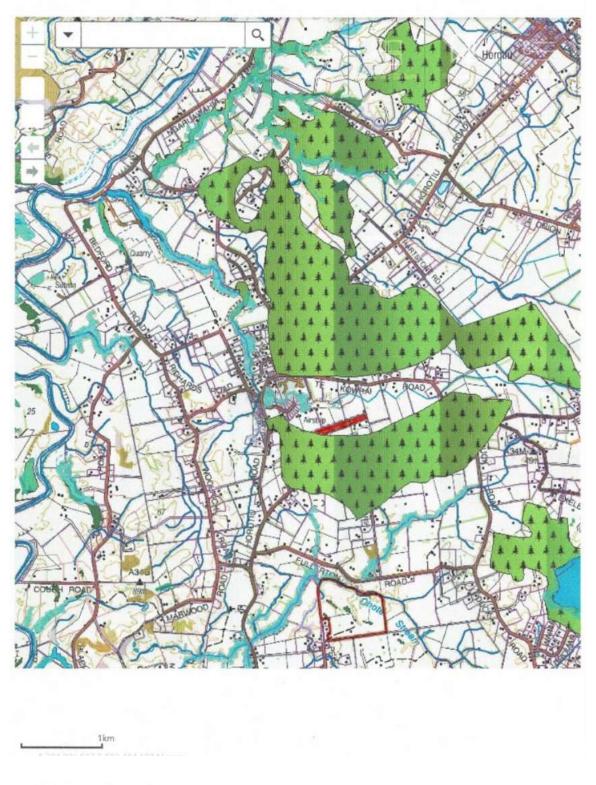
Vegetation Biodiversity



Kahikatea 2012
Pre-human Kahikatea Dominant

N.B. There is way less than 10% of the Te Kowhai area of pre-human Kahikatea forest left in 2012. Our farm shown in red near base of map. Te Kowhai airstrip shown in red near centre.

New Zealand Government

Draft National Policy Statement for Indigenous Biodiversity

NOVEMBER 2019

This draft supports consultation on He Kura Koiora I hokia: A discussion document on a proposed National Policy Statement for Indigenous Biodiversity.

More information is available on the Ministry for the Environment website: www.mfe.govt.nz.

3.17 Increasing indigenous vegetation cover

- (1) Every regional council must assess the percentage of the urban and rural areas in its region that have indigenous vegetation cover.
- (2) The regional council must specify which areas it will treat as urban for the purposes of this clause (which must be predominantly urban in character) and which it will treat as rural (which must be predominantly non-urban in character).
- (3) The assessment of the percentage of indigenous vegetation cover may be done by a desktop analysis, by ground truthing or both.
- (4) For urban areas, if the assessment indicates an area has less than 10 per cent indigenous vegetation cover, the regional council must include in its regional policy statement a target (expressed as a percentage figure within a specified time) for increasing indigenous vegetation cover in that area to at least 10 per cent of the area.
- (5) For rural areas, if the assessment indicates an area has less than 10 per cent indigenous vegetation cover, the regional council must include in its regional policy statement a target (expressed as a percentage figure within a specified time) for increasing indigenous vegetation cover in the area.
- (6) For any urban or rural area where the assessment indicates the area already has 10 per cent or more indigenous vegetation cover, the regional council may include in its regional policy statement targets (expressed as a percentage figure within a specified time) for increasing indigenous vegetation cover in the area.

Draft National Policy Statement for Indigenous Biodiversity

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- (7) Every regional council must include objectives, policies or methods for increasing indigenous vegetation cover in its region and for achieving the targets set under this clause, giving priority to all of the following:
 - a) areas to which clause 3.16 applies:
 - areas representative of ecosystems naturally and formerly present.
 - c) ensuring species richness:
 - d) restoration and enhancement at a landscape scale across the region.

Target to increase indigenous regetation

In our area Kahikotea

Appendix 2: Tool for managing effects on significant natural areas

General

This appendix supports the application of Policy 7 of this National Policy Statement.

Pursuant to Appendix 1 and Policy S, district councils are required to map Significant Natural Areas and include a description of the specific attributes that contribute to the areas qualifying as Significant Natural Areas. That description must include the relevant attribute from the 'attribute list' under each criterion.

This management tool allocates a 'High' or 'Medium' rating to each attribute. The rating applying to a particular Significant Natural Area will determine whether it is a Significant Natural Area where the limited exception to Policy 6 for specifically identified new activities applies.

A Significant Natural Area qualifies as having a 'High' rating if it has one or more attributes that rate as 'High' in respect of any one of the four criteria.

Mānuka and kānuka

The recent arrival of myrtle rust (Austropuccinio psidii) in New Zealand (April 2017) is anticipated to have significant, negative consequences for all New Zealand Myrtaceae taxa. However, precisely what those impacts will be is not yet known. As a result, a precautionary approach has been taken in the most recent New Zealand Threat Classification System lists for vascular plants and all Myrtaceae taxa have been classified as Threatened. However, some Myrtaceae taxa are relatively common in some areas, in particular manuka and kanuka would classify as Threatened only due to the risk of myrtle rust.

If a Significant Natural Area is identified only because of the presence of manuka and kanuka that is considered Threatened only because of the threat posed by myrtle rust, it should not be managed as if it is a Significant Natural Area. Assessment against the other criteria in Appendix 1 must also determine whether it is a Significant Natural Area. If it qualifies as significant for any other reason, then it should be managed as a Significant Natural Area.

This exception must be reviewed within five years of gazettal.

Government Criteria for an

Management framework

Representativeness

	Attributes	Rating
	Ecological unit(s) present that is typical of the indigenous character of the ecological district and which retains a high level of ecological integrity in the context of what remains in the ecological district.	High
CAN JUNE	Habitat that supports a typical suite of indigenous fauna that is characteristic of the habitat type in the ecological district and retains the majority of species expected for that habitat type in the ecological district.	High
	Ecological unit(s) present that is typical of the indigenous character of the ecological district and which retains a moderate level of ecological integrity in the context of what remains in the ecological district.	Medium
	Habitat that supports a typical suite of indigenous taxa that is characteristic of the habitat type in the ecological district and retains a moderate range of species expected for that habitat type in the ecological district.	Medium

see map later that shows there shows there shows there is virtually rotting left rotting left rotting left rotting left so there than it an in the than it an Basin ecological district.

Diversity and pattern

Attributes	Rating
A high diversity of indigenous species, vegetation, habitats of indigenous fauna, or communities within the context of the ecological district	High
Presence of important ecotones and/or complete gradients or sequences.	High
A moderate diversity of indigenous species, vegetation, habitats of indigenous fauna, or communities within the context of the ecological district	Medium
Presence of ecotones and/or partial gradients or sequences.	Medium

Rarity and distinctiveness

Attributes	Rating
Provides habitat for a nationally Threatened, or two or more At Risk indigenous species as identified in the New Zealand Threat Classification System lists.	Rating 1000
An indigenous species or plant community at its distributional limit.	High
indigenous vegetation that has been reduced to less than 20% of its former extent in the ecological district, region or land environment.	High Sel
indigenous vegetation or habitat of indigenous fauna occurring on sand dunes.	High
indigenous vegetation or habitat of indigenous fauna occurring on naturally uncommon ecosystem types.	High
The type locality of an indigenous species	High
Provides habitat for an At Risk indigenous species as identified in the New Zealand Threat Classification System lists	Medium
An indigenous species or plant community near its distributional limit.	Medium
An indigerious vegetation type or an indigenous fauna species that is uncommon within the region or ecological district.	Medium
Indigenous vegetation that has been reduced to between 20% and 30% of its former extent in the ecological district or land environment.	Medium
The presence of a distinctive assemblage or community of indigenous species	Medium
A special ecological or scientific feature	Medium

Ecological context

Attributes	Rating
Large size and a compact shape in the context of the ecological district.	High
Well-buffered relative to remaining habitats in the ecological district.	High .: \u
Provides a full buffer to, or link between, other important habitats of indigenous fauna or Significant Natural Areas.	High Provide
is very important for the natural functioning of an ecosystem, relative to remaining habitats in the ecological district.	High
Supports large numbers of indigenous fauna.	High
Provides critical habitat for indigenous fauna, including important feeding, breeding, refuge or resting habitat	High It is
Moderate size and a compact shape in the context of the ecological district.	Medium ach
Provides a partial buffer to, or link between, other important habitats of indigenous fauna or Significant Natural Areas.	Medium ach Medium for eco Medium di
Important for the natural functioning of an ecosystem, relative to remaining habitats in the ecological district.	Medium di

Appendix 3: Principles for biodiversity offsetting

The following sets out a framework of principles for the use of biodiversity offsets. Principles 1–12 must be complied with for an action to qualify as a biodiversity offset. Principles 13–14 should be met for an action to qualify as a biodiversity offset.

- Adherence to mitigation hierarchy: A biodiversity offset is a commitment to redress
 [more than minor] residual adverse impacts. It should only be contemplated after steps to
 avoid, remedy and mitigate adverse effects have been demonstrated to have been
 sequentially exhausted and thus applies only to residual indigenous biodiversity impacts.
- Limits to offsetting: Many biodiversity values cannot be offset and if they are adversely affected then they will be permanently lost. These situations include where:
 - residual adverse effects cannot be offset because of the irreplaceability or vulnerability of the indigenous biodiversity affected
 - ii) there are no technically feasible or socially acceptable options by which to secure gains within acceptable timeframes
 - effects on indigenous biodiversity are uncertain, unknown or little understood, but potential effects are significantly adverse.

In these situations, an offset would be inappropriate. This principle reflects a standard of acceptability for offsetting and a proposed offset must provide an assessment of these limits that supports its success.

- 3. No net loss and preferably a net gain: The values to be lost through the activity to which the offset applies are counterbalanced by the proposed offsetting activity which is at least commensurate with the adverse effects on indigenous biodiversity so that the overall result is no net loss and preferably a net gain in biodiversity. No net loss and net gain are measured by type, amount and condition at the impact and offset site and require an explicit loss and gain calculation.
- 4. Additionality: A biodiversity offset must achieve gains in indigenous biodiversity above and beyond gains that would have occurred in the absence of the offset, including that gains are additional to any remediation and mitigation undertaken in relation to the adverse effects of the activity. Offset design and implementation must avoid displacing activities harmful to indigenous biodiversity to other locations.
- Like-for-like: The ecological values being gained at the offset site are the same as those being lost at the impact site across types of indigenous biodiversity, amount of indigenous biodiversity (including condition), over time and spatial context.
- Landscape context: Biodiversity offset actions must be undertaken where this will result
 in the best ecological outcome, preferably close to the location of development or within

NOT GOVERNMENT POLICY - CONSULTATION DRAFT

the same ecological district, and must consider the landscape context of both the impact site and the offset site, taking into account interactions between species, habitats and ecosystems, spatial connections and ecosystem function.

- Long-term outcomes: The biodiversity offset must be managed to secure outcomes of the activity that last as least as long as the impacts, and preferably in perpetuity.
- Time lags: The delay between loss of indigenous biodiversity at the impact site and gain or maturity of indigenous biodiversity at the offset site must be minimised so that gains are achieved within the consent period.
- 9. Trading up: When trading up forms part of an offset, the proposal must demonstrate that the indigenous biodiversity values gained are demonstrably of higher value than those lost, and the values lost are not indigenous taxa that are listed as Threatened, At-risk or Data deficient in the New Zealand Threat Classification System lists, or considered vulnerable or irreplaceable.
- 10. Offsets in advance: A biodiversity offset developed in advance of an application for resource consent must provide a clear link between the offset and the future effect. That is, the offset can be shown to have been created or commenced in anticipation of the specific effect and would not have occurred if that effect were not anticipated.
- Proposing a biodiversity offset: A proposed biodiversity offset must include a specific biodiversity offset management plan.
- Science and matauranga Māori: The design and implementation of a biodiversity offset must be a documented process informed by science, including an appropriate consideration of matauranga Māori.
- 13. Stakeholder participation: Opportunity for the effective participation of stakeholders should be demonstrated when planning for biodiversity offsets, including their evaluation, selection, design, implementation and monitoring. Stakeholders are best engaged early in the offset consideration process.
- 14. Transparency: The design and implementation of a biodiversity offset and communication of its results to the public should be undertaken in a transparent and timely manner. This includes transparency of the loss and gain calculation and the data that informs a biodiversity offset.

Plan For biodiversity offsets Waikato Regional Council Technical Report 2017/36

Significant natural areas of the Waikato District: terrestrial and wetland ecosystems



www.waikatoregion.govt.nz ISSN 2230-4355 (Print) ISSN 2230-4363 (Online) Monday Constant of the standard of the standar

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Department of Conservation staff for sharing their knowledge, particularly for threatened species, and their review of the draft Master Dataset, GIS mapping, and report.

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SIGNIFICANT NATURAL AREAS OF THE WAIKATO DISTRICT

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8.4 Hamilton Basin Ecological Management Zone

The Hamilton Basin is perhaps the most denuded management zone within the Waikato District. The Waikato River's riparian margins form corridors and a virtually continuous ecological linkage with deeply incised gully streams. While often highly modified and containing little indigenous vegetation, these gully systems provide important habitat for many terrestrial and freshwater species. Interspersed throughout the now highly managed urban and agricultural land, peat lakes and small forest remnants stand out as vestiges of what once was an expansive and biodiverse wetland and forest ecosystem complex.

Only small and scattered indigenous forest remnants exist in the Hamilton Basin, many of which are remnant podocarp stands, often (historically) grazed extensively by stock. Despite being small and modified these stands provide important habitat and stepping stones for many indigenous bird species and threatened long-tailed bats.

so why not identify some as

There is considerable scope within the Walkato District for additions to the protected natural area network via protection of SNA on private land. The public consultation process revealed that the majority of landowners were very motivated to protect and restore SNA found on their land. However, while formal protection of natural areas is an ideal first step, the ongoing management of these SNA (including weed and animal pest control, fencing and restoration) is of primary concem. Due to the significant loss of vegetation and fragmented state of the remaining indigenous vegetation in most parts of the Walkato District, restoration of under-represented ecosystem types, and creating ecological linkages and corridors, should be a priority for addressing biodiversity loss.

Our forest

p ix

only 80 out of 1598 SNA given high status

Eightý sites (19.0% of total SNA area) out of all sites assessed have been accredited a high confidence level. A total of 504 sites (66.6% of SNA area) were assessed with a medium confidence level, and a total of 1014 sites (14.4% of SNA area) had a low confidence level. Through the review and landowner consultation process the levels of confidence increased and a total of 108 changes were to the significance ranking, with the number of "Locally" and "Regionally" significant SNA increasing, and decreasing the number of "Likely" and "Indeterminate" SNA.

Almost are dy already protected Some 46.7% of the area of SNA are legally protected under statute or covenant (excluding WDC covenants). This includes both private and public land. Public Conservation Land (PCL) administered by the Department of Conservation comprises approximately 32% (22,825 ha) of the total area identified as SNA (including SNA ranked as "likely", "indeterminate", and "not-significant"), which equates to 68.4% of the protected SNA in the Waikato District. Protected SNA owned by Waikato District Council include land protected as Marginal Strips, Stewardship Areas, Local Purpose Reserve, or as Recreation Reserve comprise 236 ha. For both PCL land and WDC owned land it is noted that while these areas are protected, this status may not guarantee adequate protection for biodiversity values.

рх

Corested Protected Protected

Through the landowner consultation process the following were identified as the main threats facing SNA in the Waikato District:

- vegetation dearance;
- stock intrusion into unfenced forest/shrubland/wetland areas;
- animal and plant pest degradation of all indigenous fauna and flora habitats, and
- degradation of the margins of estuarine wetlands and lakes by stock.

Essential components of the ongoing protection and ecological restoration of biodiversity values of SNA usually require enhancing indigenous populations of species through permanent stock exclusion, continuous weed and animal pest management, and carrying out enhancement planting. By applying these restoration measures over a number of scattered, but often ecologically linked SNA in the wider landscape, in particular when involving wetland and riparian margins, ongoing biodiversity management will enhance and restore ecological processes at a landscape scale.

White was a second of the seco

This project is limited to the identification and assessment of areas of vegetation and habitats for indigenous fauna that are composed primarily of indigenous vegetation and are over 0.5 ha in size. It is acknowledged that significant habitats for indigenous fauna do exist outside of areas of indigenous vegetation (e.g. long-tailed bats in exotic tree stands; black mudfish populations in highly modified drains and willow wetlands). It is also important to bear in mind those wetlands and terrestrial remnants under 0.5 ha, which have not been mapped or assessed in this study, it should not be implied that as yet to be identified areas, even those under 0.5 ha or exotic vegetation providing habitat for threatened species, are not significant. In some cases, they may well be ecologically significant and trigger the RPS criteria. We recommend that the Council considers a future project to assess significant habitat for indigenous fauna in exotic vegetation. Also, it would add value to the database if the ecological significance of sites smaller than 0.5 ha or of sites that have not been previously identified are assessed as they come to light.

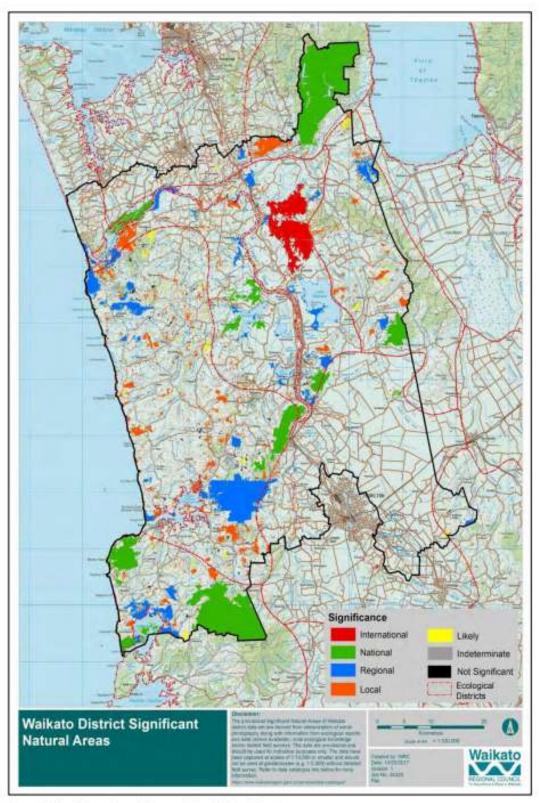
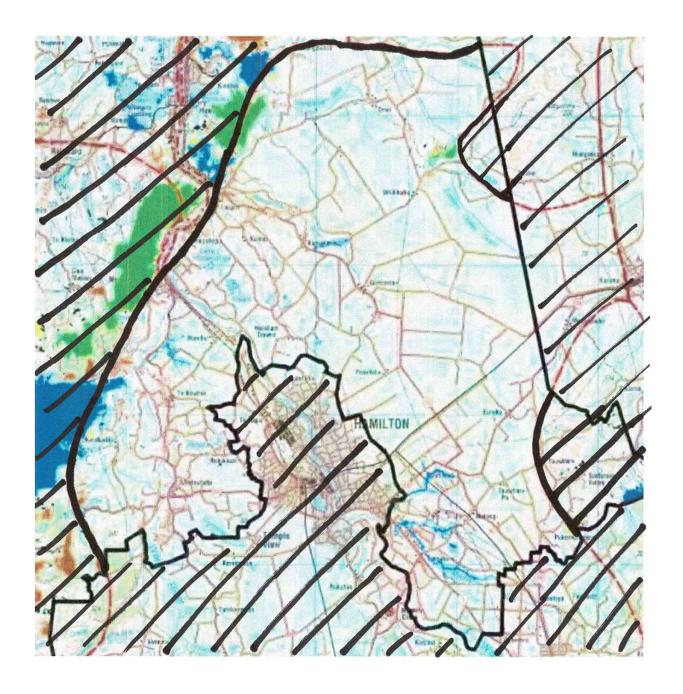


Figure 5. Significant Natural Areas of the Waikato District



Hamilton Basin Ecological District that is within the Waikato District Council area

Very few SNA identified at all in the Hamilton Basin, nothing like the 10% that they are aiming for. Waikato Regional Council need to be looking for sites smaller than 0.5 ha like ours