips or reserves can be waived, reduced, or increased but it is not clear where they are to be created and what the effects are to be.	Esplanade reserves and other development setbacks are to be created adjacent to the coast and significant water bodies as part of the subdivision consent process. Positive indigenous biodiversity outcomes are to be encouraged via subdivision incentives and contestable grants. Vegetation clearance within gullies in key habitat corridor areas is prohibited.	Focused on the creation of buffers, linkages, and corridors through promotion of the function and amenity of the gully system.	Opportunities for the protection and enhancement of indigenous biodiversity with SNAs seem to be covered during subdivision and land use change processes but it is unclear whether this approach extends to vegetation and habitat that has not been identified as significant. The mechanism for creating buffers or esplanade strips is not clear either.	The key methods for protecting and enhancing indigenous biodiversity is through managing activities associated with subdivision and other development. Esplanade strips and/or reserves are included within this provision.
11.1.2 Adverse effects on indigenous biodiversity	The range of adverse effects of development on indigenous biodiversity is recognised in the plan.	The potential adverse effects on indigenous biodiversity are mentioned in the chapter on subdivision and the criteria to be used for determining whether subdivision can occur within an area of indigenous vegetation considers all aspects listed in this policy.	The potential adverse effects on indigenous biodiversity are mentioned in the chapter on indigenous vegetation and biodiversity and the criteria to be used for determining whether subdivision can occur within an area of indigenous vegetation considers all aspects listed in this policy.	The range of adverse effects of development on indigenous biodiversity is recognised in the plan.	The range of adverse effects of development on indigenous biodiversity is recognised in the plan.	The range of adverse effects of development on indigenous biodiversity is not specifically stated within the plan.
11.1.3 Avoidance, remediation, mitigation, and offsetting for indigenous biodiversity that is not significant	No specific rules or objectives are listed in the plan for areas of indigenous habitat that are not significant.	Because a schedule of SNAs has not been included within the plan, the rules pertaining to vegetation clearance are applicable to all indigenous vegetation. However, areas that have been identified as significant are held at the council and are to be considered when determining development mitigation. Therefore more weight is given to habitats that have been determined as significant.	Because a schedule of SNAs has not been included within the plan, the rules pertaining to vegetation clearance are applicable to all indigenous vegetation. However, areas that have been identified as significant are held at the council and are to be considered when determining development mitigation.	Limited provision within the district plan for the considerations given in this policy. Vegetation removal in gullies and within the vicinity of peat lakes is required to be replanted within one month if it is within 5m of a stream or a lake but no provision is given for areas of indigenous vegetation >5m away from these areas.	There does not appear to be a specified blanket rule covering indigenous vegetation that has not been evaluated as significant except where it falls within certain specific zones (e.g. the Karangahake Gorge or the Hauraki Ecological Corridor). However areas of non-SNA indigenous vegetation are likely to be assessed within the resource consent process and may therefore be protected or at least surveyed at that time.	Modification to unscheduled indigenous biodiversity is an discretionary activity and will therefore be protected and/or enhanced in the same manner as scheduled indigenous biodiversity.
11.1.4 Recognition of activities having minor adverse effects on indigenous biodiversity	All provisions within this policy have been replicated within the plan.	All provisions within this policy have been replicated within the plan.	All provisions within this policy have been replicated within the plan.	All provisions within this policy are present within the plan and are permitted as long as the works meet the performance criteria in the Environmental Protection Overlay section of the plan.	All provisions within this policy have been replicated within the plan as either permitted, controlled, discretionary, or restricted discretionary activities depending on the relative significance of the SNA in question (local, regional, national, or international) and a number of other criteria which are stipulated clearly within the relevant section of the plan. Clear guidelines are also given on the factors which must be considered for determining the permitted degree to which an SNA is affected.	The provision of items in this policy as permitted activities within indigenous biodiversity areas is not clear.
11.1.8 Plan development	Incentives for indigenous biodiversity enhancement include conferment of additional subdivision rights and funding being available through contestable grants. Rates remission is available as another incentive for protecting biodiversity.	Incentives for indigenous biodiversity enhancement include conferment of additional subdivision rights. No mention of financial contributions to maintain or enhance biodiversity.	Incentives for indigenous biodiversity enhancement include conferment of additional subdivision rights and funding being available through contestable grants. Rates remission is available as another incentive for protecting biodiversity.	No financial incentives are mentioned in the plan with respect to biodiversity enhancement and/or protection.	Incentives for biodiversity enhancement, protection, and information will be offered through schemes such as rates relief, subdivision incentives, grants, and waiving of consent fees for ecological services associated with determining significance of an area of indigenous vegetation/habitat.	Incentives for biodiversity enhancement, protection, and information will be offered through schemes such as rates relief, subdivision incentives, grants, and landcare plans, and waiving of development levies in return for protection and/or enhancement of biodiversity.
11.1.10 Funding and assistance	Contestable grants are available for help with biodiversity enhancement and maintenance. Voluntary legal protection and biodiversity plans will be promoted. Rates remission is available as another incentive for protecting biodiversity.	No mention of rates relief, grants, or contestable funds in the district plan. However the TCDC biodiversity strategy mentions rates relief, grants, and contestable funds as avenues for promoting and enhancing biodiversity in the district.	Contestable grants are available for help with biodiversity enhancement and maintenance. Voluntary legal protection and biodiversity plans will be promoted. Rates remission is available as another incentive for protecting biodiversity.	Land will be acquired during subdivision and development consent processes where the land in question borders the Waikato River or other significant water feature however little other legal protection mechanisms are mentioned within the plan.	Incentives for biodiversity enhancement, protection, and information will be offered through schemes such as rates relief, subdivision incentives, grants, and waiving of consent fees for ecological services associated with determining significance of an area of indigenous vegetation/habitat.	Incentives for biodiversity enhancement, protection, and information will be offered through schemes such as rates relief, subdivision incentives, grants, and landcare plans, and waiving of development levies in return for protection and/or enhancement of biodiversity. Land acquisition and

	District Plan Provisions					
District Plan	**South Waikato**	**Thames-Coromandel**	**Waikato**	**Hamilton**	**Hauraki**	**Matamata-Piako**
					Land acquisition and biodiversity restoration and enhancement on public land will be considered. Consideration to ecological connectivity enhancement will be undertaken through the resource consent and land use process.	biodiversity restoration and enhancement on public land will also be considered where necessary.
11.2 Protect significant indigenous vegetation and significant habitats of indigenous fauna	A schedule of SNAs is present in the District and the SNAs are present on planning maps. Rules surrounding modification to SNAs must ensure that there is no more than minor effects to the values of any given SNA and incentives are provided to encourage legal protection of SNAs.	Protection of the characteristics that contribute to a site being considered significant is to be considered when AEEs are undertaken for resource consent.	Protection of the characteristics that contribute to a site being considered significant is to be considered when AEEs are undertaken for resource consent.	Little mention of the preservation of unique characteristics of areas of significant indigenous vegetation and habitats of indigenous fauna. These aspects are mentioned with respect to the reasons for rules around important areas but there are no specific directives for ensuring those special characters are protected from development.	A schedule of SNAs is present in the District and the SNAs are present on planning maps. Rules surrounding modification to SNAs must ensure that there is no more than minor effects to the values of any given SNA and incentives are provided to encourage legal protection of SNAs	A schedule of SNAs is present in the District and the SNAs are present on planning maps. The focus of rules within the plan is maintenance and enhancement of biodiversity.
11.2.2 Protect areas of significant indigenous vegetation and significant habitats of indigenous fauna	The range of considerations for the protection of indigenous biodiversity listed within this policy is recognised in the plan.	The main avenue for protection of SNAs is through resource consent application and consequent AEEs. Any adverse effects are to be avoided, remedied, or mitigated. No specific guidelines are given for what constitutes appropriate remediation.	The main avenue for protection of SNAs is through incentives for lodging areas of significant indigenous vegetation/habitat in conservation allotments. Determination of SNAs will be undertaken within the resource consent application process. Any adverse effects are to be avoided, remedied, or mitigated. No specific guidelines are given for what constitutes appropriate remediation.	Areas of significant indigenous vegetation and habitats for indigenous fauna are not specifically mentioned in this plan due to the paucity of such areas. The environmental protection overlay attempts to define the areas of importance for indigenous biodiversity and ecological resilience. Specific constraints on development are listed for the areas defined as important with the remaining development subject to the resource consent process. Specific guidelines of items that should be considered when assessing effects on the special areas are not listed.	The range of considerations for the protection of indigenous biodiversity listed within this policy is recognised in the plan.	The issues listed in this policy are not explicitly stated within the district plan. However through the resource consent and attendant assessment of environmental effects these items should be attended to.
11.2.3 Assess significance	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.	Planned database of important ecological sites but no mention of the criteria that will be used to determine significance.	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.
11.4 Safeguard coastal/marine ecosystems	Not applicable. No coastal areas within the district.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Not applicable. No coastal areas within the district.	The Hauraki District plan contains a separate section for the coastal zone and includes lists of permitted, discretionary, restricted discretionary, and controlled activities within the coastal zone. Protection of indigenous ecosystems, species, habitats, and vegetation types within the coastal zone are included within the schedule of SNAs, the identification of outstanding landscapes, a notable tree layer, the Waikato Regional Coastal Plan, and the Hauraki Gulf management plan. Most of the items listed in this policy are provided for under the plan with the remainder to be considered during the resource consent process.	Not applicable. No coastal areas within the district.
11.4.1 Regional and district plans	Not applicable. No coastal areas within the district.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Not applicable. No coastal areas within the district.	The range of considerations for the protection of coastal indigenous biodiversity listed within this policy is recognised in the plan.	Not applicable. No coastal areas within the district.

(Continued …)

(… Appendix 3 Continued)

	District Plan Provisions				
District Plan	**Waipa**	**Otorohanga**	**Waitomo**	**Taupō**	**Rotorua**
Status	**Partially Operative 2016**	**Operative 2014**	**Operative 2009**	**Operative 2007**	**Operative 2016**
WRC Indigenous Biodiversity Policy					
11.1. Maintain or enhance indigenous biodiversity	Maintaining or enhancing the full range of ecosystem types and function is listed as a key objective in the indigenous biodiversity chapter. Due to the low percentage of remaining indigenous biodiversity within the district, growth of indigenous biodiversity is a significant factor for the district, in particular the creation and restoration of connectivity between the widely fragmented key biodiversity hotspots.	Maintenance and enhancement of ecological processes, biodiversity, habitat connectivity, and protection of populations of threatened flora and fauna are not explicitly mentioned.	Maintenance and enhancement of ecological processes, biodiversity, habitat connectivity, and protection of populations of threatened flora and fauna are not explicitly mentioned.	No specific provisions for enhancing or maintaining ecological functioning. Limited provisions for maintaining full ecosystem types. Relies on Assessments of Environmental effects as part of the resource consent process to 'have regard' for these issues.	Protecting and, where possible enhancing, the full range of ecosystem types and function located within SNAs is listed as a key objective in the relevant chapter.
11.1.1 Maintain or enhance indigenous biodiversity	The key methods for protecting and enhancing indigenous biodiversity is through managing activities associated with subdivision and other development. Esplanade strips and/or reserves are included within this provision. Creation of buffers to wetland habitats and creation of ecological corridors between SNAs is a key driver of the indigenous biodiversity policies in the plan.	Positive indigenous biodiversity outcomes are to be provided by way of protection and enhancement of areas of significant biodiversity value as a result of the resource consent process. There is no mention of local biodiversity strategies or of an imperative to create buffers, links, or corridors. The provision of esplanade strips is not linked in writing in the plan to indigenous biodiversity gains.	Positive indigenous biodiversity outcomes are to be provided by way of protection and enhancement of areas of significant biodiversity value as a result of the resource consent process. There is no mention of local biodiversity strategies or of an imperative to create buffers, links, or corridors. The provision of esplanade strips is not linked in writing in the plan to indigenous biodiversity gains.	No mention of esplanade reserves or strips. Incentives to promote positive biodiversity outcomes through conferment of bonus lots during the subdivision process.	The key methods for protecting and enhancing indigenous biodiversity is through managing activities associated with subdivision and other development. Due to the large number of lakes and major rivers in the district, provisions for water quality by way of esplanade strips appear to be a key priority of biodiversity protection and enhancement provisions in the plan.
11.1.2 Adverse effects on indigenous biodiversity	The range of adverse effects of development on indigenous biodiversity is not specifically stated within the plan.	The potential adverse effects on indigenous biodiversity as a result of development are not explicitly listed in the district plan.	Some of the potential adverse effects on indigenous biodiversity as a result of development are listed in the district plan.	Some mention of potential adverse effects on indigenous biodiversity through list of things that must be considered in the resource consent application process but no specific mention of cumulative adverse effects in relation to biodiversity.	Most of the issues listed in this policy are listed in the plan as potential adverse effects on indigenous biodiversity.
11.1.3 Avoidance, remediation, mitigation, and offsetting for indigenous biodiversity that is not significant	Modification to unscheduled indigenous biodiversity outside of identified ecological corridors is a permitted activity.	Matters listed in this policy have not been stated as important for works affecting non-significant vegetation.	Matters listed in this policy have not been stated as important for works affecting non-significant vegetation.	No specific mention of consideration of indigenous vegetation or habitats of indigenous fauna that has not been identified as significant.	Modification to unscheduled indigenous biodiversity outside of identified geothermal areas, waterbody margins, and gully systems is not mentioned within the plan.
11.1.4 Recognition of activities having minor adverse effects on indigenous biodiversity	All provisions within this policy have been replicated within the plan as either permitted, controlled, discretionary, or restricted discretionary activities depending on the relative significance of the SNA in question (local, regional, national, or international).	All provisions within this policy have been replicated within the plan.	All provisions within this policy have been replicated within the plan.	All provisions within this policy have been replicated within the plan.	All provisions within this policy are permitted activities within SNAs provided no net loss of indigenous biodiversity results, the ecological integrity of a site is not compromised, and that any unavoidable adverse effects are suitably mitigated.
11.1.8 Plan development	Incentives for biodiversity enhancement and protection will be offered through subdivision incentives. Non-regulatory incentives will also be considered but these are currently under development.	Incentives for indigenous biodiversity enhancement include conferment of additional subdivision rights. No mention of financial contributions to maintain or enhance biodiversity.	Rates relief appears to be the only incentive for indigenous biodiversity protection within the plan. No mention of incentives for enhancement was found.	Incentives for indigenous biodiversity enhancement are to be provided through non-regulatory avenues but no details are given of what these are and how they will be implemented.	Incentives for biodiversity enhancement and protection within SNAs will be offered through subdivision incentives. No mention of non-regulatory incentives was found within the plan however this does not mean that non-regulatory methods do not exist.
11.1.10 Funding and assistance	Incentives for biodiversity enhancement and protection will be offered through subdivision incentives. Non-regulatory incentives will also be considered but these are currently under development. Esplanade strips/reserves will be acquired where necessary during subdivision and development.	No mention of rates relief, grants, or contestable funds in the district plan.	Rates relief appears to be the only incentive for indigenous biodiversity protection within the plan. No mention of incentives for enhancement was found. No mention of local biodiversity strategies was found.	No mention of rates relief or grants, but vague statements about incentives for restoration, enhancement, and protection are included.	Incentives for biodiversity enhancement and protection within SNAs will be offered through subdivision incentives. No mention of non-regulatory incentives was found within the plan however this does not mean that non-regulatory methods do not exist.
11.2 Protect significant indigenous vegetation and significant habitats of indigenous fauna	A schedule of SNAs and significant bush lots are present in the District and are present on planning maps. The focus of rules within the plan is maintenance and enhancement of biodiversity, and creation of ecological corridors.	Protection of the characteristics that contribute to a site being considered significant is to be considered when AEEs are undertaken for resource consent.	Protection of the characteristics that contribute to a site being considered significant is to be considered when AEEs are undertaken for resource consent.	Protection of the characteristics that contribute to a site being considered significant is to be considered when AEEs are undertaken for resource consent.	A schedule of SNAs is present in the District; SNAs are also mapped on planning maps.
11.2.2 Protect areas of	Items a-d are provided for within explanations on indigenous biodiversity	The main avenue for protection of SNAs is through resource consent application and	The main avenue for protection of SNAs is through resource consent application and	The main avenue for protection of SNAs is through resource consent application and	A schedule of SNAs is present in the District; SNAs are also mapped on planning maps.

	District Plan Provisions				
District Plan	**Waipa**	**Otorohanga**	**Waitomo**	**Taupō**	**Rotorua**
significant indigenous vegetation and significant habitats of indigenous fauna	within the plan. The remaining items will likely be considered through the assessment of environmental effects as part of the resource consent process.	consequent AEEs. Any adverse effects are to be avoided, remedied, or mitigated. No specific guidelines are given for what constitutes appropriate remediation.	consequent AEEs. Any adverse effects are to be avoided, remedied, or mitigated. No specific guidelines are given for what constitutes appropriate remediation.	consequent AEEs. Any adverse effects are to avoided, remedied, or mitigated. No specific guidelines are given for what constitutes appropriate remediation.	The other matters contained within this policy will be attended to through the assessment of environmental effects as part of the resource consent process.
11.2.3 Assess significance	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the district.	WRC criteria were used to identify SNAs within the part of the Rotorua District located within the Waikato Region. Bay of Plenty Regional Council criteria were used to identify SNAs within the part of the Rotorua District located within the Bay of Plenty Region.
11.4 Safeguard coastal/marine ecosystems	Not applicable. No coastal areas within the district.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species. However areas of significance in the coastal and marine area are not specifically provided for in the plan. Coastal policy seems to focus on natural character, water quality, and heritage.	Not applicable. No coastal areas within the district.	Not applicable. No coastal areas within the district.
11.4.1 Regional and district plans	Not applicable. No coastal areas within the district.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species.	Criteria in this policy applied in the same manner as when considering other areas of biodiversity that have been identified as significant and/or contain populations of threatened and at risk indigenous species. However areas of significance in the coastal and marine area are not specifically provided for in the plan. Coastal policy seems to focus on natural character, water quality, and heritage.	Not applicable. No coastal areas within the district.	Not applicable. No coastal areas within the district.

Providing outstanding ecological services to sustain and improve our environments

Call Free 0508 WILDNZ
Ph: +64 7 343 9017
Fax: +64 7 3439018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042,
New Zealand

Regional Offices located in
Auckland, Hamilton, Tauranga,
Whakatane, Wellington,
Christchurch and Dunedin

ECOLOGY RESTORATION BIODIVERSITY SUSTAINABILITY

www.wildlands.co.nz

Appendix E

Stocktake Data Collection Table

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
Totals	Yes: 8 Multiple plans used other terms such as natural heritage which contained specific objectives and policies to achieve biodiversity outcomes, without specifically referencing biodiversity in the title	Yes: 16 No: 9	Yes: 11 No: 14	'Biodiversity' used in Objectives and policies- 16 Not in Objectives, but yes in policies- 5 No objectives or policies- 5	Biodiversity' used in Rules: Yes: 2 No: 10 Used in Matters of Discretion/Assessment Criteria: 11	Methods Used: (Multiple Plans for single Council counted as 1) Research: 2 Incentives: 5 Funding: 2 Covenant: 3 Purchase of land: 2 Database: 5 Advocacy: 5 Education: 7 Re-vegetation: 1 On-going maintenance: 3 Monitoring: 3 Alternative locations: 2 Landowner involvement: 8 Iwi Engagement: 6 Volunteers: 6 Management Plans/Policies: 10 Local strategies: 1	Criteria Used: Uniqueness/Distinctiveness: 7 Representativeness: 11 Rarity: 11 Iwi: 5 Diversity: 6 Cultural and Natural Values: 4 Natural Elements: 5 Migration Values: 5 NPS/RPS: 4 Outstanding: 1 Natural diversity: 1 Pattern: 2 Shape/Size: 1 Biophysical: 2 Ecological: 3 The natural movement of water: 1 Wild/Scenic: 2 Heritage 3 International Recognition: 1 National Recognition: 1 Land cover: 2 Sustainability: 3 Ecological Context: 4 Local Reports/Pre-existing database: 2 Aesthetic: 1 Modification: 1 Freshwater: 2 Natural Landforms: 2 Research and Education: 1 Coherence: 1 Vividness: 1 Intactness: 1 Occurrence: 1 Shared Recognition and values: 1 Natural features and landscapes: 1 Part of an uncommon ecological sequence: 1 Threatened: 1	Limits imposed on significant indigenous vegetation modification (includes Outstanding Areas, recognised significant : Permitted: 1000m^2 2000m^2 Less than 500m^2 20000m^2 (2ha) Controlled: Any Modification 20000m^2 (2ha) Restricted Discretionary: 250m^2 Discretionary Any Modification x7 Non-Complying: Any Modification Prohibited: Any introduction of introduced plants No Rules: 2 NA: 6 (Air Plans etc)	Categories Used (Multiple similar categorises in singular plans counted as 1) Outstanding Natural Landscapes: 14 Outstanding Natural Features: 8 Outstanding Natural; Character: 4 Very High Natural Character: 1 High Natural Character: 3 Significant Ecological Areas: 4 Areas of Significant Cultural Value: 1 Management Areas: 4 Heritage Areas: 2 Significant indigenous biodiversity: 1 Outstanding Water bodies: 2 Regionally Significant Wetlands: 2 Watercourses of Ecological Value: 1 Protected Watercourses: 2 Rare/Threatened Habitat: 5 High Priority Water bodies: 1 Migration Paths: 1 Indigenous Ecosystems and Habitats: 4 Rivermouths: 1 Indigenous Biological Diversity in Areas in the Coastal Environment: 1	Yes: 22 No: 1 (Air Plan) NA: 1	Different monitoring methods used No specific biodiversity monitoring: 12 General s35 Monitoring: 13 Included in Objectives: 3 Included in Policies: 7 Included in Methods: 4 Included in Rules: 3 Council run monitoring strategies/consent compliance: 6 RPS: 2
Northland - New Regional Plan Combined 2016 (Draft)	No	Yes	No	Objective F.0.1 Northland's water, coastal marine area, air and soil (and associated ecosystems) are used, developed and protected in a manner that safeguards their life-supporting capacity and maximises present and future environmental, cultural, social and economic values. Policy D.2.3	The deliberate introduction or planting of any plant in any river or lake is a permitted activity, provided: The activity is not located in a wetland, and the activity does not involve the deliberate introduction or	Wastewater network management plan, storm water management plan, drainage district management plan, freshwater quality limits, water quality limits	Reference to the National Policy Statement for Freshwater Management 2014, Policy 12(2) of the New Zealand Coastal Policy Statement 2010 Including: natural elements, processes and patterns; Biophysical, ecological and geomorphological aspects; natural landforms such as	Within significant areas: None Outside significant Areas: Vegetation clearance Permitted: The area of cleared vegetation is less than	Outstanding natural landscapes, outstanding natural features, outstanding natural character, high natural character	Yes	No specific 'biodiversity' monitoring General monitoring of non-compliance, Section 35 RMA

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				Manage adverse effects of activities requiring resource consent on indigenous biodiversity by: 1. avoiding adverse effects on the characteristics and qualities that comprise the following indigenous biodiversity in the coastal environment: a) indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists, and b) areas of indigenous vegetation and habitats of indigenous fauna, that are significant using the assessment criteria in Appendix 5 of the Regional Policy Statement for Northland, and c) areas set aside for full or partial protection of indigenous biodiversity under other legislation, and d) areas of a), b), and a) as displayed in maps – I.3 'Significant marine ecological areas map', One Objective for the Plan and large indigenous biodiversity policy, another policy on outstanding natural landscapes, features, character and high character Biodiversity used?: Obs : No; Pols: Yes	planting of invasive plants, pests, or organisms Biodiversity only mentioned in matters of discretion concerning construction in wetlands		headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks; the natural movement of water and sediment; the natural darkness of the night sky; places or areas that are wild or scenic; and experiential attributes, including the sounds and smells of the seas; and their context and setting	200m2 in the following areas: a) 5m from a natural wetland, or b) 5m from the bed of a permanently flowing or intermittently flowing river, or c) 10m from the bed of a lake, or d) 20m from the bed or an outstanding freshwater body, or e) the coastal riparian management zone. Noncompliance with rule defaults to Controlled with matters of control: 1. Measures to manage effects on riparian vegetation and aquatic ecosystems, 2. The timing and extent of vegetation clearance in riparian areas, and 3. Erosion and sediment control measures.			
Far North District Plan 2015	No 12.1 Landscape and Natural Features; 12.2 Indigenous Flora and Fauna Use of the word 'biodiversity': Yes	Yes	Yes	Objective 12.2.3.1 To maintain and enhance the life supporting capacity of ecosystems and the extent and representativeness of the District's indigenous biological diversity. Objective 12.1.3.3 To recognise and provide for the distinctiveness, natural diversity and complexity of landscapes as far as practicable including the complexity found locally within landscapes and the diversity of landscapes across the District. Policy 12.2.4.1 That areas of significant indigenous vegetation	12.1.6.1.1 PROTECTION OF OUTSTANDING LANDSCAPE FEATURES (a) no tree planting consisting of more than 50 trees of a single species shall occur on any site in an Outstanding Landscape Feature as listed in Appendix 1B in Part 4, and shown on the Resource Maps; No specific rules specifically for	Voluntary protection areas of significant indigenous vegetation and habitat; establish a Significant Natural Area Committee with Iwi, landowners and Council to manage resource issues; establish a database of indigenous vegetation	aesthetic, heritage, rarity, cultural and natural values	Permitted: Indigenous vegetation clearance in Outstanding Landscapes 1000m2 Discretionary: Non-compliance with permitted rule	Outstanding Natural Features; Outstanding Natural Landscapes	Yes	No specific 'biodiversity' monitoring General monitoring of non-compliance, Section 35 RMA

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				and significant habitats of indigenous fauna be protected for the purpose of promoting sustainable management with attention being given to: (a) maintaining ecological values; (b) maintaining quality and resilience; (c) maintaining the variety and range of indigenous species contributing to biodiversity; Emphasis on ecosystems, significant indigenous vegetation, significant habitats, outstanding landscapes and natural features Biodiversity used?: Obs: Yes; Pols: Yes	biodiversity Included in Assessment Criteria						
Decision Version Auckland Unitary Plan-RPS 2016	No B7 Natural Resources Use of the word 'biodiversity': Yes	No	No	B7.2. Indigenous biodiversity B7.2.1. Objectives (1) Areas of significant indigenous biodiversity value in terrestrial, freshwater, and coastal marine areas are protected from the adverse effects of subdivision use and development. (2) Indigenous biodiversity is maintained through protection, restoration and enhancement in areas where ecological values are degraded, or where development is occurring. Policy (5) (5) Manage subdivision, use, development, including discharges and activities in the beds of lakes, rivers streams, and in wetlands, to do all of the following: (d) maintain or where appropriate enhance: (iv) areas of significant indigenous biodiversity Biodiversity used?: Obs: Yes; Pols: Yes	NA	Auckland Conservation Management Strategy, parks and open spaces policies and plans, catchment management plans, advocacy and education,	Schedule 3: Representativeness, Threat Status and rarity, diversity, stepping stones and migration pathways and buffers, uniqueness or distinctiveness Schedule 4: Recognised international or national significance, threat status and rarity, uniqueness or distinctiveness, diversity, stepping stones and buffers and migration pathways, representativeness, exclusion indicators,	NA	Schedule 3 Significant Ecological Areas – Terrestrial Schedule, Schedule 4 Significant Ecological Areas – Marine Schedule	NA/No	Objectives specific mentioning the maintenance of indigenous biodiversity. Other Objectives focused on measuring the degradation of ecological systems (freshwater, air, scheduled significant areas) General monitoring of non-compliance, Section 35 RMA
Decision Version Auckland -Unitary Plan 2016	No Chapter E Natural Resources	Yes	Yes	E15.2. Objectives [rcp/rp/dp] (1) Ecosystem services and indigenous biological diversity values, particularly in sensitive environments, and areas of contiguous indigenous vegetation cover, are maintained or enhanced while providing for appropriate subdivision, use and development. (2) Indigenous	Permitted Vegetation alteration or removal of up to than 25m2 of any contiguous indigenous vegetation Restricted Discretionary:	No direct methods relating to biodiversity	Places identified through existing information on databases sourced from: • Auckland Department of Conservation Management Strategy; • Department of Conservation Sites of Special Wildlife Interest Database (sites of outstanding, high, moderate-	Vegetation Clearance Restricted Discretionary E15(A10)Vegetation alteration or removal, including cumulative removal on a site over a 10-year period, of greater than 250m2 of	Wetland Management Areas, Natural Lake Management Areas, Significant Ecological Areas – Terrestrial, Significant Ecological Areas – Marine, Significant	Yes	RPS Monitoring No specific biodiversity monitoring

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				biodiversity is restored and enhanced in areas where ecological values are degraded, or where development is occurring. E15.3. Policies [rcp/rp/dp] 2) Manage the effects of activities to avoid significant adverse effects on biodiversity values as far as practicable, minimise significant adverse effects where avoidance is not practicable, and avoid, remedy or mitigate any other adverse effects on indigenous biological diversity and ecosystem services, including soil conservation, water quality and quantity management, and the mitigation of natural hazards. Biodiversity mentioned but not the main focus of the Obs and Pols. Biodiversity is used for general direction for specific wetlands, vegetation, etc protection Biodiversity used?: Obs: Yes; Pols: Yes	Vegetation alteration or removal of greater than 25m2 of any contiguous indigenous vegetation No specific biodiversity rules		high or moderate ranking); • WERI (Wetlands of Ecological and Representative Importance) database; • Regional and District Plans, including Appendix B of the Auckland Regional Policy Statement 1999; • Protected Natural Area Programme survey reports; • Local reports such as Waiheke Island Sites of Significance.	indigenous vegetation that: (a) is contiguous vegetation on a site or sites existing on 30 September 2013; and (b) is outside the rural urban boundary	Ecological Areas – Marine where mangroves are a minor component or absent, Outstanding Natural Features, Outstanding Natural Landscapes, Outstanding Natural Character and High Natural Character, Notable Trees, Waitakere Ranges Heritage Area Subdivision,		
Bay of Plenty Coastal Plan 2015	No Natural Heritage	Yes	Yes	Objective 2A Safeguard the integrity, form, functioning and resilience of the coastal environment and sustain its ecosystems by: (a) Protecting Indigenous Biological Diversity Areas A, (b) Maintaining Indigenous Biological Diversity Areas B; (c) Promoting the maintenance of indigenous biodiversity in general; and (d) Enhancing or restoring indigenous biodiversity where appropriate. Policy NH 3A Urban activities in the coastal environment surrounding Ōhiwa Harbour and Waiōtahe Estuary should be avoided unless: (a) It can be demonstrated that the activities will not cause cumulative adverse effects on the natural character, natural features and biodiversity of these areas; or Biodiversity used?:	Rule DD 15: In an Indigenous Biological Diversity Area A or area of Outstanding Natural Character (as identified in Appendix I to the RPS) that is not otherwise a permitted, controlled, restricted discretionary activity or prohibited activity under a rule in this Plan is a discretionary activity where the activity is one for one or more of the following purposes: (a)Providing protection, restoration or rehabilitation for the biodiversity or natural character values associated with such areas;	Method 2 Support private landowners to protect and enhance high value ecological sites in the coastal environment using sustainable land management, biodiversity protection and pest animal and pest plant control. Method 2A Assess Māori cultural values and attributes comprising the elements of Outstanding Natural Character, Outstanding Natural Features and Natural Landscapes and Indigenous Biological Diversity Areas in the coastal environment. Work with tāngata whenua to develop a	Representativeness, Research and education, Rarity, Coherence, Vividness, Naturalness, Intactness, Natural features and landscapes, occurrence, shared and recognised values, Maori values, historical associations	None measurable biodiversity rules. Biodiversity included in Plans and matters of discretion and control	Rivermouths, Indigenous Biological Diversity Areas in the Coastal Environment, Outstanding Natural Features and Landscapes in the Coastal Environment, Areas of Significant Cultural Value, Historic Heritage Inventory	Yes	Monitoring included in Methods, Rules matters of discretion, Policy Compliance monitoring No specific biodiversity rules

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				Obs: Yes; Pols: Yes	Specific biodiversity rules Biodiversity matters of discretion	framework for assessment of effects on cultural values and attributes. Method 3 Support and facilitate research that will identify areas in the Bay of Plenty region where ecosystems and biodiversity values are most likely to be impacted by climate change, and research into the capacity and options available to manage such changes. Method 3A Support research to identify areas in the Bay of Plenty region where ecosystems and biodiversity values are being, or are likely to be, adversely effected by fishing activities, and investigate the options available to manage such activities for the protection of indigenous biodiversity. Method 4 Encourage district councils to take into account the adverse effects that domestic animals and garden plant varieties can have on natural heritage values, when preparing district plans that regulate urban development and public access in the coastal environment.					
Bay of Plenty - Proposed Air Plan 2016	No	No	No	Objective 3: Manage discharges of contaminants to air according to their potential health, nuisance, and amenity effects, and their impact on the mauri of air.	No specific biodiversity rule	No specific biodiversity methods	None	none	None	No	

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				No specific biodiversity objectives or policies Biodiversity used?: Obs: No; Pols: No							
Bay of Plenty - RPS 2014	No	Yes	No	Objective 2 Preservation, restoration and, where appropriate, enhancement of the natural character and ecological functioning of the coastal environment Policy CE 6B: Protecting indigenous biodiversity Biodiversity only mentioned in the policy above Biodiversity used?: Obs: No; Pols: Yes	NA	Method 49: Improve biodiversity values of open spaces Reserves, parks and other open space (including esplanade strips and reserves) should be acquired or protected by covenant and then managed to improve biodiversity values, where this is consistent with the purpose of open space. This should be implemented with reference to significant indigenous vegetation and habitats of indigenous fauna where these have been identified as warranting protection as a matter of national importance through the application of the criteria set out in Appendix F and other identified regional biodiversity priorities.	Natural Character attributes: Water characteristics, abiotic systems and landforms, land cover and land use, terrestrial biotic, perceptual	NA	High Natural Character, Very High Natural Character, Outstanding Natural Character	Yes	Natural Environment Regional Monitoring Network (NERMN) monitors the state of, and trends in, the environment. General monitoring of non-compliance, Section 35 RMA Objectives included on-going 'management' and 'maintenance'
Waikato Regional Policy Statement May 2016	No	Yes	Yes	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 Maintain or enhance indigenous biodiversity 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, with a particular focus on: h) tāngata whenua relationships with indigenous biodiversity including their holistic view of ecosystems and the environment; j) the	NA	Maintenance of biodiversity area, recognition of adverse effects on biodiversity, offsetting, avoidance, remediation, mitigation, information gathering, biodiversity inventory, threatened species information, incentives, pest management, funding and assistance, local strategies	Representative, threatened, under-represented indigenous vegetation, migration, part of an uncommon ecological sequence,	NA	Outstanding Natural Features and Landscapes, Significant indigenous vegetation, significant habitats or indigenous fauna	Yes	Specific indigenous biodiversity monitoring

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				consideration and application of biodiversity offsets Biodiversity used?: Obs: Yes; Pols: Yes							
Proposed Opotiki District Plan (consultation closes Nov 18 2016)	No Chapter 13 Landscapes and Vegetation Use of the word 'biodiversity': Yes	Yes	Yes. Surface of Water Activities, Heritage, Natural Hazards, Subdivision	13.2.2 OBJECTIVE – INDIGENOUS VEGETATION AND HABITATS The sustainable management of indigenous vegetation and habitats of indigenous fauna to maintain and, where appropriate, enhance biodiversity of the District. POLICIES 13.2.2.5 To avoid, or, where this is not practicable, remedy, mitigate or offset the adverse effects of activities on indigenous biodiversity, including protecting indigenous ecosystems, rare, at risk, or threatened species and their habitats. Focus on Outstanding Natural Features and Landscapes, indigenous vegetation and habitats, wetlands, and natural character Biodiversity used?: Obs: Yes; Pols: Yes	13.5 ASSESSMENT OF CONTROLLED ACTIVITIES 13.5.1 The Council has reserved control over the following matters for all Controlled Activities and may impose conditions in relation to these matters. 1. The location and extent of vegetation to be cleared in relation to the minimum area required for the house and curtilage. 2. The management and protection of any rare and threatened species No specific biodiversity rules	Raise public awareness; consult and liaise with landowners, iwi, regional council, ODC about conservation; rates relief; use the Natural Heritage Fund; promote Nga Whenua Rahui to protect significant natural areas on their land; encourage volunteers	Representativeness, rarity or distinctive features, diversity and pattern, naturalness, ecological context, viability and sustainability, Maori, historical, community association	Permitted Performance Standard in Outstanding Natural Features or Landscapes: Controlled: 2. Within a site listed in 13.9.1 or 13.9.2 (Outstanding Natural Features and Landscapes), earthworks and vegetation clearance and disturbance for the construction of new walking and cycling tracks. Restricted Discretionary: Within a site listed in 13.9.1 or 13.9.2 (Outstanding Natural Features and Landscapes),, indigenous vegetation clearance and disturbance for new buildings and building platforms not provided for above. Discretionary: Within a site listed in 13.9.1 or 13.9.2, indigenous vegetation clearance and disturbance not otherwise provided for as a Permitted, Controlled or Restricted Discretionary Activity.	Outstanding natural Landscapes, Outstanding Natural Features	Yes	No specific 'biodiversity' monitoring General monitoring of non-compliance, Section 35 RMA
Gisborne - Freshwater Plan going through hearing process	No	Yes	Yes	Objective 1 The quality and quantity of the Region's freshwater bodies and their catchments is managed so that ecosystems are able to continue to function, including supporting habitat and feeding, breeding, migratory and other requirements of indigenous species, and that the life	Discretionary Activity: Any activity that results in the modification of a wetland including drainage, infilling or vegetation clearance provided that it is not a Regionally Significant Wetland	Catchment Plans, Setting up collaborative stakeholder groups to develop each catchment plan, Values identified through collaborative process inform the limit setting process	National Policy Statement for Freshwater Management 2014	Discretionary Activity: Any activity that results in the modification of a wetland including drainage, infilling or vegetation clearance provided that it is not a Regionally Significant Wetland identified in Schedule 3.	Outstanding Waterbodies, Regionally Significant Wetlands, Watercourses in Land Drainages Areas with Ecological Values, Protected	Yes	Council run research and monitoring effectiveness of Obs and Pols included in Policies and Methods, database established,

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				supporting capacity of freshwater is maintained. Policy 4.1.13 In addition to the policies above, when considering applications to take and use water, the following assessment criteria shall be used: I. Any actual or potential adverse effects on significant indigenous biodiversity or aquatic ecosystem values identified in Schedule 1; Biodiversity used?: Obs: No; Pols: Yes	identified in Schedule 3. Non-complying Activity: Any activity that results in the modification of a Regionally Significant Wetland identified in Schedule 3 not provided for in another Rule, No specific biodiversity rules	for each catchment, Consult with iwi and hapu to ascertain the nature of cultural and spiritual values they hold in relation to specific waterbodies, Iwi and hapu, community and landowner input to identifying outstanding and regionally significant waterbodies, Iwi, landowners, communities and water user groups working with council on specific actions to improve water quality, Development of restoration plans for reaches of waterbodies in Council ownership, including restoration of riparian areas as part of reserve management in areas with regionally significant values.		Non-complying Activity: Any activity that results in the modification of a Regionally Significant Wetland identified in Schedule 3 not provided for in another Rule	Watercourses		
Gisborne District Plan 2011	No Natural Heritage Use of the word 'biodiversity': Yes	Yes	Yes	Objective 1. The maintenance and, where appropriate, enhancement of the abundance, distribution range and diversity of the Gisborne District's indigenous flora and fauna. Policy To protect, through the maintenance or enhancement of, the biodiversity of indigenous flora and fauna throughout the Gisborne District. Regard to the following will be had when preparing plans or considering applications for plan changes, resource consents or designations affecting natural heritage values not specifically provided for in Natural Heritage Overlays: Targeted objectives and policies towards specific aspects of biodiversity e.g. riparian margins, wetlands, vegetation Biodiversity used?: Obs: yes; Pols: Yes	Controlled: 4.7.2.1 Clearance of plantation forest vegetation planted prior to the notification of this plan provided that: 1. Vegetation clearance exceeds 2ha in any contiguous area and /or exceeds 2ha over any 12 month period Council shall limit its control to the matters a) - f) specified below: d) Potential effect on the values associated with natural character, biodiversity, significant habitat of indigenous fauna, amenity value and landscape, including revegetation type and	Community engagement for knowledge and monitoring, advocacy of sites values, education of management issues to community and interest groups, Natural Heritage Fund, Research into Formally Protected Areas and Significant Waterbodies and Riparian Areas	Representativeness, Natural diversity, pattern, rarity, naturalness, viability, buffering, surrounding landscape	Outstanding Landscape Area Overlay: Controlled: 4.7.2.1 Clearance of plantation forest vegetation planted prior to the notification of this plan Provided that: 1. Vegetation clearance exceeds 2ha in any contiguous area and /or exceeds 2ha over any 12 month period. Restricted Discretion: 4.7.3.1 Vegetation clearance, other than that specifically permitted or authorised by another rule Provided that: 1. Vegetation clearance exceeds 500m2 in any contiguous area and/or exceeds 500m2 over any 12 month period.	Protection Management Area, Gisborne Urban Ridgeline Overlay, Riparian Management Area Overlay, Outstanding Landscape Area Overlay, Natural Heritage Overlay	Yes	No specific 'biodiversity' monitoring General monitoring of non-compliance, Section 35 RMA

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
					density as they impact on these values Biodiversity used in Council discretion, not in a measured amount stated in the rules.						
Horizons - One Plan 2016	Yes. Land Use Activities and Indigenous Biological Diversity	No	No	**Objective 13-2: Regulation of activities** *affecting indigenous biological diversity^* The regulation of resource use activities to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna or to maintain indigenous *biological diversity^*, including enhancement where appropriate. **Policy 13-4: Consent decision-making for activities in** *rare habitats*, threatened habitats** **and** *at-risk habitats** Consent must generally not be granted for resource use activities in a rare habitat*, threatened habitat* or at-risk habitat* assessed to be an area of significant indigenous vegetation or a significant habitat of indigenous fauna under Policy 13-5, unless: any more than minor adverse effects^ on that habitat's representativeness, rarity and distinctiveness, or ecological context assessed under Policy 13-5 are avoided. where any more than minor adverse effects^ cannot reasonably be avoided, they are remedied or mitigated at the point where the adverse effect^ occurs. where any more than minor adverse effects^ cannot reasonably be avoided, remedied or mitigated in accordance with (b)(i) and (ii), they are offset to result in a net indigenous biological diversity^ gain. Specific biodiversity Objectives	**Permitted: 13-1 Small-scale** *land disturbance** Conditions: a) The activity must not take place onland^ that is within a coastal foredune*. b) The activity must not occur on land^that is in, or within 5 m of: i)the bed^ of a river^ that is permanently flowing, ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m, iii) the bed^ of a lake^. c) The activity must not occur on land^ that is in, or within 10 m of: i) A wetland^ as identified in Schedule F, ii) Sites valued for Trout Spawning as identified in Schedule B, iii) Sites of Significance - Aquatic as identified in Schedule B. No specific	No non-statutory methods	Tussockland* Habitat Type Classified as At-risk vii. An area of indigenous* tussockland* covering at least 0.5 ha. Or Wetland^ Habitat Types Classified as Threatened viii. Areas of naturally occurring indigenous* wetland^ habitat covering at least 0.1 ha. Or ix. Areas of indigenous* vegetation that have been established in the course of wetland^ habitat restoration. Or x. Areas of artificially created indigenous* wetland^ habitat covering at least 0.5 ha. Or Naturally Uncommon Habitat Types and Wetland^ Habitat Types Classified as Rare xi. Habitat type that is classified as Rare that covers at least 0.05 ha. Or xii. Areas of indigenous* habitat created at some time in the course of dune habitat restoration (including dune stabilisation).	Vegetation Clearance Permitted: a) The activity must not take place on*land^* that is within a *coastal foredune**. b)) The activity must not occur on land^that is in, or within 5 m of: (i) the bed^ of a river^ that is permanently flowing (ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m (iii) the bed^ of a lake^. (d) The activity must not occur on land^that is in, or within 10 m of: (i) A wetland^ as identified in Schedule F(ii) Sites valued for Trout Spawning as identified in Schedule B Restricted Discretionary: a) The activity must not take place onland^ that is within a coastal foredune*. (b) The activity must not occur on land^that is in, or within 10 m of: (i) the bed^ of a river^ that is	Threatened Habitat, Rare Habitat, At-risk Habitat,	Yes	RPS Monitoring, General monitoring of non-compliance, Section 35 RMA No specific biodiversity monitoring

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				and Policies. Focus on habitat Biodiversity used?: Obs: Yes; Pols: Yes	biodiversity rules			permanently flowing, (ii) the bed^ of a river^ that is not permanently flowing and has an active bed* width greater than 1 m, (iii) the bed^ of a lake^, (iv) a wetland^ as identified in Schedule F, (v) sites valued for Trout Spawning as identified in Schedule B, (vi) Sites of Significance - Aquatic as identified in Schedule B. Discretionary: Non Compliance with the above			
Whanganui District Plan PC45 - Natural Environment July 2016	No Natural Environments (only Policies and Urban River Landscape Overlay and Protected Trees rules) Use of the word 'biodiversity': No	Yes	No	Objective 10.2.4 An ecologically healthy natural environment. The natural environment is complex and dynamic, with many interactions (processes) between its parts. Some activities have the potential to destroy natural landscapes, ecosystems, habitats and natural processes. However, with appropriate planning and design, it is possible to carry out development in a way which does not compromise, or actively enhances, the health of the natural environment. Policy 10.3.5 To have particular regard for the maintenance and enhancement of conservation values, public access, amenity values and spiritual and cultural values, on key waterbodies. Broadly focused on the natural environment. Focus on riparian margins, urban river landscapes, protected trees and Outstanding Natural Landscapes. Includes access and cultural values Biodiversity used?: Obs: No; Pols: No	10.4.2 Restricted Discretionary Activities. The following are restricted discretionary activities in the Urban River Landscape: a. The erection of new structures. Council restricts its discretion to the following matters: i. Effects on amenity values including views and access to and along the river margins. ii. Effects on the landform, including physical characteristics of the riverbank and esplanade reserve. iii. The effect of the form, mass, proportion and materials of any buildings on the overall visual amenities and on any specifically identified views to be protected.	24.6.1 Develop written agreements and/or protocols for implementing the management of natural and physical resources of significance to Tangata Whenua. 24.6.4 Liaise with Tangata Whenua to produce written information about the significance of resources within the District. 24.6.19 Protected Tree owners advice Establish a system of consultation and advice to owners of protected trees regarding maintenance, root protection and progenation. 24.6.20 Tree Maintenance Programme assistance Provide	a. Protected Areas managed by the Department of Conservation (DOC). b. Council's reserves of conservation value. c. QEII National Trust areas protected by QEII open space covenants or owned by the Trust. d. New Zealand Fish and Game Council significant sites. e. Geo-preservation sites. f. Areas of dominant indigenous vegetation cover. g. Natural features and landscapes which are outstanding and regionally significant as defined in the Regional Policy Statement for ManawatuWhanganui. In the Whanganui District, these are: • the Whanganui River and river valley upstream of Aramoana; • the Whanganui National Park; and • the district's coastline.	10.5.3 Discretionary: a. The modification, destruction or removal of any protected tree except as provided for above. There were no specific indigenous biodiversity standards. Only Protected Tree Rules.	Outstanding Natural Landscapes (not yet reviewed in Plan/ has no rules)	Yes	No specific 'biodiversity' monitoring Policy: Outstanding Natural Landscapes 10.3.18 Monitor the health of the natural environment and revise management as appropriate General monitoring of non-compliance, Section 35 RMA

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
					iv. Landscaping proposals, including design and materials, and the effects of the landscaping on the visual amenity and on any specifically identified views shafts. v. Whether or not any structures individually or collectively forms a visual landmark and makes a positive contribution to the character of the area. No mention of 'biodiversity'	free assistance to owners of protected tree inventory items in the preparation of maintenance or conservation plans when required.					
Greater Wellington Regional Policy Statement 2013	no Indigenous ecosystems	No	Yes	Objective 3 Habitats and features in the coastal environment that have significant indigenous biodiversity values are protected; and Habitats and features in the coastal environment that have recreational, cultural, historical or landscape values that are significant are protected from inappropriate subdivision, use and development. Policy 24: Protecting indigenous ecosystems and habitats with significant indigenous biodiversity values – district and regional plans Specific biodiversity objectives and policies for significant and non-significant biodiversity for rivers, wetlands, habitats, ecosystems, and general biodiversity values Biodiversity used?: Obs: Yes; Pols: Yes	NA	Method 12: Information about techniques to maintain and enhance indigenous ecosystems Method 53: Support community restoration initiatives for the coastal environment, rivers lakes and wetlands	Direction from Policy 23 Policy 23: Identifying indigenous ecosystems and habitats with significant indigenous biodiversity values – district and regional plans District and regional plans shall identify and evaluate indigenous ecosystems and habitats with significant indigenous biodiversity values; these ecosystems and habitats will be considered significant if they meet one or more of the following criteria: (a) Representativeness: the ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or in the region, and: (i) are no longer commonplace (less than about 30% remaining); or (ii) are poorly represented in existing protected areas (less than about 20% legally protected). (b) Rarity: the ecosystem or habitat has biological or physical features that are scarce or threatened in a local, regional or national context. This can include individual species, rare and distinctive biological communities and physical features that are unusual or rare. (c) Diversity: the ecosystem or habitat has a	NA	Rivers and lakes with values requiring protection, indigenous ecosystems and habitats,	Yes	Regional Monitoring Strategy, General monitoring of non-compliance, Section 35 RMA

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
							natural diversity of ecological units, ecosystems, species and physical features within an area. (d) Ecological context of an area: the ecosystem or habitat: (i) enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats; or (ii) provides seasonal or core habitat for protected or threatened indigenous species. (e) Tangata whenua values: the ecosystem or habitat contains characteristics of special spiritual, historical or cultural significance to tangata whenua, identified in accordance with tikanga Māori.				
Greater Wellington - Proposed Combined Regional Plan 2016	No	Yes	No	3.6 Biodiversity, aquatic ecosystem health and mahinga kai Objective O25 To safeguard aquatic ecosystem health and mahinga kai in fresh water bodies and coastal marine area: (a) water quality, flows, water levels and aquatic and coastal habitats are managed to maintain aquatic ecosystem health and mahinga kai, and (b) restoration of aquatic ecosystem health and mahinga kai is encouraged, and (c) where an objective in Tables 3.4, 3.5, 3.6, 3.7 or 3.8 is not met, a fresh water body or coastal marine area is improved over time to meet that objective Policy 4.5 Biodiversity, aquatic ecosystem health and mahinga kai Policy P31: Aquatic ecosystem health and mahinga kai Aquatic ecosystem health and mahinga kai shall be maintained or restored by managing the effects of use and development on physical, chemical and biological processes to: (a) minimise adverse effects on natural flow characteristics and hydrodynamic processes, and the natural pattern and range of water level fluctuations in rivers, lakes and natural wetlands, and	Rule R106: Restoration of natural wetlands, significant natural wetlands and outstanding natural wetlands – controlled activity Activities for the purpose of restoring the indigenous biodiversity of a natural wetland, significant natural wetland or outstanding natural wetland identified in Schedule A3 (outstanding wetlands), that are not permitted by rules R104 and R105, are controlled activities provided the following condition is met The above rule is the only rule that including 'biodiversity'. Biodiversity included in the Matters of Discretion	Method M20: Wetlands Wellington Regional Council will work in partnership with mana whenua, landowners, territorial authorities, and the community to: (a) promote the value of wetlands and advocate for their management, restoration and protection, and (b) provide guidance to landowners with wetlands on their property to assist with the management of those wetlands, and (c) develop and implement Restoration Management Plans for landowners with outstanding wetlands and significant wetlands as required, and (d) provide incentives to landowners, such as assistance with the costs of riparian and wetland fencing, planting and pest control, and (e) encourage and assist with the legal	Criteria in the RPS 2013 Representativeness Rarity Diversity Ecological context Tangata whenua	Vegetation Permitted: Rule R100: Vegetation clearance on erosion prone land – permitted activity The use of land, and the discharge of stormwater into water or onto or into land where it may enter water from vegetation clearance of a contiguous area up to 2ha per property per 12 month period on erosion prone land is a permitted activity, provided the following conditions are met: (a) any soil or debris from the vegetation clearance is not placed where it can enter a surface water body or the coastal marine area, and (b) any soil disturbances associated with the vegetation clearance shall not after the zone of reasonable mixing, result in any of the following effects in receiving waters: (i) the production of conspicuous oil or grease films, scums of foams, or floatable or	Outstanding water bodies, Rivers and lakes with significant indigenous ecosystems: high macro invertebrate community health, Rivers and lakes with significant indigenous ecosystems habitat for indigenous threatened/at risk fish species, Rivers and lakes with significant indigenous ecosystems: habitat for six or more migratory indigenous fish species, Known rivers and parts of the coastal marine area with inanga spawning habitat, Lakes with significant aquatic plant communities, Habitats for indigenous birds in rivers, Habitats for indigenous birds in lakes, Habitats for indigenous birds in the coastal marine area, Sites with	Yes	Monitoring in Policies, Matters of Discretion, Methods including Monitoring and Reporting Plans

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				(b) minimise adverse effects on aquatic habitat diversity and quality, including the form, frequency and pattern of pools, runs, and riffles in rivers, and the natural form of rivers, lakes, natural wetlands and coastal habitats, and (c) minimise adverse effects on habitats that are important to the life cycle and survival of aquatic species, and (d) minimise adverse effects at times which will most affect the breeding, spawning, and dispersal or migration of aquatic species, and (e) avoid creating barriers to the migration or movement of indigenous aquatic species, and restore the connections between fragmented aquatic habitats where appropriate, and (f) minimise adverse effects on riparian habitats and restore them where practicable, and (g) avoid the introduction, and restrict the spread, of aquatic pest plants and animals. Specific biodiversity objectives and policies and other Obs and Pols about ecosystems health and mahinga kai Biodiversity used?: Obs: Yes; Pols: Yes		protection of wetlands through covenanting with the QEII National Trust, the Department of Conservation and Ngā Whenua Rahui. Methods included specifics on biodiversity		suspended materials, or (ii) any conspicuous change in colour or visual clarity, or (iii) any emission of objectionable odour, or (iv) the rendering of fresh water unsuitable for consumption by animals, or (v) any significant adverse effect on aquatic life. Discretionary: Rule R101: Earthworks and vegetation clearance – discretionary activity The use of land, and the discharge of stormwater into water or onto or into land where it may enter water from earthworks or vegetation clearance that is not permitted by Rule R99 or Rule R100 is a discretionary activity.	significant indigenous biodiversity values in the coastal marine area, Significant primary contact recreation rivers and lakes,		
Kapiti Coast District Plan Review 2016	Yes Natural Environment Sub Chapter 3.2 Ecological and biodiversity	No	No	Objective 2.2 – Ecology and biodiversity: To improve indigenous biological diversity and ecological resilience through the: a) protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna; b) restoration of the ecological integrity of important degraded environments and habitats; c) enhancement of the health of terrestrial and aquatic ecosystems; and d) enhancement of the mauri of waterbodies. Policy 3.12 – Management approach to biodiversity protection: Adverse effects from subdivision, use and development on significant	Restricted Discretionary: 3. Subdivision of land containing significant or locally indigenous vegetation or significant habitats of indigenous fauna. No specific biodiversity rules. Used in matters of discretion	Included in the policies: Incentives, adaptive management	Representativeness, rarity, diversity, distinctiveness, continuity and linkage within landscape, landscape integrity, ecological context of an area, tangata whenua values, sustainability and resilience	Vegetation Clearance: Permitted: Trimming of locally indigenous vegetation (except scheduled vegetation) that is not within the urban environment). Restricted Discretionary: Trimming of any vegetation that: a) is within an ecological site (Schedule 3.1); b) is a key indigenous tree species (Schedule 3.2); c) is a rare and threatened vegetation species (3.3); d) is	Sensitive Natural Features: Ecological sites, Outstanding natural features and landscapes, Significant amenity landscapes, Areas of high natural character, rare and threatened vegetation species, key indigenous tree species,	Yes	Monitoring included in Policy 3.16 Policy 3.16 – Monitoring Reference Monitoring of levels of biodiversity in the District will be undertaken through: a) periodic monitoring of the District's indigenous vegetation and habitats of indigenous fauna by desktop methods

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				indigenous vegetation and significant habitats of indigenous fauna including aquatic ecosystems will be minimised, including by: a) avoiding the removal or significant modification of any significant locally indigenous vegetation, in particular avoiding disturbance of all indigenous vegetation within ecological sites; b) managing land use activities resulting in increased sediment and contaminant levels of surface water, including storm water, to reduce the likelihood of aquatic ecosystems being detrimentally affected; c) creating and maintaining appropriate buffer zones around and linkages between, areas of significant indigenous vegetation, significant habitats of indigenous fauna and around aquatic ecosystems to ensure that wider ecological processes are considered when making decisions about significant sites; and d) Preventing the introduction or spread of exotic weed species and pest animals (both terrestrial and aquatic). Specific biodiversity objective and policies which include ecological resilience, significant indigenous vegetation, significant habitats of fauna, ecological integrity, mauri of waterbodies Biodiversity used?: Obs: Yes; Pols: Yes				listed in the Schedule 10.1. e) is in or within 20 metres of a waterbody or the coastal marine area where it not within the urban environment. Discretionary: Modification of any vegetation which does not meet the restricted discretionary activity 3A.3.1			including aerial photography analysis, and site inspections; b) monitoring of compliance with resource consent conditions affecting the District's indigenous vegetation and habitats of indigenous fauna; c) complementing monitoring work undertaken by other relevant authorities or suitably qualified persons on the state of the environment in the Kāpiti Coast District; d) reviewing District Plan policies in response to development pressures, expressed community outcomes and environmental changes which may reduce the policies' effectiveness; e) requiring that data for monitoring purposes is collected and analysed in a scientifically defensible manner; and f) including monitoring and review conditions on resource consents where required for base level and

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
											performance monitoring and to implement adaptive management if unanticipated effects occur.
Chatham Islands - Resource Management Document notified July 2015	No . Indigenous Vegetation and Habitats of Fauna	Yes	Yes	4.4.1 Objective - Significant Areas of Indigenous Vegetation and Habitats (i) To protect, and where possible, enhance the remaining significant areas of indigenous vegetation and habitats of indigenous fauna. 4.4.1.1 Policies (i) To recognise areas of significant vegetation and habitats of fauna in accordance with one or more of the following criteria: (a) The area is one of the best examples of an association of species which is typical of the Chathams. (b) The area is important for the future viability of a threatened species. (c) The area is connected to one or more significant areas in a way that makes a major contribution to the overall functioning of those areas. (d) The area is greater than 10 hectares with a high degree of non-modification. (e) The area is protected by statute or covenant. (ii) To avoid, remedy, or mitigate adverse effects on the ecological integrity, functioning, habitat values and natural character of areas of significant vegetation and habitats. (iii) To encourage forestry plantings for among other purposes, firewood. (iv) That burnoffs should avoid areas of significant indigenous vegetation and habitats of fauna. Two mentions of 'biodiversity' in Pols. 'Ecosystem' used instead. Biodiversity used?: Obs: No; Pols: Yes	16. Activities In or Near Waterbodies Permitted: (i) Activities - within 5 metres of a bank of a river or lake or - in a wetland or within 5 metres of a wetland are permitted if: (a) they do not involve the erection of structures and; (b) they do not involve the clearance of indigenous vegetation and; (c) the activity does not result in any change in the colour or visual clarity of water other than of a temporary nature Discretionary: (ii) Activities that contravene a permitted condition are a discretionary activity. Assessment Criteria: (a) The necessity to undertake the activity in proximity to the waterbody. (b) Effects on water quality, public access, ecosystems, cultural and community values. No biodiversity rules	Education, consultation with affected parties, assessment of resource consents	Not given. Sections removed from document.	25. Areas of Significant Natural Value Permitted: (i) Activities within areas of Significant Natural Value, listed in Appendix 1 and identified on the Planning Maps, are permitted if: (a) it is in accordance with an agreement, a covenant, a conservation management strategy, or a management plan or; (b) if there is no agreement, conservation management strategy, covenant, or management plan in place the rules of this Document shall apply. Discretionary: (ii) Activities that contravene a permitted condition are a discretionary activity Assessment Criteria: (a) The frequency, intensity and duration of activity proposed (b) The effect on natural values in terms of viability of species, visual impact, water quality etc.	Areas of Significant Natural Value	Yes	· Documentation of complaints received by Council · Site inspections · Enforcement action and abatement notices undertaken by Council and/or other parties · Areas covenanted and protected · Record of the number and type of resource consents · Monitoring of and compliance with resource consent conditions · Records from other organisations such as the Department of Conservation, Ministry of Primary Industries etc
Marlborough Unitary	Yes. Indigenous Biodiversity	No	Yes	Objective 8.1 – Marlborough's remaining indigenous biodiversity in terrestrial, freshwater and coastal	Permitted 2.14.6. Planting vegetation for the	Regional Rules, District Rules, Marlborough's Significant Natural	Appendix 3: Ecological Significance Criteria for terrestrial, wetland and coastal environments	Indigenous Vegetation Clearance Permitted : Compliance	Landscapes, Coastal Natural Character, Threatened	Yes	General monitoring of non-compliance,

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
Plan 2016				environments is protected. Policy 8.2.3 – Priority will be given to the protection, maintenance and restoration of habitats, ecosystems and areas that have significant indigenous biodiversity values, particularly those that are legally protected. Specific mention of biodiversity but also mention of habitats and ecosystems Biodiversity used?: Obs: Yes; Pols: Yes	purposes of edge and aquatic habitat protection and prevention of bank erosion. 2.14.6.1. When vegetation is planted for the purposes of aquatic habitat protection, native plant species must be preferentially planted. No specific biodiversity rules. Very few mentions of wetlands, habitats, ecosystems	Areas Programme, Monitoring programmes, Financial support of landowner protection and restoration, Public Information, Guidelines for development and activities for landowners, Pest Management Plans, Council Works, Council Acquisition of land	Representativeness, rarity, Diversity and pattern, Distinctiveness, Size and shape, Connectivity/ecological context, sustainability, adjacent catchment modification in respect of significant sites within the coastal marine area	with conditions – 19.3.3.5. Clearance of indigenous vegetation, per Computer Register, must not exceed: (a) 2000m2 in any 5 year period where the average canopy height is between 3m and 6m; (b) 10000m2 in any 5 year period where the average canopy height is below 3m, except for the following species where clearance must not exceed: (i) 500m2 of indigenous sub-alpine vegetation; (ii) 100m2 of tall tussock of the genus Chinochloa. Discretionary: Noncompliance with Permitted rule	Environments, High Priority waterbodies for public access, Freshwater Management Units, Riparian Natural Character Management Area		Section 35 RMA Monitoring included in Policies Policy 8.2.8 – Where monitoring of ecosystems, habitats and areas with significant indigenous biodiversity value shows that there is a loss of or deterioration in condition of these sites, then the Marlborough District Council will review the approach to protection.
Canterbury - New RPS 2013	Yes. Ecosystems and indigenous biodiversity	Yes	Yes	Objective 9.2.1 – Halting the decline of Canterbury's ecosystems and indigenous biodiversity Policy 9.3.1 – Protecting significant natural areas Specific biodiversity policies and also mentions of habitat, ecosystems, wetlands, etc 1) Significance, with respect to ecosystems and indigenous biodiversity, will be determined by assessing areas and habitats against the following matters: (a) Representativeness (b) Rarity or distinctive features (c) Diversity and pattern (d) Ecological context Biodiversity used?: Obs: Yes; Pols: Yes	NA	Protection Guidelines, Canterbury Biodiversity Strategy 2008, biodiversity enhancement and restoration incentives, management agreements, community initiatives, bylaws, heritage orders, covenants, Iwi engagement, Water Zone Committees, Regional and Zonal Implementation Programmes,	Representativeness, Rarity/Distinctiveness, Diversity and Pattern, Ecological Context	NA	Outstanding Natural Features and Landscapes,	Yes	General monitoring of non-compliance, Section 35 RMA No specific biodiversity monitoring
Christchurch City Council Replacement Plan 2016	Yes. Chapter 9 Natural and Cultural Heritage. Subsection 9.1 Indigenous Biodiversity	Yes	No	9.1.1.1 Objective - Indigenous Biodiversity and Ecosystems Indigenous biodiversity is maintained and enhanced and areas of significant indigenous	Indigenous vegetation clearance within a Site of Ecological Significance Standard: indigenous vegetation clearance shall be limited to:		No specific biodiversity criteria	Indigenous Vegetation Clearance: Permitted: Indigenous vegetation clearance within a Site of Ecological Significance Standard: indigenous vegetation	Sites of Ecological Significance	Yes	No specific biodiversity monitoring

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
	and Ecosystems			vegetation and significant habitats of indigenous fauna are identified and protected. 9.1.1.1.1 Policy – Identification of Ecological Significance – Protect areas of indigenous biodiversity as sites of ecological significance where they have been identified and assessed as meeting at least one of the significance criteria in Policy 9.3.1 and Appendix 3 of Canterbury Regional Policy Statement Biodiversity used?: Obs: Yes; Pols: Yes	. within 1m of an existing track; . maintenance and erection of fencing; . maintenance of existing fire ponds; . the removal of diseased vegetation; . removal or targeted spraying of pest plants or removal of pest animals in accordance with the Biosecurity Act 1993; . grazing where the site has been used for grazing on or within 12 months prior to 25 July 2015; and . park management activities in any Open Space Zone No specific biodiversity rules Biodiversity in Matters of Discretion			clearance shall be limited to: . within 1m of an existing track; . maintenance and erection of fencing; 0. maintenance of existing fire ponds; 1. the removal of diseased vegetation; 2. removal or targeted spraying of pest plants or removal of pest animals in accordance with the Biosecurity Act 1993; 3. grazing where the site has been used for grazing on or within 12 months prior to 25 July 2015; and 4. park management activities in any Open Space Zone Discretionary: Indigenous vegetation in originally rare ecosystems and non compliance			
Otago - Coastal Plan 2011	No	No	No	Objective 5.2.2 Amenity, cultural, historical, scenic and ecological values associated with Otago's coastal marine area can be lost over time through inappropriate subdivision, use and development. 5.4.2 Priority will be given to avoiding adverse effects on: (a) The values identified in Schedule 2.1, associated with any coastal protection area; and (b) The habitat and movement of marine mammals and birds in the coastal marine area adjacent to any marine mammal and bird site identified in Schedule 3.1; when considering the use, development and protection of Otago's coastal marine area. Use of the word 'ecological' and 'habitat' instead Biodiversity used?:	13.5.1 Introduction of exotic or introduced plants 13.5.1.1 The introduction or planting of any exotic or introduced pest plant in Otago"s coastal marine area is a prohibited activity. No specific biodiversity rule	Consultation, pest management strategies, education, liaison	Coastal Protection Areas are considered to be of regional, national or international importance in terms of their ecological and scenic values, and including those areas having spiritual or cultural significance.	Exotic Plants: Discretionary: 13.5.1.3 The introduction of any exotic or introduced plant is a discretionary activity. 13.5.2.2 Except as provided for by Rule 13.5.2.1, the removal of exotic or introduced plants is a discretionary activity Prohibited: 13.5.1.1 The introduction or planting of any exotic or introduced pest plant in Otago"s coastal marine area is a prohibited activity.	Coastal Protection Areas, Coastal Recreation Areas, Coastal Harbourside Areas	Yes	Analysis of feedback, water quality surveys, self monitoring, maintaining a data base of coastal permits, commission research, compliance monitoring, make held data public, joint initiatives with other authorities

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				Obs: No; Pols: No							
Proposed Queenstown Lakes District Plan (Indigenous Vegetation and Biodiversity Hearings May 2016)	Yes. Indigenous vegetation and biodiversity	Yes	No	33.2.1 Objective – Protect, maintain and enhance indigenous biodiversity 33.2.1.5 Recognise anticipated activities in rural areas such as farming and the efficient use of land and resources while having regard to the maintenance, protection or enhancement of indigenous biodiversity values Biodiversity used?: Obs: Yes; Pols: Yes .	Discretionary: The clearance of indigenous vegetation complying with all the standards in Table 2 shall be a permitted activity Table 2: Clearance is less than 5000m² in area of any site and, 500m² in area of any site less than 10ha, in any continuous period of 5 years. No specific biodiversity rules	Consultation No biodiversity methods	Representiveness, Rarity, Diversity, Distinctiveness	Clearance of Indigenous Vegetation Permitted: Compliance with Standards (For example): Clearance is more than 20m from a water body; Where indigenous vegetation is greater than 2.0 metres in height, clearance is less than 500m² in area of any site and, and 50m² in area of any site less than 10ha, in any continuous period of 5 years) Discretionary: Non compliance	Significant Natural Areas, Threatened Plant List, Threatened Environment Maps	Yes	Monitoring of compliance, state of the environment, suitability of effectiveness of the provisions of the Plan, No specific biodiversity monitoring
Proposed Southland - Air Plan 2014	No	No	No	Biodiversity used?: Obs: No; Pols: No		Monitoring programmes, use of guidelines, database of environment, education, advocacy, consent monitoring, information distribution	None		Appendix G Areas where pristine air quality is to be protected,	Yes	No
Proposed Southland Land and Water Plan 2016	Yes. Indigenous Biodiversity Use of the word 'biodiversity': Yes	Yes	No	Objective 14 The range and diversity of indigenous ecosystem types and habitats within dryland environments, rivers, estuaries, wetlands and lakes, including their margins, and their life-supporting capacity are maintained or enhanced. Policy 34 – Restoration of existing wetlands and the creation of wetlands Recognise the importance of wetlands and indigenous biodiversity, particularly the potential to improve water quality, through encouraging: 1. the maintenance and restoration of existing wetlands and the creation of new wetlands; and 2. the establishment of wetland areas, including on-farm, in subdivisions, on industrial sites and for community sewage schemes; and 3. offsetting peak flows and assisting with flood control.	Rule 14 – Discharge of fertiliser (a) The discharge of fertiliser in circumstances where contaminants may enter water is a permitted activity provided the following conditions are met: (iii) where any permanently flowing river, lake, lagoon, estuary, artificial watercourse or wetland: (2) does not have riparian planting from which stock is excluded, fertiliser is not discharged directly into or within 10 metres of the bed or within 10 metres of a wetland boundary or any identified significant indigenous biodiversity site.	Management Plans for activities as conditions of consent	None given. Significant sites are just listed in the Appendix	Permitted Rule 74 – Wetlands (a) The use of land for the modification of a wetland for the purposes of maintaining and enhancing the wetland, or maintaining and enhancing pedestrian access to the wetland (including the construction, maintenance or upgrading of structures), is a permitted activity provided the following conditions are met: (i) the modification does not result in any destruction or removal of any indigenous vegetation unless that vegetation was planted; Noncompliance is	Regionally Significant Wetlands in Southland; Sensitive Waterbodies	Yes	Biodiversity included in monitoring (See below): Rule 3 When considering applications for controlled activities or restricted discretionary activities, in addition to the matters over which: (a) control is reserved; or (b) exercise of discretion is restricted; the decision-maker may also consider the lapse period sought, the duration of the

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
				Biodiversity issues identified but no objectives targeting biodiversity. Ecosystems and freshwater measured instead Biodiversity used?: Obs: No; Pols: Yes	Rule 25 – Cultivation on sloping ground Environment Southland will restrict the exercise of its discretion to the following matters: 1. the management of sediment and other contaminants from critical source areas; 2. risks to biodiversity and water quality and mitigation measures for addressing those risks; and 3. monitoring, inspection and audit requirements Rule 74 – Wetlands (a) The use of land for the modification of a wetland for the purposes of maintaining and enhancing the wetland, or maintaining and enhancing pedestrian access to the wetland (including the construction, maintenance or upgrading of structures), is a permitted activity provided the following conditions are met: iv) the modification does not result in any establishment of pest plant species that: (1) is listed in the Regional Pest Management Strategy for Southland 2013; (2) may damage existing biodiversity values of the wetland; or (3) will form the dominant vegetation type in the wetland. Biodiversity only used in the above rules			Discretionary			resource consent sought, the review of the conditions of a resource consent, the need for a bond and the collection, recording, monitoring and provision of information concerning the exercise of a resource consent. Monitoring also included in matters which the Council restricts its discretion too.

Plans	Clear Chapter on Biodiversity? Name?	Is there integration with landscape value?	Links to other Matters on biodiversity in the Plan	The broad objectives of and approaches to biodiversity planning and management	The type of regulatory approaches adopted	The type of non-regulatory approaches adopted	The criteria being applied to define significant areas and habitats	The extent to which rules and consent thresholds differ across plans	The extent to which plans differentiate and prioritise categories of significance	The extent to which plans make provision for biodiversity that is not significant	Level of monitoring
Proposed Southland District Plan 2012 (appeal Version September 2016)	Yes. Biodiversity Use of the word 'biodiversity': Yes	No	No	Objective BIO.1 Indigenous vegetation and habitats of indigenous fauna are managed so that the overall life supporting capacity of ecosystems are safeguarded. Policy BIO.1 Protect ecosystems which support significant indigenous vegetation and significant habitats of indigenous fauna. Very focused on biodiversity – indigenous vegetation, habitats, and fauna for all activities (vegetation clearance, subdivision, construction, forestry, etc) Biodiversity used?: Obs: No; Pols: No	Rule BIO.3 - Discretionary Activities The clearance, modification or removal of indigenous vegetation which is not provided for under Rule BIO.1 or Rule BIO.2 is a Discretionary Activity. No rules specifically referring to biodiversity. Biodiversity mentioned in matters the council restricted its discretion too.	Increase awareness; encourage landowners to identify, maintain, protect and enhance significant indigenous vegetation and habitats or indigenous fauna; partnership with community groups and landowners and regional council	Section 6 of the RMA	Permitted 1. The clearance, modification or harvesting of indigenous vegetation which: (a) Has been planted and managed specifically for the purpose of harvesting. (b) Has grown up under production planting and is necessary to enable the management, harvesting or replanting of any area of planted indigenous or exotic forestry. (c) Is amenity planting Discretionary: The clearance, modification or removal of indigenous vegetation which is not provided for under Rule BIO.1 or Rule BIO.2 is a Discretionary Activity. NOTE: [New Non-Complying Rule requested for the clearance or removal or modification of vegetation in areas of significant indigenous vegetation and habitats of significant indigenous fauna as defined by criteria inserted by Forest & Birds relief for Policy BIO.1 and the Coastal Marine Area.] (Forest & Bird)	Outstanding Natural Feature/Landscape; Visual Amenity Landscapes	Yes	No specific 'biodiversity' monitoring General monitoring of non-compliance, Section 35 RMA