

Biodiversity Strategy

2012

Prepared by
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1 Executive Summary

The natural environment of the Whangarei District contains many and varied landscapes, providing a diverse range of habitats and promoting a diverse range of biodiversity. Internationally, New Zealand contains a relatively high level of biodiversity – it is a biodiversity ‘hotspot’. Even within New Zealand, the diversity of landforms and soil types of Northland has resulted in a wide variety of natural ecosystems and an unusually high diversity and endemism of species. This means that the species we have in New Zealand and Northland do not occur naturally in other places in the world, and so contribute to global biodiversity. Thus, the protection and maintenance of biodiversity in Northland and Whangarei is of high importance.

The natural environment plays an important role in defining the character of the Whangarei District, and contributes to our unique sense of place. It has been shown that one of the main reasons people move to Northland is the quality of the environment, and the main reason for staying, is again the environment. Development such as tourism, agriculture, forestry, fishing, aquaculture, and mining are all dependent upon sustained and managed natural resources including biodiversity. Thus, a successful economy over the long-term is dependent upon a sustainable natural environment. Biodiversity is also central to the functioning of ecosystems, including the benefits people obtain from healthy and diverse ecosystems (ecosystem services). These include such things as food provision, air, water, soil, and other resources.

The State of the Environment Report on Biodiversity (2011) highlighted the current state of biodiversity in the Whangarei District. The well-being of our natural environment is under pressure from many threats facing biodiversity, including habitat destruction, introduced pests, weeds and pollution. There are 205 at risk and threatened species present within the District, all of which are under threat from pressures of one form or another. These pressures are contributing to biodiversity loss locally and nationally, as national and regional state of the environment reports indicate a continuing loss of biodiversity.

However, there are a number of positive actions that are happening in the Whangarei District with regard to biodiversity management, and there have been some encouraging improvements as a result of intensive conservation programmes for some species. Additionally, the number and area of formal conservation covenants are increasing each year as landowners choose or are encouraged to protect areas of native habitat. Whangarei District has both a large number and area of land under conservation covenant (both by QEII and the Reserves Act) compared to many parts of New Zealand. Whangarei District Council assists this positive outcome by contributing an annual grant to QEII National Trust to set up new open space covenants in the District.

There are a number of voluntary initiatives throughout the District that contribute to the protection and enhancement of biodiversity. These include landcare groups, coastcare groups, charitable organisations and trusts, community pest control areas, non-government organisations and school groups, as well as individual landowners. The work that these communities are doing is an invaluable contribution towards the maintenance and enhancement of biodiversity in the District which should be supported. Several of these groups are also working in conjunction with Council to maintain and enhance biodiversity on public reserves. Reserve management plans and natural area maintenance programmes also ensure biodiversity is maintained and enhanced on public land in the District.

Despite these encouraging efforts, indicator data from the State of the Environment Report highlights the fact that statutory objectives relating to biodiversity management such as ‘maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District’ and ‘protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development’ are not entirely being achieved.

The State of the Environment Report on Biodiversity and the Whangarei District Growth Strategy include in their recommendations that a biodiversity strategy be developed to co-ordinate and enhance efforts to achieve biodiversity objectives, and ensure that District Council functions with regard to biodiversity are being carried out effectively.

In order to ensure that this happens and to set out a framework and process for achieving biodiversity objectives, the Biodiversity Strategy has been prepared. It is intended that the Strategy will, among other things:

- Identify actions necessary to achieve District Council statutory functions relating to the protection of indigenous biodiversity, particularly those required under Part 2 and section 31 of the Resource Management Act and the New Zealand Coastal Policy Statement.
- Collate and re-focus policies and actions relating to biodiversity already adopted by Council and the community, and propose new ones to ensure statutory objectives relating to biodiversity are achieved.

- Identify opportunities to integrate/enhance existing functions relating to biodiversity management in the Whangarei District, particularly within Council.
- Identify opportunities to integrate actions relating to biodiversity management with neighbouring territorial authorities, Northland Regional Council and the Department of Conservation.
- Incorporate relevant actions from the State of the Environment Report on Biodiversity and the Whangarei District Growth Strategy Implementation Plan relating to biodiversity.
- Inform the review of District Plan provisions relating to biodiversity.
- Provide information and educate the public/stakeholders about biodiversity management in the Whangarei District.
- Provide a monitoring framework to measure progress and assess monitoring requirements relating to biodiversity.

The strategy outlines specific goals/objectives for achieving improved biodiversity outcomes, and also the actions required to achieve these goals. The goals are divided into the following themes:

Theme 1 Information/Knowledge

Objective 1.1 Improve knowledge of biodiversity in the Whangarei District

Objective 1.2 Undertake on-going monitoring and research

Theme 2 Protection and Restoration

Objective 2.1 Ensure effective regulatory protection

Objective 2.2 Encourage effective non-regulatory protection

Objective 2.3 Assist voluntary biodiversity protection and restoration

Objective 2.4 Identify and prioritise opportunities for biodiversity restoration/enhancement

Theme 3 Collaboration/Education

Objective 3.1 Participate in integrated management of biodiversity

Objective 3.2 Assist education on the importance of biodiversity

A detailed action plan is outlined in Section 7 of the Strategy. However, key priority actions were also identified that are considered to be vital to the success of biodiversity management in the District. They are outlined in Section 8 with more detail and specific direction as to how and when they are to be achieved. Priority actions are considered to be:

District Plan Provisions

Action 1.1.1 Map or otherwise identify areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas) in the District. Identify these areas on the District Plan maps as a resource area.

Action 1.1.3 Map or otherwise identify areas of at least high natural character, and natural features and landscapes in the coastal environment (and include in the District Plan as a resources area), as required by the New Zealand Coastal Policy Statement.

Action 2.1.1 Implement the long term settlement pattern identified in the Whangarei District Growth Strategy to minimize development in areas in close proximity to significant ecological areas and potential adverse effects on indigenous biodiversity.

Action 2.1.2 Undertake a review of provisions relating to biodiversity (e.g. indigenous vegetation and habitat, riparian and coastal margins, heritage trees) as part of the District Plan rolling review. Include effective provisions to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas).

Consent Processing

Action 2.1.6 Adopt a strategic approach that takes cumulative effects of development on indigenous biodiversity into account when assessing resource consents, particularly in areas of significant indigenous vegetation and significant habitats of indigenous fauna.

- Action 2.1.7 Ensure conditions on consents are adequate to protect indigenous biodiversity, particularly on consents within or close to areas of significant indigenous vegetation and significant habitats of indigenous fauna.
- Action 2.1.9 Consider a practice note for processing resource consents on excluding cats/dogs/mustelids from developments in proximity to significant ecological areas (especially known kiwi habitat).

Blue/Green Networks

- Action 1.1.2 Identify ecological linkages, including potential linkages between habitats, and riparian connections for a 'green and blue' network across the District.
- Action 2.4.3 Undertake restoration/rehabilitation of water quality and riparian margins in Whangarei City to provide blue/green corridors through the urban area.
- Action 2.4.4 Promote the naturalisation of waterways within Growth Strategy nodes, especially the larger urban and urbanising nodes, to develop effective connections between riparian and terrestrial habitat.

Weed and Pest Management

- Action 2.4.1 Formulate a weed and pest policy and management plan for Council reserves.
- Action 2.4.2 Ensure pest/weed management and biodiversity is recognised and provided for when preparing or reviewing reserve management plans. Develop these for priority reserves.

Community Initiatives/Collaboration

- Action 2.3.5 Support community initiatives for biodiversity protection. Provide assistance to community groups and landowners involved in conservation and biodiversity enhancement. This may be in the form of funding, advice, staff time, etc. Showcase successful biodiversity stories.
- Action 3.1.5 Provide information to, liaise with, and collaborate when required with external organisations and bodies (such as government departments and agencies, other Councils, business associations, environmental groups, resident/ratepayer groups, landcare/coastcare groups) to promote integrated management of natural resources and protection and enhancement of biodiversity.

2 Introduction

Biodiversity in the Whangarei District

The natural environment of the Whangarei District contains many and varied landscapes, providing a diverse range of habitats and promoting a high level of biodiversity. Habitats vary from the extensive lowlands of the Hikurangi Swamp, to some 270km of coastline, with the harbour supporting over 10,000 waterbirds, rolling pasture land, volcanic scoria cones supporting volcanic broadleaf forests and 17 major river catchments. Indigenous forest covers 22% of the District, and the District is also home to populations and breeding sites of North Island brown kiwi, Pateke (brown teal), Hochstetter's frog, New Zealand dotterel and the New Zealand fairy tern. Whangarei District is also home to 220 regionally significant species such as the New Zealand scaup, kukupa (native wood pigeon), and banded kokopu.

BIODIVERSITY: *Biodiversity includes the variety of living organisms, including plants, animals, fungi and micro-organisms; the diversity of life on earth.*

It also includes the diversity of ecosystems in which they live (ecosystem diversity), and the variety of genes within a species and between populations (genetic diversity).

Internationally, New Zealand contains a relatively high level of biodiversity – it is a biodiversity 'hotspot'. Even within New Zealand, the diversity of landforms and soil types of Northland has resulted in a wide variety of natural ecosystems and an unusually high diversity and endemism of species. This means that the species we have in New Zealand and Northland are the only places in the world they occur, and so contribute to global biodiversity. Thus the maintenance of biodiversity in Northland and Whangarei is of high importance.

ENDEMIC: *Means that a species is only found in that place; it is unique to that area.*

The natural environment plays an important role in defining the character of the Whangarei District, and contributes to our unique sense of place. It has been shown that one of the main reasons people move to Northland is the quality of the environment, and the main reason for staying, is again the environment. Development such as tourism, agriculture, forestry, fishing, aquaculture, and mining are all dependent upon sustained and managed natural resources including biodiversity. Thus, a successful economy over the long-term is dependent upon a sustainable natural environment.

Biodiversity is also central to the functioning of ecosystems, including the benefits people obtain from healthy and diverse ecosystems (ecosystem services). These include such things as food provision, air, water, soil, and other resources. Ecosystem services are commonly classified as provisioning services (food, fibre, water, fuel), regulating services (air quality, pollination, erosion control, climate regulation), cultural services (spiritual, recreational, educational, aesthetic), or supporting services (photosynthesis, nutrient cycling, soil formation).

Why we need a Biodiversity Strategy

Loss of Biodiversity

The State of the Environment Report on Biodiversity (2011) highlighted the current situation of biodiversity in the Whangarei District. The well-being of our natural environment is under pressure from many threats facing biodiversity, including habitat destruction, introduced pests, weeds and pollution. There are 205 at risk and threatened species present within the District, all of which are under threat from pressures of one form or another. Between the 2002 and 2005 updates of the New Zealand Threat Classification System, threatened and at risk species present within the District that were considered to have genuinely worsened in status were: grey duck (serious decline to nationally endangered), ornate skink (not threatened to gradual decline) and forest ringlet butterfly (gradual decline to serious decline).

The District also contains 62,323ha (23%) of acutely and chronically threatened environments, meaning that less than 20% of indigenous vegetation remains in these areas. In the years from 1997 – 2002, 284ha (0.4%) of indigenous land cover such as fernland, grey scrub, broadleaved indigenous hardwoods, and manuka/kanuka was lost. Additionally, 16% of new lots created from 1996 – 2009, and 12% of land use consents were located or partly located within a significant ecological area identified as part of the Protected Natural Areas Programme. Twenty-six percent of new lots and 25% of land use consents were granted within North Island brown kiwi habitat (1996 – 2009).

Pressures such as these are contributing to biodiversity loss locally and nationally, as national and regional state of the environment reports indicate a continuing loss of biodiversity. This data highlights the fact that

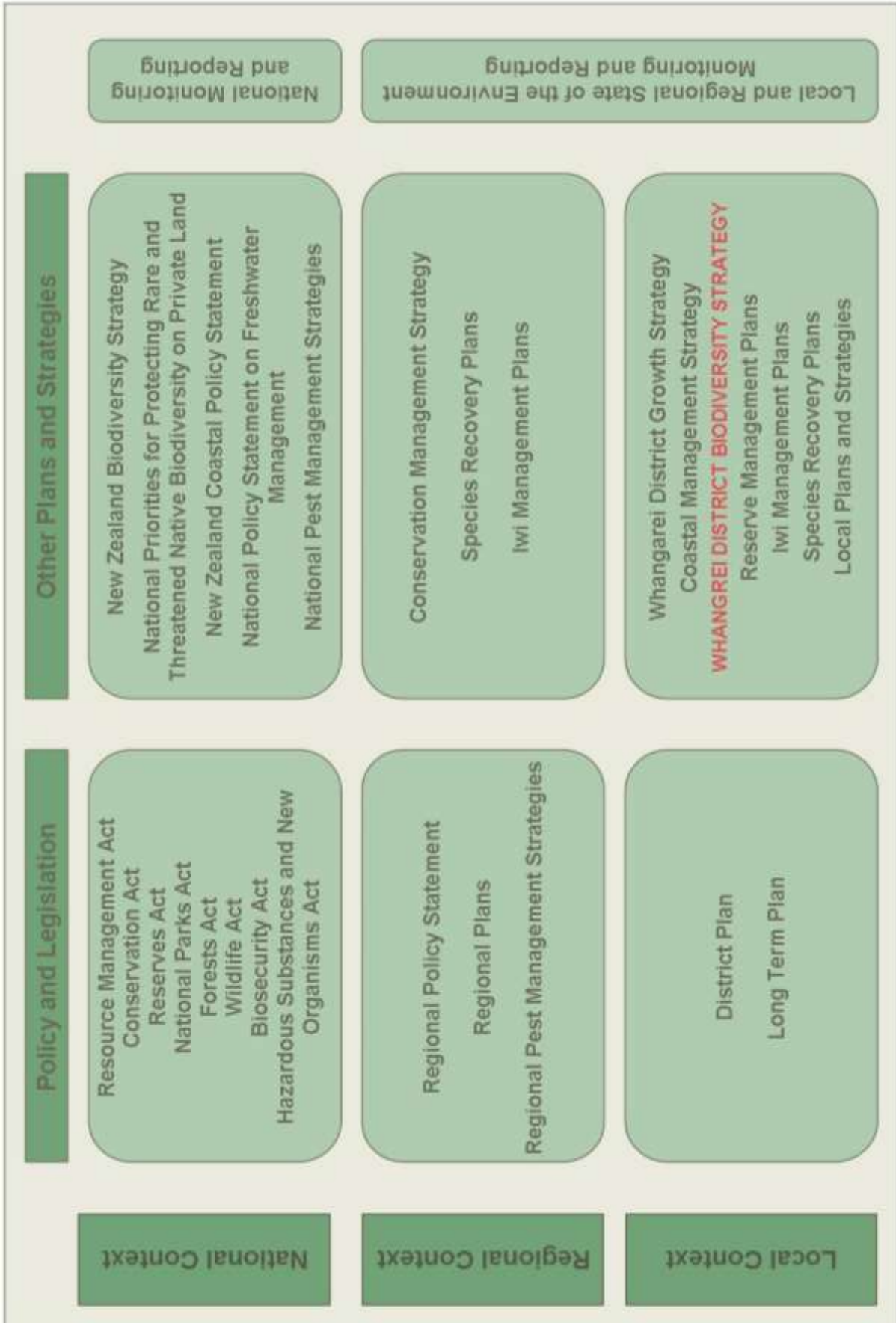
statutory objectives relating to biodiversity management such as 'maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District' and 'protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development' are not being achieved. The state of the environment report therefore recommended that a biodiversity strategy be developed to co-ordinate and enhance efforts to achieve these objectives, and ensure that District Council functions with regards to biodiversity are being carried out.

Internationally, New Zealand is a signatory to the international Convention on Biological Diversity, with a duty to protect our indigenous biodiversity. A main outcome of this was the production of a Biodiversity Strategy for New Zealand (The New Zealand Biodiversity Strategy, 2000). This sets a framework for biodiversity protection and enhancement of biodiversity in New Zealand. Council also has functions relating to biodiversity under a variety of legislation and national policy, e.g. the Resource Management Act and the New Zealand Coastal Policy Statement (see section 3 and figure 1). There are also functions relating to biodiversity included in regional planning documents, such as the Regional Policy Statement for Northland, Regional Coastal Plan and Regional Water and Soil Plan. Lastly, the Whangarei District Growth Strategy along with the State of the Environment Report on Biodiversity outlined a range of initiatives that are required to meet statutory obligations in relation to biodiversity protection and enhancement. It is important that these functions are carried out effectively.

In order to ensure that this happens and to set out a framework and process for achieving biodiversity objectives, this biodiversity strategy has been prepared. It is intended that the strategy will:

- Identify actions necessary to achieve District Council statutory functions relating to the protection of indigenous biodiversity, particularly those required under Part 2 and s.31 of the RMA and the New Zealand Coastal Policy Statement.
- Collate and re-focus policies and actions relating to biodiversity already adopted by Council and the community, and propose new ones to ensure statutory objectives relating to biodiversity are achieved.
- Identify opportunities to integrate/enhance existing functions relating to biodiversity management in the Whangarei District, particularly within Council.
- Identify opportunities to integrate actions relating to biodiversity management with neighbouring territorial authorities, Northland Regional Council (NRC) and the Department of Conservation (DoC).
- Incorporate relevant actions from the State of the Environment Report on Biodiversity and the Whangarei District Growth Strategy Implementation Plan relating to biodiversity.
- Inform the review of District Plan provisions relating to biodiversity.
- Provide information and educate the public/stakeholders about biodiversity management in the Whangarei District.
- Provide a monitoring framework to measure progress and assess monitoring requirements relating to biodiversity.

Figure 1 Policy and legislation – local, regional and national setting for biodiversity management



3 Policy and Legislation

The following section outlines relevant policy and legislation directing biodiversity management in New Zealand and the Whangarei District. Council and other government agencies have a mandate to manage biodiversity according to this legislation.

Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the main statute prescribing how we should manage the environment in New Zealand. The purpose (section 5) of the RMA is to: “promote the sustainable management of natural and physical resources” (which includes all forms of plants and animals). There are several matters of national importance (section 6), including “the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins”, “the protection of outstanding features and landscapes” and “the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.” Section 30 and 31 set out the functions of regional and territorial authorities, including “the establishment, implementation, and review of objectives, policies, and methods for maintaining indigenous biological diversity” (regional) and “**the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of – ...the maintenance of indigenous biological diversity**”. Under the RMA, regional and District plans are formulated which include regulatory protection for the environment including indigenous biodiversity.

More information <http://www.mfe.govt.nz/rma/index.html>

Local Government Act 2002

The Local Government Act states that in undertaking their functions, local authorities should take a sustainable development approach, including taking into account the need to maintain and enhance the quality of the environment.

More information <http://www.gp.org.nz/related-laws/faq-rma-lga.php>

Conservation Act 1987

The Conservation Act was developed to promote the conservation of New Zealand's natural and historic resources. To achieve this, it established the Department of Conservation, and specifies the functions of the department, one of which is the protection and enhancement of biodiversity. The Act also sets out the process of land acquisition for conservation purposes.

More information <http://www.doc.govt.nz/about-doc/role/legislation/conservation-act/>

Reserves Act 1977

This Act provides for the acquisition of land for reserve purposes and the classification of these, including scenic, nature and scientific reserves as well as conservation covenants and Nga Whenua Rahui kawenata (covenants on Maori land).

More information <http://www.doc.govt.nz/about-doc/role/legislation/reserves-act/>

National Parks Act 1980

This Act provides for the preservation in perpetuity for their intrinsic worth and for the benefit, use and enjoyment of the public areas that contain scenery of such distinctive quality, ecological systems or natural features so beautiful, unique or scientifically important that their preservation is in the national interest.

More information <http://www.doc.govt.nz/about-doc/role/legislation/national-parks-act/>

Forests Act 1949

The Forests Act 1949 was amended in 1993 to bring an end to unsustainable harvesting and clear-felling of indigenous forest. Now, indigenous timber can only be produced from forests that are managed in a way that maintains continuous forest cover and ecological balance – sustainable forest management. It must be ensured that forests continuously provide a full range of products and amenities in perpetuity, while retaining natural values.

More information <http://www.maf.govt.nz/forestry/forestry-in-nz/indigenous-forestry>

Wildlife Act 1953

The Wildlife Act deals with the protection of certain species, and provides for the establishment of wildlife reserves.

More information <http://www.doc.govt.nz/about-doc/role/legislation/wildlife-act/>

Biosecurity Act 1993

The Biosecurity Act provides a legal basis for the exclusion, eradication and effective management of pests and unwanted organisms in New Zealand. Under this Act national pest management strategies are able to be notified, and local authorities are able to prepare regional pest management strategies for the control of unwanted pests and organisms.

More information <http://www.biosecurity.govt.nz/biosec/pol/bio-act>

Hazardous Substances and New Organisms Act 1996

This Act established the Environmental Risk Management Authority (ERMA) to assess and decide on applications to introduce hazardous substances or new organisms into New Zealand, including genetically modified organisms. In July 2011, ERMA became the Environmental Protection Authority (EPA).

More information <http://www.mfe.govt.nz/laws/hsno.html>

New Zealand Biodiversity Strategy 2000

The New Zealand Biodiversity Strategy was produced in response to the decline of New Zealand's indigenous biodiversity and fulfils part of our obligations to the Convention on Biological Diversity. It established a framework for action to conserve and sustainably use and manage New Zealand's biodiversity. The four goals are: Community and individual action; responsibility and benefits; Treaty of Waitangi and to halt the decline in New Zealand's indigenous biodiversity and genetic resources of introduced species.

More information <http://www.biodiversity.govt.nz/picture/doing/nzbs/index.html>

Statement of National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land 2007

The national priorities in this statement set out the types of ecosystems and habitats in New Zealand that are in most need of protection. The statement is intended as a guide for local authorities, conservation groups and landowners, giving clear priorities for the protection and management of biodiversity, including in planning and decision-making frameworks. The four priorities are:

- To protect indigenous vegetation associated with land environments that have 20% or less remaining indigenous cover.
- To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.
- To protect indigenous vegetation associated with 'originally rare' terrestrial ecosystem types.
- To protect habitats of acutely and chronically threatened indigenous species. The statement is a non-statutory document.

More information <http://www.biodiversity.govt.nz/land/guidance/>

New Zealand Coastal Policy Statement 2010

The New Zealand Coastal Policy Statement guides local authorities in their management of the coastal environment. Policy 11 directs local authorities to protect indigenous biological diversity in the coastal environment by avoiding adverse effects on certain biodiversity elements, and avoiding significant adverse effects on other biodiversity elements. Policy 13 addressed the preservation of natural character of the coastal environment (which includes elements of biodiversity) and its protection from inappropriate subdivision, use and development and Policy 14 promotes the restoration or rehabilitation of the natural character of the coastal environment. Policy 15 outlines the method for protecting natural features and landscapes (which include elements of biodiversity) in the coastal environment from inappropriate subdivision, use and development.

More information <http://doc.org.nz/publications/conservation/marine-and-coastal/new-zealand-coastal-policy-statement/new-zealand-coastal-policy-statement-2010/>

National Policy Statement for Freshwater Management 2011

A primary policy objective of the National Policy Statement (NPS) for Freshwater Management is to safeguard freshwater's life-supporting capacity, ecosystem processes and indigenous species. The freshwater NPS contains policies to provide direction on water quality, water quantity, integrated management and iwi/hapū interests. The freshwater NPS's major focus is the setting of limits for both water quantity and quality.

More information <http://www.mfe.govt.nz/rma/central/nps/freshwater-management.html>

Proposed National Policy Statement on Indigenous Biodiversity

The government released a proposed National Policy Statement (NPS) on Indigenous Biodiversity in January 2011. The NPS is intended to provide clearer direction to local authorities on their responsibilities for managing indigenous biodiversity under the RMA. It outlines policies and decision-making frameworks for the identification and management of indigenous biodiversity found outside the public conservation estate. It also provides clarification as to what is to be considered significant indigenous vegetation and significant habitats of indigenous fauna, drawing on the criteria listed in the statement of national priorities. A summary of submissions has been released (December 2011), but it is unknown when the final document will be released.

More information <http://www.mfe.govt.nz/publications/biodiversity/indigenous-biodiversity/index.html#about>

Conservation Management Strategy for Northland

Conservation management strategies are 10-year regional strategies that provide an overview of conservation issues and give direction for the management of public conservation land and waters, and species for which the Department of Conservation has responsibility. Their purpose is to implement general policies and establish objectives for the integrated management of natural and historic resources, and for recreation, tourism, and any other conservation purposes. The current strategy is under review, with a draft due in 2012.

More information <http://www.doc.govt.nz/about-doc/role/policies-and-plans/conservation-management-strategies-and-plans/>

Iwi Management Plans

Iwi management plans address resource management issues of iwi and hapū within their rohe. Iwi management plans are generally prepared as an expression of rangatiratanga to help iwi and hapū exercise their kaitiaki roles and responsibilities. Three have been completed in the Whangarei District:

- Ngāti Hine Iwi Environmental Management Plan (2008)
- Patuharakeke Te Iwi Trust Board (Inc.) Takahiwai Marare Environmental Plan (2007)
- Te Iwi o Ngatiwai Iwi Environmental Policy Document (2007)

More information <http://www.qp.org.nz/plan-topics/faq-iwi-management.php>

Northland Regional Policy Statement

The Regional Policy Statement for Northland (RPS) is prepared under the RMA, and is the overarching resource management document for the region. It sets the direction for the management of natural and physical resources, and regional and District plans have to give effect to this document. The RPS includes objectives, policies and methods for the management of ecosystems and biodiversity. It is currently being reviewed.

More information <http://www.nrc.govt.nz/Resource-Library-Summary/Plans-and-Policies/Regional-Policy-Statement/Regional-Policy-Statement/>

Whangarei District Growth Strategy: Sustainable Futures 30/50

The Whangarei District Growth Strategy sets out a strategic direction for the District over the next 30/50 years. It has been developed in response to significant population growth, and population growth projections.

Sustainability, including environmental sustainability is the key concept underlying the project. A preferred settlement pattern has been developed, based on consolidated development of existing areas. The implementation plan outlines actions relating to biodiversity that should be implemented in the District over the next 30/50 years, which are drawn on for developing this strategy.

More information

<http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/SustainableFutures/Pages/default.aspx>

Whangarei District Plan

The Whangarei District Plan is prepared under the RMA and sets out the regulatory framework for resource management in the District. Policies and rules direct the use and development of land in order to manage effects on the environment. The plan contains objectives and policies for indigenous vegetation and habitat, including indigenous vegetation clearance rules. The objectives for indigenous vegetation and habitat are: 'maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District' and 'protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development'.

More information <http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/DistrictPlan/Pages/default.aspx>

Long Term Plan 2012 – 2022 (draft)

The Long Term Plan sets territorial authorities' commitments and priorities for the following 3-10 years, including those relating to the natural environment, and how these are to be achieved. It also reports on the achievement of past commitments. One of the community outcomes that the Plan seeks to achieve is "A clean, healthy and valued environment".

More information <http://www.wdc.govt.nz/PlansPoliciesandBylaws/Plans/LTCCP/Pages/default.aspx>

Whangarei Reserves Strategy (draft)

This strategy will provide for the future management and acquisition of reserves (including those for biodiversity purposes) in the District when it is finalised.

Whangarei Open Space Strategy: Open Spaces Special Places

Council approved the Open Space Strategy in 2001, to set the direction for planning and managing open spaces now and into the future. This includes for the purposes of conservation and management of biodiversity.

More information

<http://www.wdc.govt.nz/FacilitiesandRecreation/ReservesandOpenSpaces/Pages/default.aspx>

All websites accessed December 2011.

4 Roles of Agencies

Environmental Protection Authority

The Environmental Protection Authority (EPA) is a government agency formed to exercise responsibility for regulatory functions concerning environmental management in New Zealand.

These include national consenting under the RMA (including for activities in the Exclusive Economic Zone), regulation of hazardous substances and new organisms, ozone depleting chemicals, hazardous waste exports and imports, assessment of environmental effects in Antarctica and management of the Emissions Trading Scheme.

More Information <http://www.epa.govt.nz/about-us/who-we-are/Pages/default.aspx>

Ministry for the Environment

The Ministry for the Environment (MfE) advises the Government on New Zealand's environmental laws, policies, standards and guidelines, monitors how they are working in practice, and takes any action needed to improve them. One focus is promoting the sustainable management of land and water, including indigenous biodiversity.

MfE also reports on the state of the New Zealand environment, local government performance on environmental matters, and on the work of the EPA and the Energy Efficiency and Conservation Authority.

More information <http://www.biodiversity.govt.nz/picture/doing/who/govt.html>
<http://www.mfe.govt.nz/about/about.html>

Biosecurity New Zealand

The Ministry of Agriculture and Forestry/Biosecurity NZ is the government agency leading New Zealand's biosecurity system. This involves preventing harmful organisms from entering and establishing in New Zealand, and reducing the unwanted harm caused by organisms already established here to ensure the welfare of the environment, flora and fauna, marine life and Māori resources.

More information <http://www.biosecurity.govt.nz/biosec/org>

Department of Conservation

The Department of Conservation (DoC) is the government department charged with conserving the natural and historic heritage of New Zealand. Among its responsibilities, DoC manages or administers: national parks and conservation parks protected inland waters and wild and scenic rivers, native wildlife, non-commercial freshwater fisheries, marine reserves and offshore islands set aside for conservation.

DoC has a leading role in conservation work, including: managing natural and historic heritage, including marine environments, hands-on work with species and ecosystems, managing national parks, high country parks, forest parks, reserves, offshore islands, and historic sites, building and maintaining outdoor recreation facilities, working with tourism operators and others running businesses on public conservation areas, leading conservation research and science, sharing information and partnering with others including iwi, communities, non-government organisations, businesses, conservation boards, and central and local government and advocating for the conservation of natural and historic heritage.

More information <http://www.biodiversity.govt.nz/picture/doing/who/govt.html>
<http://www.doc.govt.nz/about-doc/role/vision-role-overview-and-statutory-mandate/overview-of-docs-role/>

Northland Regional Council (NRC)

The NRC is the over-arching local government body in Northland. Their mandate is to protect the region's land, water, coast and air while still allowing for sustainable development. Responsibilities include: environmental management including resource management planning and monitoring, flood and land management, biosecurity, emergency management, pollution control, public transport planning and funding, and coastal navigation and safety.

More information <http://www.nrc.govt.nz/Resource-Library-Summary/Publications/Funding-and-support/What-we-do1/What-we-do/>
<http://www.nrc.govt.nz/Your-Council/Council-business/What-we-do/>

Whangarei District Council (WDC)

WDC has functions under the RMA, with the responsibility to manage the effects of development including subdivision and land use to achieve the protection of land and associated natural and physical resources of the District. This is achieved through the District plan, long-term and other statutory and non-statutory plans and strategies.

WDC is also a landowner in the District and maintains a number of parks and reserves, including for the purposes of biodiversity, nature conservation, and ecological corridors/linkages.

More information: <http://www.wdc.govt.nz/YourCouncil/WhatWeDo/Pages/default.aspx>

NZ Landcare Trust

The NZ Landcare Trust is an independent, non government organisation that works with farmers, landowners and community groups to improve the sustainability of our landscapes and waterways. A focus is on building good relationships with farmers, landowners and rural communities, and working closely with them. The Trust works on a range of field projects, from large catchment-based projects that deal with complex landcare issues to smaller, landcare groups with a specific biodiversity focus. The trust also organises the Biodiversity Northland Forum.

More information: <http://www.landcare.org.nz/About-Us>

<http://www.landcare.org.nz/About-Us/What-we-do>

Biodiversity Northland Forum

Biodiversity Northland brings together all agencies involved in biodiversity management and protection in Northland, including DoC, local government, Iwi, landcare groups, Fish and Game NZ etc. Regular meetings are held which facilitate the sharing of information relating to biodiversity, and promote integrated management among the three Districts in Northland and those organisations involved in biodiversity management.

More information <http://biodiversitynorthland.org.nz/>

Fish and Game New Zealand

Fish and Game New Zealand's role includes looking after the habitats of sports fish and game birds. This type of work includes protecting streams and rivers from development and water abstraction, ensuring water quality is protected from illegal dumping and pollution, and that wetlands are protected from drainage. Although this work is to protect the habitat of hunting and fishing species, it also benefits water quality and wetland environments, and associated indigenous biodiversity.

More information <http://www.fishandgame.org.nz/Site/Features/FeatureswhatdoesFGdo.aspx>

Conservation/Voluntary Community Groups

There are a number of conservation groups e.g. coastcare and landcare groups, trusts, resident and ratepayer groups that work on reserve land and private land in the District to maintain ecological systems and biodiversity. The efforts of these groups are invaluable in the protection and enhancement of biodiversity values in the District.

Land Owners

Land owners have responsibility for managing their own land and its resources according to the Whangarei District Plan. Many landowners in the District work hard to conserve and manage remaining biodiversity on their land. This includes entering into formal covenants on land covered by native bush, either through Council or QEII covenants, and restoration efforts.

Iwi/Hapu

The traditional relationship developed over centuries of close interaction by Māori with New Zealand's indigenous biodiversity remains an important part of the lives of many Maori. As well as being traditional users of biological resources, Māori have interests in agriculture, forestry, fisheries, aquaculture and ecotourism, all of which include elements of biodiversity. Māori are involved in all aspects of biodiversity management, including conservation and customary and commercial use. They are kaitiaki for the biodiversity of tribal areas and holders of traditional tribal knowledge. Māori involvement in biodiversity and

resource management is increasingly taking the form of partnership arrangements between Crown agencies and Māori. For example, partnerships between DOC and individual iwi and hapu include shared management of particular conservation areas and access to biological resources for customary use.

Māori are also developing their own iwi management plans, which address natural resource issues within their rohe, including biodiversity.

More information <http://www.biodiversity.govt.nz/picture/doing/nzbs/part-three/theme-seven.html>

All websites accessed December 2011.

5 Current Biodiversity Management in Whangarei District

Current biodiversity management in Whangarei District is undertaken by various government and non-government organisations along with private landowners. This section deals mainly with Council and Council related functions. Within-Council functions are spread across a number of departments and currently lack co-ordination. The intent of this strategy is to provide a consistent approach to biodiversity management across Council along with a strategic long-term approach to such management.

Council Parks and Reserves

WDC is a significant land holder in the District, including land administered for the purpose of parks and reserves. These areas can have significant value for biodiversity, as land is generally not under threat from development pressure and may be managed for pest and weed control. Approximately 2,300ha of reserves are administered by Council in the District (Whangarei District Growth Strategy, 2010). Currently, Council is undergoing a rationalisation of reserve assets to quantify and classify reserves in the District and a reserves strategy is being produced to provide for management and direct future acquisition of reserves.

Reserve Management Plans

The Reserves Act 1977 requires that reserve land administered by Council under that Act be managed in accordance with an approved Reserve Management Plan (RMP) which sets the direction for management, control and administration of that reserve. Once a reserve management plan has been prepared, consulted on and adopted, it is subject to ongoing review to adapt to changing circumstances or increased knowledge about the reserve.

Reserve management plans are currently completed for four reserves within Whangarei District: Parihaka and Hatea River reserves, Kensington Park, William Fraser Memorial Park (Pohe Island) and Pukenui Forest – Ngahere o Pukenui. There is also a draft Waiarohia Stream Reserves Management Plan.

Whangarei District Council Natural Area Maintenance Programme

The natural area maintenance programme was initiated by Council in 2005 to focus and increase the effectiveness of weed control efforts in the District. Prior to the programme, weed control was undertaken in an ad-hoc manner in response to requests for service from the community or the identification of a specific problem. In order to generate more achievable and maintainable outcomes, weed control efforts were concentrated in specific areas. In 2005/06, a pilot project to control all pest plants in a 12ha area of Mair Park was seen as sufficiently successful to increase this area the next year, and extend the programme to other areas, including AH Reed Memorial Park, Whangarei Falls and Coronation Reserve in subsequent years. Currently, a total of 169ha is maintained as weed-free in these areas. The programme extended each year, but only to the extent that the weed free areas can be maintained, ensuring ongoing success. Achieving these outcomes in visible and well-used areas also serves to raise awareness, and attract funding and buy-in to the project.

Pohutukawa Coast Programme

The Pohutukawa Coast Programme was initiated by Council 20 years ago, with free Pohutukawa trees being supplied to landowners to help re-establish Pohutukawa trees along the coastline. The programme is now administered in combination with the New Zealand Refining Company, and has expanded to include other trees such as kauri and hebe, and bird-feeders such as flax and kowhai. Over 41,000 trees have been planted in the District as a result of the programme, with more being planted each year. The benefits of planting these trees include providing food and habitat for native birds and encouraging biodiversity. In future there is a possibility to focus planting in areas that may serve as connections between habitats, e.g. areas of the city between Parihaka and Coronation Reserves.

Friends of Matakohe-Limestone Island

Matakohe-Limestone Island, in the Whangarei Harbour, is a scenic reserve owned by Whangarei District Council. By agreement, it is managed by the Friends of Matakohe-Limestone Island Society, and sponsored by the District Council and Golden Bay Cement. Island restoration and re-planting started in the 1980s and continues today along with predator and weed-control programmes. A full-time ranger position was initiated in the mid-1990s. The island is now a crèche for brown kiwi, which are transferred from the mainland until they are large enough to survive stoat predation.

Other introductions to the island include lizards, invertebrates and grey-faced petrel, with other bird species also naturally colonising. Work continues with the help and support from the community and volunteers and is a testament to biodiversity restoration in the District.

Pukenui Western Hills Forest Charitable Trust

Pukenui Forest, located on the Western Hills, comprises approximately 1,700ha of public land administered by the Department of Conservation and the Whangarei District Council in conjunction with Iwi, adjoining owners, and recreational groups. The forest is habitat for many threatened species, and is one of the largest areas identified as part of the Protected Natural Areas Programme in the Whangarei District. It is also a major water catchment for the city, supplying around 50-60% to the city water supply. The Pukenui Western Hills Forest Charitable Trust was formed in the 2008 as an over-riding body to co-ordinate the restoration of the forest. Whangarei District Council sponsors the trust, which includes a Council representative. The trust is also assisted by the Northland Regional Council and DOC. A management plan for the area was released in 2009, and guides restoration and conservation efforts. These include pest and weed control (including pest and weed-free zones), and wildlife monitoring.

Esplanade Reserves and Strips

The acquisition of esplanade reserves and strips is provided for in section 230 of the RMA. They are generally created as a result of the subdivision process, but may be created by agreement between Council and the landowner. The purpose of esplanade creation is for public access and also conservation purposes. Esplanade reserves are vested with Council, and may slowly erode over time, as rivers change course, or Mean High Water Springs changes. Esplanade strips remain in the ownership of the landowner, but move with the course of the river. When parcels of less than 4ha are created as a result of subdivision, an esplanade reserve or strip of 20m must be created if the lot contains a river of more than 3m in width. There may be circumstances when a waiver in the 20m width may be granted, for instance when there is no additional ecological or access benefit from having the width. Esplanade strips may be created where probable erosion will erode a reserve (e.g. eroding coastlines). To ensure that conservation values are protected in placing an esplanade strip along a riparian margin, a covenant may also be placed on the site, requiring protection of vegetation and fencing or stock, etc.

Esplanade reserves or strips may be acquired in exceptional circumstances on lots over 4ha for high priority areas e.g. the Hatea River. An esplanade priority network has been developed for the District where riparian areas with a high public amenity value, or where conservation would benefit from riparian protection. This includes the entire coastline in the District. The policy of Council is to take esplanade reserves or strips whenever the opportunity arises, with applications for reduction in width generally being declined.

Esplanade reserves and strips are an important, once off opportunity to preserve riparian corridors and maintain and create connections with existing habitat. They should continue to be created and maintained in order to provide a positive contribution to biodiversity in the District. Once created, esplanade reserves become a reserve of Council and are managed by the Parks and Recreation Department.

Regulatory Management

Whangarei District Plan

The District plan contains various regulatory measures aimed at the protection of the natural environment, including biodiversity. These include vegetation clearance rules, setback distances from water bodies, goat control rules, esplanade area rules, and lot size restrictions on subdivision. There are also objectives and policies for indigenous vegetation and habitat, heritage trees, riparian and coastal margins, landscapes, water bodies and open space, which all include biodiversity elements.

Objectives and Policies

Indigenous Vegetation and Habitat

All objectives and policies in this section are directly relevant to maintenance and enhancement of biodiversity in the District.

Objectives

- 17.3.1 Maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District.
- 17.3.2 Protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development.

Policies

- 17.4.1 To recognise as significant, and provide protection for, indigenous vegetation and habitats of indigenous fauna, including indigenous wetlands, which are of Moderate, Moderate-High and Outstanding Value using the criteria set out in Schedule 17A.
- 17.4.2 To maintain the ecological values of significant indigenous vegetation and the significant habitats of indigenous fauna in the Living 3, Countryside, Coastal Countryside and Open Space Environments.
- 17.4.3 To promote the enhancement of areas of significant indigenous vegetation and significant habitats of indigenous fauna that have been, or may be degraded by inappropriate subdivision, use and development.
- 17.4.4 To avoid, remedy or mitigate the adverse effects of land use activities on areas of indigenous vegetation and significant habitats of indigenous fauna, including areas of value to tangata whenua, as determined by Schedule 17A, so as to maintain its ecological values.
- 17.4.5 To avoid, remedy or mitigate the adverse effects of goats in areas where they have been eradicated at Mt Manaia and Bream Head.
- 17.4.5 A To avoid the introduction of plant and animal pests where practicable.
- 17.4.5 B To encourage programmes for plant and animal pest control in areas of ecological value.
- 17.4.5 C To recognise that dogs, cats and mustelids are a significant threat to kiwi.

Landscape

Most of the objectives and policies in the landscape chapter are relevant to maintaining indigenous biodiversity as it relates to natural character and natural landscapes (i.e. indigenous vegetation and indigenous ecosystems).

Objectives

- 16.3.1 The preservation of the natural character of the coastal environment.
- 16.3.2 The protection of outstanding landscapes and natural features, including geological sites from inappropriate subdivision, use and development.
- 16.3.4 The preservation of natural features significant to Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga.

Policies

- 16.4.4 To ensure that subdivision, use and development does not adversely affect the natural character of the coastal environment (particularly coastal headlands and promontories), lakes and rivers and their margins.
- 16.4.5 To ensure that subdivision of land in Outstanding Landscape Areas, or land containing Outstanding Natural Features or Geological Sites is of a scale, design and location that maintains and protects the landscape values and natural character of the environment.
- 16.4.10 To protect indigenous vegetation, which contributes to the character and visual quality of landscapes from inappropriate subdivision, use and development.
- 16.4.11 To encourage the rehabilitation of landscapes ensuring the remediation of the adverse effects of inappropriate land use activities. Development proposals that provide for the enhancement and rehabilitation of previously compromised landscapes may receive recognition for the positive effects provided.
- 16.4.12 To identify for protection and, where possible, enhance natural features that are significant to Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and to ensure that these natural features are not adversely affected by inappropriate subdivision, use and development.

Open Space

This section contains several objectives and policies relating to indigenous biodiversity:

Objectives

- 15.3.1 Provide open space that meets community, recreational and conservation needs.
- 15.3.2 Where appropriate, create open space linkages that provide physical connections between ecosystems, and enhance biodiversity and recreational opportunities.

Policies

- 15.4.4 To establish open space linkages between significant ecological sites and between public recreation areas in order to enhance biodiversity, physical ecosystem connections and recreational opportunities.

Water Bodies

Objectives relating to biodiversity include the preservation of the natural character of water bodies, and avoiding adverse environmental effects on them. Policies include controlling the effects of subdivision and land use to avoid, remedy or mitigate adverse effects on water quality and quantity, including by separation distances for land use activities, and the retention and enhancement of riparian vegetation.

Heritage Trees

Heritage trees can contribute to biodiversity values in the District. The objective in this section is to protect and enhance trees that make a significant contribution to heritage values, thus also protecting their contribution to biodiversity. Rules relating to heritage trees involve controlling the trimming and removal of the trees, and activities impacting on heritage trees.

Tangata Whenua

Relevant policy includes ensuring that indigenous wetlands, estuaries, coastal areas and waterbodies, of significant to tangata whenua, are maintained and enhanced, and that access for tangata whenua to those water bodies is provided.

Riparian and Coastal Margins

Objectives and policies relate to the preservation of, and avoiding adverse effects on the *natural character* of riparian margins, water quality (including separation distances), protecting significant ecological areas on the coast and alongside rivers and streams and maintaining and enhancing riparian vegetation. Natural character includes elements of biodiversity, and aquatic biodiversity is affected by the quality of water, which is in turn affected by the quality of riparian margins.

This section of the plan also covers policies relating to the taking of esplanade reserves and strips (refer relevant section in this Chapter).

The Coast

Objectives and policies on the coast mainly relate to the preservation of, and avoiding adverse effects on the *natural character* of the coastal environment, particularly the effects of subdivision, use and development. Natural character includes elements of indigenous biodiversity e.g. indigenous vegetation and indigenous ecosystems. Therefore preservation and protection of natural character benefits biodiversity in the coastal environment.

Summary

Overall, there are many objectives and policies that are beneficial for biodiversity in the District plan. However, these are not always taken into account as there are no corresponding rules to back them up, i.e. there are no rules relating to significant ecological areas (significant indigenous vegetation and significant habitats of indigenous fauna). Significant ecological areas are also not currently identified in the District plan. This has led to a permissive development environment, with many activities affecting biodiversity being permitted or controlled. Evaluation of the effects of proposals in or around significant ecological areas occurs in an ad hoc manner, relying on the application of criteria in Schedules 17A, B and C of the plan (Appendix 2) to determine where these areas are. This may lead to inconsistency in the application being applied, and uncertainty over whether areas qualify or not. In the absence of rules relating to significant ecological areas and identification of significant ecological areas on the planning maps, the underlying rules of each Environment (i.e. Countryside and Coastal Countryside) apply, and thus the strength of these rules become important factors in the protection of significant ecological areas. The next section outlines the effectiveness of these rules, but in summary they are quite permissive, with inconsistencies, meaning the best

environmental outcome may not be achieved for the area. Protection of significant areas is not easy to achieve with the current provisions in the plan.

Rules

Goat Control Rules

In areas of outstanding landscape, and within a goat control area the keeping of goats is only permitted where the goats are contained on site at all times. Goats can cause damage to native plants by browsing and trampling, preventing forest regeneration. This rule aims to prevent goats from doing this, particularly in areas where they have already been eradicated for the purpose of environmental regeneration. Goat control areas are currently in place at Mt. Manaia and Bream Head.

Indigenous Vegetation Clearance Rules

Countryside, Coastal Countryside and Open Space

Indigenous vegetation clearance of 500m² is permitted in areas of predominantly indigenous vegetation of 5ha or more, or 1ha predominantly over 6m, and in indigenous wetlands, where the express purpose is for providing a house site and access. Other vegetation removal is also permitted for such things as walking tracks, danger to human life and structures and cultural use, as well as vegetation removal with a MAF sustainable forestry permit. Otherwise vegetation clearance in these areas is discretionary. In other areas it is permitted.

Notable Landscape

Clearance of 500m² is permitted in areas of predominantly indigenous vegetation of 1ha or more and in indigenous wetlands where the express purpose is for providing a house site and access. Other vegetation removal is also permitted for such things as cultural use, danger to human life or existing structures and the creation and maintenance of walkways. Otherwise vegetation clearance is a controlled activity.

Outstanding Landscape

Vegetation clearance is permitted if the removal is of trees that are a danger to human life and existing structures, the clearance is for a fence where the purpose is to exclude stock, it is beneath the canopy of a production forest, or for cultural use. Otherwise vegetation clearance is a restricted discretionary activity.

Summary

These rules have proven to be permissive, with 500m² indigenous vegetation clearance permitted for a house site or access on each lot as a result of subdivision, as well as in indigenous wetlands. It is also currently a permitted activity to clear up to 5ha of indigenous vegetation, to clear up to 1ha of indigenous vegetation over 6m high, and to clear indigenous vegetation in accordance with a Sustainable Forest Management Permit (including old growth native trees e.g. Kauri). Vegetation clearance rules in areas of notable and outstanding landscapes are less restrictive (controlled and restricted discretionary status) than outside these areas (discretionary status). They also contradict with Northland Regional Water and Soil Plan rules controlling the removal of vegetation in indigenous wetlands (which is a discretionary activity in the Regional Water and Soil Plan, but permitted in the District Plan).

Esplanade Area Rules

These state that subdivision is a controlled activity if lots of less than 4ha are created with an esplanade reserve or strip with a minimum width of 20m along rivers over three meters in width or on the landward side of Mean High Water Springs. Otherwise it is a discretionary activity.

Lot Size Restrictions

In 2006, an Environment Court ruling increased discretionary subdivision in the Coastal Countryside Environment from 6ha to 10ha. The minimum lot size for a controlled subdivision in both the Countryside and Coastal Countryside was also increased from 4ha and 6ha respectively, to 20ha. Empirical evidence suggests that the increased lot size in these areas has helped the restoration of kiwi numbers at Whangarei Heads.

Significant Ecological Areas

During the District Plan formulation, a report was produced identifying 'Sites of Special Biological Importance (SSBI) in 1995. Prior to the Proposed District Plan being notified, SSBIs on public land, and those on private

land where landowners approved or were neutral of the identification on their land were included on the District Plan maps. The Plan included policies and rules for these areas ('significant ecological areas') and there were also criteria included to identify significant areas outside of the mapped areas.

Following submissions and hearings, some of the sites were removed – those where landowners had not stated either support or opposition to the identification of these areas on their property. This version was incorporated into the Transitional District Plan. During the appeal process, a workshop dealing with conflict over which significant ecological areas were to be included, and how they were identified was held.

The result of this was that because 'catch-all' vegetation clearance and wetland disturbance provisions were included in the Countryside, Coastal Countryside and Living 3 Environments, these would be sufficient to protect significant ecological areas. The chapter on significant ecological areas, and areas on the planning maps were withdrawn in 2003.

In 2005, tree protection was being addressed, with the decision that in rural areas tree protection rules be developed as part of the landscape project and that the general vegetation clearance rules in the District Plan be retained for habitat protection. Areas identified in the District as part of the Protected Natural Areas Programme (PNAP) undertaken by DOC were also recommended to be included in the District Plan once all the reports for the District were finalised. This is now the case and these areas will be addressed by the District Plan rolling review process.

Tree Protection

The Tree Protection Strategy was proposed in 2005. The elements of the proposed strategy included (extract from Environmental Services Committee minutes 15 December 2005):

5 Tree Strategy Proposed Way Forward

- 2.-1 *That Council make a resolution on which type of tree protection should be afforded in the Coastal Environment:*
 - 2.1 *Protection of Pohutukawa over a specified height and girth width; and*
 - 2.2 *Protection of other Natives over a specified height and girth width.*
- 3.-1 *That tree protection in the **urban environment** consists of a voluntary mechanism utilising the STEM criteria and Heritage Tree list in the District Plan;*
- 4.-1 *That tree protection rules in the **rural environment** are developed as part of the landscape project in areas identified as outstanding, visual amenity, natural character and heritage landscape areas, **and** that voluntary tree protection within the rural environment for individual trees through utilisation of the heritage tree list and STEM criteria **and/ or** through covenanting areas of bush;*
- 5.-1 *That the general vegetation clearance rules in the District Plan are retained for habitat protection, PNAP to be included in the District Plan once finalised;*
- 6.-1 *That additional criteria to the **STEM criteria** be inserted into the District Plan regarding the appropriateness of tree locations in regard to network utilities*
- 7.-1 *That an interim plan change is prepared in regard to trees **on Council and Road Reserve***
- 8.-1 *That a **draft tree strategy document** is prepared and is to go out for targeted public consultation.*
- 9.-1 *That a policy of incentives is developed and included in any public consultation.*

Plan Change 56 – Indigenous Pohutukawa in the Coastal Environment was initiated in response to concern over on-going loss of Pohutukawa trees in coastal settlements and as part of the Tree Strategy. The plan change aimed to introduce rules into the District Plan to protect Pohutukawa trees of a certain height and girth. As part of changes to the RMA in late 2008, territorial authorities' powers to use general tree protection rules (such as those in Plan Change 56) were effectively withdrawn. Consequently, the plan change was withdrawn in 2011, with the resolution to address tree protection provisions as part of the overall Tree Strategy dealing with the District as a whole.

Consent Conditions

Conditions are placed on resource consent to ensure that the effects of the activity to be undertaken do not adversely affect the environment, including biodiversity.

Common conditions include the requirement for a protective covenant over areas of bush, or the prohibition of keeping cats or dogs in areas near habitat for native birds such as kiwi. Individual trees may also be 'spot-protected', if there is reason for doing so.

Conservation Covenants

Conservation covenants are usually created as a result of subdivision as a means of mitigating environmental effects. However, they may also be created voluntarily. The area to be covenanted is formally registered on the Certificate of Title of a property, and the land is protected in perpetuity (i.e. forever). Covenants may be created under the Reserves Act (WDC covenant) or the Queen Elizabeth the Second National Trust Act 1977 (QEII covenant). Landowners may choose prior to the issuing of section 224 certificate whether to take up the WDC covenant or a QEII covenant. The QEII National Trust is an independent body that helps landowners establish 'open space' covenants on private land. There are criteria that must be met, and the covenant is monitored regularly to ensure compliance with covenant conditions. Covenants are usually fenced to exclude stock, with pest and weed management in place to protect the values of the vegetation. WDC covenants also generally contain conditions such as fencing, and pest and weed management plans. Council has a monitoring programme in place to assess the condition of these covenants, with initial findings showing that this is generally good, although most would benefit from specific pest and weed control.

There are now many conservation covenants created as a result of subdivision, and are an important mechanism to protect biodiversity. The 2010/2011 Annual Consents and Complaints Monitoring Report produced by Council shows that more and more covenants are being created in the District, which is a positive contribution to the protection of biodiversity, and shows how this mechanism is currently working well to achieve biodiversity objectives. Current data shows that there are 793 conservation covenants covering approximately 1,185ha, and 281 QEII covenants covering approximately 1,930ha in the District.

Wastewater Bylaw (2008)

The wastewater bylaw covers the public wastewater network, and onsite wastewater treatment and land application systems. It prohibits certain substances from entering the network, and requires new installations to fit water saving devices such as low flow shower heads. On-site wastewater treatment must be treated and disposed of within the confines of the site and comply with consent required by the Building Act 2004, and the relevant permitted activity rules in the Northland Regional Water and Soil Plan.

Stormwater Management Bylaw (2008)

The intention of the stormwater management bylaw is to manage stormwater within the District to protect people, property and the environment by minimising the impact of flooding, erosion and environmental pollution. It prohibits the entering to public stormwater systems of hazardous substances, chemical, sewage, trade waste or any other substance likely to cause nuisance. Private stormwater systems must be designed, constructed and operated in accordance with relevant standards and RMA plans.

Strategies

Various strategies have been produced by Council or are in production that includes elements of biodiversity protection, maintenance and enhancement. These include the Whangarei District Growth Strategy: Sustainable Futures 30|50, Open Space Strategy, Wastewater Strategy (draft), Whangarei Harbour Integrated Management Strategy (WHIMS, draft), and Reserves Strategy (draft).

Whangarei District Growth Strategy: Sustainable Futures 30|50

The strategy sets out a direction for managing growth sustainably in the Whangarei District over the next 30-50 years. The development path sets out a consolidated, sustainable settlement pattern, including environmental constraints and opportunities.

By consolidating and intensifying development in already compromised areas, the effects of development on biodiversity can be reduced.

However, there will be an on-going need for more formal protection of threatened areas to protect them from potential impacts associated with further development, along with increased efforts to protect existing

biodiversity from pests and weeds. The Implementation Plan for the Growth Strategy contains actions for the next 50 years, with specific actions relating to biodiversity. These are incorporated into this strategy.

Open Space Strategy: Open Spaces Special Places

Council approved the Open Space Strategy in 2001, to set the direction for planning for and managing open spaces in the District, including for the purposes of conservation and management of biodiversity. The open space strategy sets a vision, guiding principles and an implementation plan to best manage open spaces in Whangarei. This includes provision of open space and adequate recreation opportunities, including areas valued for conservation purposes (including plants, animals, wildlife habitats and ecological processes).

The reserves aspect of this strategy is currently being reviewed, and will comprise the reserves strategy when it is finalised. While the Open Space Strategy covers a wider open space and environmental perspective, the Reserves Strategy will focus more specifically on Council's role in the provision and management of its reserves network.

Whangarei Harbour Integrated Management Strategy (draft)

Publically, there is concern over the health of Whangarei Harbour, in particular from the effects of sewage and storm-related overflows. Whangarei District Council is investing substantial resources in the upgrade of the Whangarei City Wastewater Treatment Plant and associated assets, to address these concerns. However, there is also growing realisation that other actions are also needed to enhance the health of the Whangarei Harbour and its associated catchments. Additionally, there is a need for comprehensive management of land use in the Whangarei Harbour catchment area. The Whangarei Harbour Integrated Management Strategy is an opportunity to develop, in partnership with other organisations such as Northland Regional Council, Iwi, and the public, an integrated catchment strategy that enhances the health of Whangarei Harbour and improves outcomes for biodiversity.

Wastewater Strategy (draft)

This is currently a draft strategy that sets out principles for managing and delivering a high standard of wastewater treatment and disposal in the Whangarei District, thus benefiting the environment. The vision is that Whangarei District is more sustainable, resilient, prosperous, safer, healthier and cleaner because of the top quality wastewater service provided. One of the four goals is: "to protect the environment by minimising adverse environmental effects from wastewater discharges, including discharges to land water and air", with the principles for achieving these goals being a well managed and sustainable treatment and disposal, a well managed network, reduce, reuse/recycle/recover, integrated wastewater management, funding and future planning, and knowing our historical and cultural background. The strategy has yet to be adopted.

Stormwater Strategy (draft)

Key goals of the stormwater strategy are to protect the environment and enable sustainable growth and development. This is to be achieved by provision of effective and sustainable stormwater systems, minimisation of adverse effects of overland flow/flooding, protection and enhancement of receiving environments, integrated catchment management, funding and future planning and knowledge of our historical and cultural background. The stormwater strategy has the potential to benefit biodiversity in the District, in particular freshwater biodiversity.

Reserves Strategy (draft)

Land development generates additional population and hence increased demand for open space and reserve land (including nature reserves) and recreational facilities. The reserves strategy is intended to ascertain current provision of reserves, open space and amenities, and identify gaps against anticipated growth. It will then provide guidance in aligning future land purchases to the most appropriate areas and ensuring that identified levels of service are met. Several reserve types in the strategy include biodiversity elements, including nature reserves, and recreation and ecological linkages. The primary purpose of nature reserves is the protection of natural values, typically native forest areas, coastal areas, wetlands or other natural landscapes. Recreation and ecological linkage reserves are important in protecting and enhancing biodiversity and ecological linkages, through the urban environment in particular. The strategy has yet to be adopted.

Hikurangi Swamp Scheme

The Hikurangi Swamp Scheme was constructed in the early 1970s by the Northland Catchment Commission for the purpose of controlling floodwaters that regularly flooded farmland within the Hikurangi Valley.

Following local government reforms in the late 1980s, management of the scheme was transferred to the Whangarei District Council and consent has recently been granted by the NRC. As part of condition of consent for the scheme, Council was required to produce a Scheme Management Plan, a Floodway Riparian and Oxbow/cut off channel Management Plan (ROBMP), and a Fishery Management Plan which all to some degree require provision for biodiversity. The fishery management plan includes provisions for fish migration, particularly eel migration that has been affected by the altered hydrology in the area. The ROBMP provides for riparian planting, fencing and stock exclusion to re-vegetate specific areas of the Scheme to create environmental benefits and ensure the design basis and flood carrying capacity of the Scheme is not compromised. These plans have not yet been implemented but it is intended that this will happen over the next few years. The Scheme has brought agencies together such as Ngati Hau, NIWA, Northland Fish and Game, NorthPower, and the NRC in a collaborative approach to addressing the management issues in the area, including biodiversity.

Integrated Management

Management of biodiversity can often span different organisation's mandates and legal boundaries. As outlined in Section 4 of the Strategy, a range of organisations have a role in biodiversity management in Whangarei and Northland. Significant Ecological Areas can also cross District and regional boundaries. Thus, opportunities to integrate work with other organisations regarding biodiversity management are important. Working together offers opportunities for collaboration of knowledge, experience and resources in order to achieve better and more co-ordinated outcomes. Council is involved in several cross-boundary initiatives for biodiversity management in Northland.

Biodiversity Northland

Biodiversity Northland is an umbrella group of agencies involved in biodiversity management and protection in Northland. Regular meetings are held which facilitate the sharing of information relating to biodiversity, and promote integrated management among the three Districts in Northland and those organisations involved in biodiversity management. Outcomes of the group include shared information and knowledge, joint displays at the Northland Field Days, the Biodiversity Northland Website (<http://biodiversitynorthland.org.nz/>), and the Whole of Northland Project.

Northland Kiwi Forum

The Northland Kiwi Forum is a collection of agencies involved in kiwi recovery and management in Northland. Whangarei District contains important kiwi habitat, including high density kiwi areas and the Whangarei Kiwi Sanctuary. Matakohē-Limestone Island is also used as a predator-free 'kiwi crèche'. Young kiwi are transferred from the mainland to the island until they reach a weight where they are able to withstand stoat predation; the kiwi are then transferred back to the mainland. Council representation on the Kiwi Forum is important because of the high presence of kiwi in the District, and Council's regulatory role influences land use and management in these areas.

Integrated Kaipara Harbour Management Group

The Integrated Kaipara Harbour Management Group (IKHMG) was established as a group representing crown agencies, iwi and hapu, community and local government agencies to address the declining health/mauri of the Kaipara Harbour. The purpose of the IKHMG is to promote integrated and co-ordinated inter-agency management and kaitiakitanga of the Kaipara Harbour and its catchment. The Integrated Strategic Plan of Action 2011 – 2021 was released in November 2011, and guides the efforts and management of the harbour and surrounding catchment for the next 10 years. A large proportion of the Whangarei District serves as a catchment for the Kaipara Harbour, and so involvement and commitment to this initiative is appropriate and an important contribution to the project.

Financial Mechanisms

Several financial mechanisms are in place to promote the protection of biodiversity. These include such measures as financial grants, environmental benefit lots, rates relief for covenanted land and possible reduction of subdivision fees where the main purpose is for conservation. Council also contributes to the cost of creating QEII open space covenants when this option is taken up as a result of condition on consent.

Financial Grants

Creating a conservation covenant is sometimes required as a condition of consent. Council can provide financial assistance to set up these covenants where they are open space covenants administered by the QEII trust.

Funding is also provided to Experiencing Marine Reserves (EMR) for their Drains to Harbour Stormwater programme. The programme is educational, and aims to raise community awareness around the connection between drains and waterways and highlight ways of minimising stormwater pollution.

Environmental Benefit Lot

The Environmental Benefit Lot rule allows an extra lot as part of a subdivision, in return for the permanent protection of a significant natural feature, for example stands of indigenous vegetation or habitat of indigenous fauna, including indigenous wetlands. However, this mechanism is not often used. Possible reasons include the impracticability of complying with the conditions of the rule (being that the entire feature to be protected has to be contained within one lot, and the entire feature must be protected). The criteria for applying the environmental benefit rule is set out in Appendix 2 (Schedule 17D). If the rule is not used because a proposed subdivision does not comply, this does not always result in the best environmental outcome being achieved, as the feature goes unprotected.

Rates Relief

Provision of rates relief is used as an incentive and method for compensation for those landowners who covenant land for the protection of areas of significant indigenous vegetation. This method is used to good effect, although the calculation of relief is related to the size of the covenant rather than its value. On a large property, this provision becomes minor.

Subdivision Fees

A waiver or reduction of subdivision consent application fees may be considered where the sole or principal purpose of the subdivision is protection of significant indigenous vegetation or significant habitats of indigenous fauna. This method is used only very rarely, mainly because the sole purpose of subdivision is not usually to protect significant indigenous vegetation.

Development Contributions

Development Contributions (DCs) are administered under the Local Government Act (2002). DCs are applied where the demand of a development or the accumulative demand of developments requires Council to provide new assets or assets of increased capacity necessary to service new growth. Land development generates additional population and hence increased demand for reserve land (including nature reserves) and recreational facilities.

A proportion of development contributions is classified as a 'reserve' contribution, i.e. this money is directly available to purchase reserves necessary to service growth created by development. However this contribution is small (approx. 0.3%) and covers all reserves, not only those created for biodiversity purposes. Biodiversity also does not feature in the methodology for utilising DCs, meaning that it is difficult to attribute reserve contributions to acquire reserves specifically for biodiversity purposes. Development contributions are administered in relation to the demands of any growth associated with a development. Thus, the increased demand for biodiversity from growth must be quantified to qualify for funding from these contributions, which is often hard to achieve (i.e. how much 'biodiversity' is required per member of the population, and how much will be required to service levels of growth). This value is usually incorporated into the provision of nature reserves.

Development contributions may be taken in the form of land or equivalent monetary value calculated as necessary to service the level of growth associated with development. The option may be taken at the discretion of the Parks and Recreation Department. Sometimes the acquisition of land will create general maintenance liabilities, or the land is not in a suitable location so monetary contributions may be more effective to purchase land elsewhere (i.e. in strategic locations). Even so, it is difficult to spend money outside what is outlined in the Long Term Plan or Annual Plan, little of which is prescribed for biodiversity purposes. In short, the purchase of land for biodiversity purposes does not occur often. That being said, Whangarei District already has quite a high proportion of Council-owned land that incorporates biodiversity values in its management (e.g. scenic and nature reserves).

Financial Contributions

Financial contributions are administered under the Resource Management Act (1991). This states that Council may levy a financial contribution, in respect of resource consents, for any purpose identified in the District Plan, including the purpose of requiring positive enhancements on the environment to offset any adverse effects that have been identified. This acquisition method can be used in respect to land acquisition for biodiversity management, such as protection of natural bush.

Council reserves the right to continue to impose financial contributions under the RMA, as set out in Chapters 9 and 80 of the Whangarei District Plan, as a condition of consent. This may be in addition to a development contribution, but where a financial contribution is imposed in relation to an activity on a development, a development contribution will not be required for the same activity.

Voluntary/Community Measures

There are a number of voluntary initiatives throughout the District that contribute to the protection and enhancement of biodiversity. These include landcare groups, coastcare groups, charitable organisations and trusts, community pest control areas, non-government organisations and school groups, as well as individual landowners. The work that these communities are doing is an invaluable contribution towards the maintenance and enhancement of biodiversity in the District, which should be supported. Examples include the lobbying by the Ngunguru Sandspit Protection Society to bring the Ngunguru sandspit into public ownership, which occurred in August 2011. The Whangarei Heads Landcare Forum have also brought together landcare groups in the area as part of joint kiwi restoration efforts to great success. Friends of Matakohe-Limestone Island was formed in the mid-1990s and manage the island, including reintroduction of species and weed and pest control. The island is also a crèche for young kiwi. The Pukenui Western Hills Forest Charitable Trust is a joint trust managing the Pukenui Forest, including pest and weed control (including several pest and weed free areas), and wildlife monitoring.

Currently, Council provides financial contribution to QEII Trust for the establishment of open space covenants, it also sponsors the Friends of Matakohe-Limestone Island and Pukenui Western Hills Forest Charitable Trust. Possible additional support measures are further expanded in section 7 (Actions).

Conclusion

Data from the State of the Environment Report on Biodiversity (2011) has shown that despite the existing measures described in this chapter being in place, statutory objectives (such as 'maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District', and 'protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development') are not entirely being achieved. However, encouraging results have been recorded with regard to intensive management of particular species (e.g. Pateke and kiwi), and voluntary (community/landowner) efforts are an invaluable contribution to biodiversity restoration and enhancement. Future development and population growth will continue to threaten biodiversity in the Whangarei District, making it more difficult to achieve biodiversity objectives. A biodiversity strategy with implementation measures should assist in providing better protection for biodiversity in the District in the future by outlining clear goals (objectives) for biodiversity protection and enhancement, and specific actions aimed at long term protection and enhancement of biodiversity in the District.

6 Goals (Objectives) of the Strategy

The following objectives have been developed from the State of the Environment Report on Biodiversity and the Whangarei District Growth Strategy together with legislative requirements and community feedback on the Growth Strategy which emphasised the importance of maintaining and enhancing the District's natural heritage including biodiversity. The objectives have been grouped according to theme, and actions relating to these objectives are outlined in Section 7 (Action Plan).

The first theme concerns information relating to biodiversity in the District. Information is key to making good management decisions, and better information about biodiversity in the District will lead to better and more effective provisions for the maintenance and protection of biodiversity.

Theme 1 Information/Knowledge

Objective 1.1 Improve knowledge of biodiversity in the Whangarei District

Objective 1.2 Undertake on-going monitoring and research

The second theme concerns protection of remaining biodiversity in the District. The biodiversity in Whangarei is important for many reasons – social, economic, cultural and for the ecological services it provides. However, continued population growth and land use changes places remaining biodiversity under threat, and the protection of biodiversity in future will become more and more challenging. Hence, it is important to have a robust framework in place for the protection of biodiversity. Restoration efforts are also critical to the enhancement of biodiversity in the District. A lot of good work is being done by community and volunteer groups, but there is room for more co-ordination of efforts and increased funding for even more effective results.

Theme 2 Protection and Restoration

Objective 2.1 Ensure effective regulatory protection

Objective 2.2 Encourage effective non-regulatory protection

Objective 2.3 Assist voluntary biodiversity protection and restoration

Objective 2.4 Identify and prioritise opportunities for biodiversity restoration/enhancement

Collaboration of biodiversity initiatives and management can help secure better outcomes through better funding and more co-ordinated efforts. There are many relationships that Council has with other organisations concerning the management of biodiversity in the District, and these are critical to achieving good biodiversity outcomes in the District.

Theme 3 Collaboration/Education

Objective 3.1 Participate in integrated management of biodiversity

Objective 3.2 Assist education on the importance of biodiversity

7 Action Plan

The Action Plan is comprised of a programme of specific actions to implement the Strategy and are implemented through various methods. Actions fall into different types – some actions are generally one-off or occur over a period of time within specific timeframes. They may include research or policy development, for example producing strategies, plans, or policies. Others may be actions to anchor strategy implementation or physical development including services and infrastructure. A third type of action may be about process and working collaboratively over the longer term with relevant stakeholders and agencies to address particular issues.

Priority/Timing

The priority/timing criteria indicate when the action should be implemented. Each action is assigned a number and each number refers to a three year period coinciding with successive Long Term Plans. For example, priority '1' means the action needs to be implemented in 1-3 years; in effect, between 2012 – 2015. Priority 2 actions should be implemented in years 4, 5 and 6 and priority 3 actions should be implemented in year 7, 8 and 9. Some actions are assessed as 'on-going'; these are actions that continue over time.

Priority/Timing

Priority	Time Period	Years
1	1-3	2012-2015
2	4-6	2015-2018
3	7-9	2018-2021

Agencies and Action Origins

The agencies involved in initiating and implementing the actions are identified along with Council department. This may be in conjunction with external organisations with biodiversity functions, e.g. DOC and NRC. Actions in the plan may have originated from recommendations in the Whangarei District Growth Strategy, the State of the Environment Report on Biodiversity, or they may be new initiatives or prescribed in the District Plan.

List of Abbreviations

Abbreviation	Interpretation
Council Departments	
BR	Business Records
CS	Community Services
F	Finance
IS	Infrastructure and Services
PG	Positive Growth
PM	Policy and Monitoring
PR	Parks and Recreation
RC	Resource Consents
RS	Regulatory Services
WD	Waste and Drainage
Organisations	
BN	Biodiversity Northland
DOC	Department of Conservation
NRC	Northland Regional Council
WDC	Whangarei District Council
Action Origins	
DP	District Plan

Abbreviation	Interpretation
SOE	State of the Environment Report on Biodiversity
IMP	Whangarei District Growth Strategy Implementation Plan
New	New Action
Implementation Actions	
LTP	Long Term Plan

Cost Implications

Cost implications are an estimate of the cost to Council to implement the action. Costs are not necessarily additional costs to Council. Often actions are already committed to, or being covered from current resources. Four cost groupings are used: current resources, low, medium and high. The criteria for these groupings are shown below. The vast majority of actions are within current resources, or low cost.

Cost Implications

Descriptor	Criteria
Current Resources	Normal in-house work programmes within current resourcing.
Low	Extra to normal in-house work programmes, i.e. use of consultants or external experts and infrastructure provision at low cost (up to \$100,000).
Medium	Extra to normal in-house work programmes, i.e. use of consultants or external experts and infrastructure provisions at medium cost (between \$100,000 and \$500,000).
High	Major infrastructure projects (hard or soft) and/or acquisitions at high cost (over \$500,000).

Theme 1 Information/Knowledge

Objective 1.1: Improve knowledge of biodiversity in the Whangarei District				
Actions	Agencies	Timing	Cost Implication	
1.1.1 Map or otherwise identify areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas) in the District. Identify these areas on the District Plan maps as a resource area. (SOE)	WDC (PM), DoC, NRC, BN	1/2 2012-2018	Current Resources	
1.1.2 Identify ecological linkages, including potential linkages between habitats, and riparian connections for a 'green and blue' network across the District. (SOE)	WDC (PM, PR), NRC, DoC, BN	2 2015-2018	Current Resources	
1.1.3 Map or otherwise identify areas of at least high natural character, and natural features and landscapes in the coastal environment (and include in the District Plan as a resource area), as required by the New Zealand Coastal Policy Statement. (SOE)	NRC, WDC (PM)	1/2 2012-2018	Low	
1.1.4 Collate research and reports related to biodiversity in the District and make database available. This will provide a comprehensive source of information and research on biodiversity in the District, and identify information gaps. (NEW)	WDC (PM, BR), NRC, North Tech, DoC, BN.	3 2018-2021	Current Resources	
1.1.5 Asses the cost and effectiveness of existing financial mechanisms related to biodiversity protection e.g. financial grants, rates relief, natural area maintenance, and recommend improvements or alternatives. (NEW)	WDC (PM, RC, PR, F)	2 2015-2018	Current Resources	

Objective 1.2: Undertake on-going monitoring and research.			
Actions	Agencies	Timing	Cost Implication
1.2.1 Develop biodiversity monitoring indicators in conjunction with other agencies, to measure progress and effectiveness of responses to biodiversity, and report on the state of biodiversity periodically. (SOE)	WDC (PM), NRC, DoC, BN	1/2 2012-2018	Current Resources
1.2.2 Undertake a survey of public and interest group perceptions of how well they feel objectives relating to biodiversity are being achieved and how involved in/how they feel about biodiversity issues in the District. This will help assess progress on biodiversity education and engagement objectives. (SOE)	WDC (PM)	3 2018-2021	Low
1.2.3 Develop a process to monitor permitted activity indigenous vegetation clearance and consents for vegetation clearance. (NEW)	WDC (RC, RS)	1/2 2012-2018	Current Resources
1.2.4 Establish monitoring procedures for resource consents with biodiversity conditions. (NEW)	WDC (PM, RS)	1/2 2012-2018	Current Resources
1.2.5 Monitor environmental benefit lot uptake and assess effectiveness. (NEW)	WDC (PM, RC), NRC	1/2 2012-2018	Current Resources
1.2.6 Monitor complaints and incidents/investigations regarding biodiversity/indigenous vegetation. (NEW)	WDC (RS)	1/2 2012-2018	Current Resources
1.2.7 Continue conservation covenant monitoring and produce a periodic covenant monitoring report to identify and report on the condition of covenants in the District. (SOE/NEW)	WDC (PM)	On-going	Current Resources

Theme 2 Protection and Restoration

Objective 2.1: Ensure effective regulatory protection			
Actions	Agencies	Timing	Cost Implication
2.1.1 Implement the long term settlement pattern identified in the Whangarei District Growth Strategy to minimise development in areas in close proximity to significant ecological areas and potential adverse effects in indigenous biodiversity. (SOE)	WDC (PM, RC), NRC	On-going	Current Resources
2.1.2 Undertake a review of provisions relating to biodiversity (e.g. indigenous vegetation and habitat, riparian and coastal margins, heritage trees) as part of the District Plan rolling review. Include effective provisions to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas). (IMP)	WDC (PM), DoC, NRC, BN	1/2 2012-2018	Current Resources
2.1.3 Include effective provisions in the District Plan to protect the natural character of the coast, and outstanding features and landscapes. (SOE)	WDC (PM)	1/2 2012-2018	Current Resources
2.1.4 Undertake a review of the provisions in the District Plan relating to riparian and coastal margins and water bodies to ensure that, wherever appropriate, riparian reserves or strips are established when subdivision occurs, particularly in esplanade priority areas. (IMP)	WDC (PM)	2 2015-2018	Current Resources
2.1.5 Implement the requirements of national strategies and national policy statements relating to indigenous	WDC (PM)	On-going	Current Resources

Objective 2.1: Ensure effective regulatory protection			
Actions	Agencies	Timing	Cost Implication
biodiversity and undertake changes to the District Plan when required. (IMP)			/Low
2.1.6 Adopt a strategic approach that takes cumulative effects of development on indigenous biodiversity into account when assessing resource consents, particularly in areas of significant indigenous vegetation and significant habitats of indigenous fauna. (IMP)	WDC (RC), DoC, NRC	On-going	Current Resources
2.1.7 Ensure conditions on consents are adequate to protect indigenous biodiversity, particularly on consents within or close to areas of significant indigenous vegetation and significant habitats of indigenous fauna. (IMP)	WDC (RC)	On-going	Current Resources
2.1.8 Require the establishment of covenants on areas with significant biodiversity values when processing subdivision consents (NEW).	WDC (RC)	On-going	Current Resources
2.1.9 Consider a practice note for processing resource consents on excluding cats/dogs/mustelids from developments in proximity to significant ecological areas (especially known kiwi habitat). (NEW)	WDC (RC), DOC, NRC	1 2012-2015	Current Resources

Objective 2.2: Encourage effective non-regulatory protection			
Actions	Agencies	Timing	Cost Implication
2.2.1 Promote and consider initiating formal protection mechanisms for areas of significant indigenous vegetation and significant habitats of indigenous fauna (taking into account linkage areas identified in 1.1.2) where they are not protected already, e.g. purchasing land for reserves, open space covenants, regional parks and Nga Whenua Rahui kawenata. (IMP)	WDC (PR)	On-going	Medium/High
2.2.2 Consider financial/development contributions to acquire land or cash for acquisition of land with high biodiversity values for reserve purposes. (DP)	WDC (PR)	On-going	Current Resources
2.2.3 In conjunction with other agencies, establish a network of connected protected areas (taking into account linkage areas identified in 1.1.2) to ensure habitat availability for indigenous biodiversity. (SOE)	WDC (PR), NRC, DoC	On-going	Current Resources
2.2.4 During development of new structure plans and reviews of existing structure plans, ensure that information on biodiversity is included and taken into account, including areas identified for protection. (IMP)	WDC (PM)	On-going	Current Resources
2.2.5 Promote and support programmes to control dogs, cats and mustelids in known high-density kiwi habitat. (DP)	WDC (RC, PM, RS)	On-going	Current Resources

Objective 2.3: Assist voluntary biodiversity protection and enhancement			
Actions	Agencies	Timing	Cost Implication
2.3.1 Consider the use of economic instruments, including financial incentives, for protection of biodiversity to assist and advise landowners in protecting biodiversity on private	WDC (PM, RC)	On-going	Current Resources

Objective 2.3: Assist voluntary biodiversity protection and enhancement			
Actions	Agencies	Timing	Cost Implication
land. (IMP)			
2.3.2 Provide meaningful rates relief as an incentive and method of compensation for those landowners who covenant land for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna. (DP)	WDC (F)	On-going	Current Resources
2.3.3 Continue Annual Plan allocations for assisting other agencies in protecting biodiversity, e.g. QEII trust covenants (DP).	WDC (PR)	On-going	Low
2.3.4 Consider a waiver or reduction of subdivision consent application fees where the sole or principal purpose of the subdivision is protection of significant indigenous vegetation or significant habitats of indigenous fauna. (DP)	WDC (RC)	On-going	Current Resources
2.3.5 Support community initiatives for biodiversity protection. Provide assistance to community groups and landowners involved in conservation and biodiversity enhancement. This may be in the form of funding, advice, staff time, etc. Showcase successful biodiversity stories (SOE)	WDC (PR, PM), DOC, NRC, BN	On-going	Current Resources
2.3.6 Support the establishment of restoration projects in threatened ecosystems with local communities which incorporate connectivity, e.g. Ngahere o Pukenui Management Plan. (SOE)	WDC (PR, PM)	On-going	Current Resources
2.3.7 Consider setting up an environmental enhancement fund, as has been done in the past, to assist landowners to improve biodiversity on private land. (SOE)	WDC (CS, PR, PM)	On-going	Low

Objective 2.4: Identify and prioritise opportunities for biodiversity restoration/ enhancement			
Actions	Agencies	Timing	Cost Implication
2.4.1 Formulate a weed and pest policy and management plan for Council reserves. (NEW)	WDC (PR), NRC, DoC	1/2 2015-2018	Current Resources
2.4.2 Ensure pest/weed management and biodiversity is recognised and provided for when preparing or reviewing reserve management plans. Develop these for priority reserves. (SOE)	WDC (PR), NRC, DoC	On-going	Current Resources
2.4.3 Undertake restoration/rehabilitation of water quality and riparian margins in Whangarei City to provide blue/green corridors through the urban area. (IMP)	WDC (PM, PR, WD), NRC	2/3 2015-2021	Medium/ High
2.4.4 Promote the naturalisation of waterways within Growth Strategy nodes, especially the larger urban and urbanising nodes, to develop effective connections between riparian and terrestrial habitat. (IMP)	WDC (PM, PR, WD), NRC, DoC, Landcare Groups	On-going	Current Resources/ Low
2.4.5 Include biodiversity protection and enhancement initiatives in asset/activity management plans and future LTPs when appropriate, along with budgetary commitments and funding sources. (IMP)	WDC (IS)	On-going	Current Resources/Low

Theme 3 Collaboration/Education

Objective 3.1: Participate in integrated management of biodiversity			
Actions	Agencies	Timing	Cost Implication
3.1.1 During the current review of the Regional Policy Statement, provide input to ensure that biodiversity issues in the Whangarei District are addressed, and that a statutory framework for protecting indigenous biodiversity values, and managing threats to biodiversity, is identified and implemented at a regional level. (IMP)	WDC (PM)	1 2012-2015	Current Resources
3.1.2 During future reviews of the Regional Coastal Plan and Regional Water and Soil Plan, provide input to ensure strong provisions for protecting biodiversity values and managing threats to biodiversity are included. (IMP)	WDC (PM)	On-going	Current Resources
3.1.3 Continue involvement in Biodiversity Northland Forum and Northland Kiwi Forum Working Group. (NEW)	WDC (PM)	On-going	Current Resources
3.1.4 Consult with, and facilitate participation of, local iwi and hapu in decisions regarding biodiversity management in the Whangarei District and take iwi and hapu environmental management plans into account when formulating resource policy/rules. (IMP/SOE)	WDC (PM, RC)	On-going	Current Resources
3.1.5 Provide information to, liaise with, and collaborate when required with external organisations and bodies (such as government departments and agencies, other Councils, business associations, environmental groups, resident/ratepayer groups, landcare/coastcare groups) to promote integrated management of natural resources and protection and enhancement of biodiversity. (IMP)	WDC (PM), NRC, DOC	On-going	Current Resources
3.1.6 Collaborate with other local and regional authorities in Northland and consider joint management strategies where significant ecological areas cross Council boundaries. (SOE)	WDC (PM), NRC, FNDC, KDC	On-going	Current Resources

Objective 3.2: Assist education on the importance of biodiversity			
Actions	Agencies	Timing	Cost Implication
3.2.1 Produce a brochure/booklet on biodiversity in Whangarei District. (NEW)	WDC (PM)	1/2 2012-2018	Current Resources
3.2.2 Recognise and include the benefits of biodiversity and ecosystem services in economic development strategies, tourism strategies, and marketing initiatives etc. (NEW)	WDC (PG), ALL	On-going	Current Resources
3.2.3 Educate and inform resource users of the need for local sourcing of plant material (DP)	WDC (PM, RC, PR)	On-going	Current Resources
3.2.4 Promote community awareness of the role of ecosystems and the importance of the protection of indigenous biodiversity through plant and animal pest control programmes and other measures. (DP)	WDC (PM, PR)	On-going	Current Resources
3.2.5 Fund implementation of environmental education strategy and/or carry out education in the community on the existence of biodiversity information, and how it can be accessed and utilised. (SOE)	WDC (PM)	On-going	Low

Objective 3.2: Assist education on the importance of biodiversity			
Actions	Agencies	Timing	Cost Implication
3.2.6 Update and maintain information on biodiversity on the WDC website. (NEW)	WDC (PM)	On-going	Current Resources

8 Priority Actions

The actions outlined here are considered to be critical to the success of biodiversity management in the District. They are outlined in more detail with specific direction as to how and when they are to be achieved.

1 District Plan Provisions

Action 1.1.1	Map or otherwise identify areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas) in the District. Identify these areas on the District Plan maps as a resource area			
Explanation	In order to protect biodiversity in the District, it is essential to know where remaining biodiversity, especially significant ecological areas, are located. Provisions and strategies for protecting and enhancing these areas can then be implemented. Significant ecological areas were originally included in the Proposed District Plan maps, but subsequently removed following submissions and appeals. Significant research has gone into identifying these areas, and DOC has recently completed all the Protected Natural Area studies for Ecological Districts in the Whangarei District. A current resolution of Council is to incorporate these areas into the District Plan when all the reports for the Whangarei District are completed. This is now the case, and these areas should be identified and incorporated into the District Plan preferably during the current District Plan rolling review.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
1/2 (2012-2018)	WDC (PM)	DOC, NRC, BN	Current Resources	Regulatory (District Plan)

Action 1.1.3	Map or otherwise identify areas of at least high natural character, and natural features and landscapes in the coastal environment (and include in the District Plan as a resource area), as required by the New Zealand Coastal Policy Statement.			
Explanation	Areas of at least high natural character and natural features and landscapes in the coastal environment are required to be identified by the New Zealand Coastal Policy Statement. Identifying these areas will complement action 1.1.1, as aspects of indigenous vegetation and indigenous fauna are inherent in the concepts of natural character and natural features and landscapes. Identifying these areas will also assist in action 2.1.1 (District Plan Review), as renewed District plan provisions regarding indigenous vegetation will apply to these areas.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
1/2 (2012-2018)	NRC	WDC (PM)	Low	Regulatory (District Plan)

Action 2.1.1	Implement the long term settlement pattern identified in the Whangarei District Growth Strategy to minimise development in areas in close proximity to significant ecological areas and potential adverse effects on indigenous biodiversity			
Explanation	The Whangarei District Growth Strategy set out a preferred development path for the District over the next 30/50 years, called the long term settlement pattern. This was developed as a result of community consultation, and represented a major policy change from historic sporadic development to a more consolidated, structured and strategic approach. This settlement pattern will be of significant benefit to biodiversity, as potential adverse effects of development and growth will be confined to identified areas. By consolidating growth and intensifying development in already compromised areas, the effects on biodiversity in other areas can be reduced.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (PM, RC)	NRC	Current Resources	Regulatory (District Plan)

Action 2.1.2	Undertake a review of provisions relating to biodiversity (e.g. indigenous vegetation and habitat, riparian and coastal margins, heritage trees) as part of the District Plan rolling review. Include effective provisions to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna (significant ecological areas)			
Explanation	<p>As highlighted in Section 5 of the Strategy – Current Biodiversity Management in Whangarei District the current provisions in the District Plan for indigenous vegetation and habitat are not working as effectively as they could. This has also been highlighted in the State of the Environment Report on Biodiversity (2011). The main recommendations to address this are:</p> <ul style="list-style-type: none"> - Significant ecological areas in the District should be identified on planning maps. - There should be rules and/or performance standards regarding vegetation clearance, etc. relating to these areas. - Vegetation clearance rules in other zones should be reviewed and improved (refer to analysis of current biodiversity management). - Vegetation clearance rules in notable and outstanding landscapes should be more restrictive than other zones (e.g. Countryside and Coastal Countryside) which is not currently the case. - Vegetation clearance under a sustainable forest management permit should be reviewed, in particular its status as a permitted activity. - Vegetation clearance in indigenous wetlands should be reviewed, particularly its status as a permitted activity. - There is a lack of protection for individual old growth indigenous trees and heritage tree provisions should strengthen protection for these. - Review Council’s policy on tree protection. <p>These recommendations should be incorporated into the current rolling review of the District Plan.</p>			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
1/2 (2012-2018)	WDC (PM)	DOC, NRC, BN	Current Resources	Regulatory (District Plan)

2 Consent Processing

Action 2.1.6	Adopt a strategic approach that takes cumulative effects of development on indigenous biodiversity into account when assessing resource consents in areas of significant indigenous vegetation and significant habitats of indigenous fauna			
Explanation	<p>Protecting remaining biodiversity within the District needs to be a priority when assessing resource consent applications for new developments. This includes taking a strategic view of future implications of development. Biodiversity is often impacted from the cumulative effects of development in an area, including small amounts of vegetation clearance, and pests coming in close proximity with native fauna. While a single development may not have a significant adverse effect, cumulative effects of on-going development may adversely impact biodiversity. These effects may become evident over time, by which stage the ‘new’ state (of less biodiversity) has become normalised. Some development may set a precedent for future higher density development in close proximity to significant ecological areas, which should be discouraged. The Whangarei District Growth Strategy has identified locations where growth and development should be concentrated over the next 30/50 years, thus aiming to protect the environment from the effects of sporadic subdivision and development. The Strategy should be taken into account when assessing resource consents, as should the State of the Environment Report on Biodiversity.</p>			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (RC)	DOC, NRC	Current Resources	Regulatory (Consents)

Action 2.1.7	Ensure conditions on consents are adequate to protect indigenous biodiversity, particularly on consents within or close to areas of significant indigenous vegetation and significant habitats of indigenous fauna			
Explanation	Conditions are placed on resource consent to ensure that the effects of the activity to be undertaken do not adversely affect the environment, including biodiversity. Common conditions include the requirement for a protective covenant over areas of bush, or the prohibition of keeping cats, dogs or mustelids in areas near habitat for native birds such as kiwi. Individual trees may also be 'spot-protected', if there is reason for doing so.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (RC)	-	Current Resources	Regulatory (Consents)

Action 2.1.9	Consider a practice note for processing resource consents on excluding cats/dogs/mustelids from developments in proximity to significant ecological areas (especially known kiwi and pateke habitat)			
Explanation	One of the most visible ways in which humans impact on biodiversity is when they come in close proximity to indigenous flora and habitats, e.g. subdivision and development. This can impact negatively on biodiversity, particularly in sensitive areas. Ensuring conditions on consent will mitigate the effects on the environment of the ensuing development can include placing a condition on the consent to exclude cats, dogs and mustelids in sensitive ecological areas, particularly known kiwi habitat. In some cases, this provides the best chance for the unique flora and fauna in the District to flourish in combination with increased development activity in the future. A policy, or practice note, will formalise and standardise when this method is used, reducing inconsistencies and promoting uniform protection for significant ecological areas.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
1 (2012-2015)	WDC (RC)	DOC, NRC	Current Resources	Regulatory (Consents)

3 Blue/Green Networks

Action 1.1.2	Identify ecological linkages, including potential linkages between habitats, and riparian connections for a 'green and blue' network across the District.			
Explanation	A major threat to biodiversity is the fragmentation of habitat and reduction of available habitat for species. By providing linkages between remaining areas of indigenous vegetation and habitat in the District, it is possible to increase available habitat for species and thus improve biodiversity. Riparian reserves or strips provide opportunities for establishing ecological corridors and are an important mechanism for biodiversity protection and enhancement. Identifying these areas is also an important step for guiding future restoration and funding efforts. A desktop analysis of current remaining areas of indigenous vegetation and riparian corridors, in conjunction with consultation with other agencies should provide a basis for the identification of the best potential 'corridors' to link habitats.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
2 (2015-2018)	WDC (PM, PR)	DOC, NRC, BN	Current Resources	Regulatory (District Plan)

Action 2.4.3	Undertake restoration/rehabilitation of water quality and riparian margins in Whangarei City to provide blue/green corridors through the urban area			
Explanation	<p>Urban biodiversity is an important element to enhancing urban amenity, sense of place, and providing ecological services. Providing habitat for biodiversity in urban areas is also important in providing 'stepping stones' and connections with habitats outside of urban areas. Riparian areas can be effective areas to restore and enhance these habitats.</p> <p>In Whangarei City there are examples of urban waterways that have retained natural habitat and biodiversity values (e.g. Cafler park, Western Hills Drive). However, other riverbanks and stream margins that have been heavily degraded by development have much potential for restoration and enhancement.</p> <p>Restoration of riparian areas can also contribute to flood retention and mitigation, stormwater/wastewater/sediment filtration, and recreational, amenity and sense of place values. Thus, this action can be combined with flood protection and mitigation works in the central city, actions from the wastewater strategy, the Whangarei Harbour Integrated Management Strategy (WHIMS) and also sense of place/enhancement projects.</p>			

Action 2.4.3	Undertake restoration/rehabilitation of water quality and riparian margins in Whangarei City to provide blue/green corridors through the urban area			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
2/3 (2015-2021)	WDC (PM, WD, PR)	NRC	Medium/High	AMPs, LTP, Annual Plan

Action 2.4.4	Promote the naturalisation of waterways within Growth Strategy nodes, especially the larger urban and urbanising nodes, to develop effective connections between riparian and terrestrial habitat			
Explanation	<p>Waterways provide natural ecological linkages between habitats. The restoration of riparian vegetation along a stream corridor can provide a route between discrete areas of habitat. This increases the available food supply and provides a wider range of niches and appropriate habitats for flora and fauna, and in turn increases the chance of survival. Riparian vegetation also contributes to stream health by acting as a buffer from contaminant runoff, and decreasing water temperature, allowing more oxygen to be available to in-stream communities.</p> <p>Historical land use change has left many waterways in the District free from this buffering vegetation. Promoting the restoration of riparian vegetation in these areas will increase biodiversity values, and also restore connections between habitats, thus encouraging more biodiversity. The restoration of these areas could be determined as part of the strategic ecological linkages identified in action 1.1.2, and financial incentives/funding directed towards these areas (see action 2.3.1).</p>			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (PM, PR, WD)	DOC, NRC, Landcare Groups	Current Resources/Low	Annual Plan/LTP funding

4 Weed and Pest Management

Action 2.4.1	Formulate a weed and pest policy and management plan for Council reserves.			
Explanation	<p>Pests and weeds are major threats to indigenous biodiversity. Although the main responsibility for weed and pest management under the RMA falls to the NRC, the WDC has an obligation to control weeds and pests on Council reserves, including road reserves. Apart from impacting on the reserves themselves, weeds and pests can spread to neighbouring properties, adversely affecting biodiversity values there. A strategic document providing guidance and levels of service for weed and pest management on appropriate Council reserves would be useful. This could prioritise reserves where effort is to be concentrated (e.g. those that are already part of intensive weed control for the natural areas protection programme) and prioritising reserves that need Reserve Management Plans (see action 2.4.2).</p>			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
1/2 (2012-2018)	WDC (PR)	NRC, DOC	Current Resources	Plan/Strategy

Action 2.4.2	Ensure pest/weed management and biodiversity is recognised and provided for when preparing or reviewing reserve management plans. Develop these for priority reserves			
Explanation	<p>Reserve management plans address how a reserve is to be managed; different categories of reserves are managed for different purposes. The Reserve management plans for appropriate reserves (i.e. nature and ecological linkage reserves), should specify how the biodiversity values in the reserve will be provided for and managed. This should include controlling weeds (and ideally pests) in the area, and potentially a re-vegetation plan. When taking into account priorities for formulating these plans, consideration may be given to where existing efforts are being undertaken, and therefore maximise the benefits of additional conservation actions.</p>			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (PR)	NRC, DOC	Current Resources	Reserve Management Plans

5 Community Initiatives/Collaboration

Action 2.3.5	Support community initiatives for biodiversity protection. Provide assistance to community groups and landowners involved in conservation and biodiversity enhancement. This may be in the form of funding, advice, staff time, etc. Showcase successful biodiversity stories			
Explanation	Conservation efforts by landowners and the many community groups in Whangarei provide an invaluable contribution to biodiversity protection and enhancement in the District. Without support some of these groups may no longer be able to continue, and with support, new initiatives will be able to develop. General support could be in the form of providing advice and information to help group planning and applying for funding. Specific support in the form of funding or financial incentives could be used for strategic projects in identified ecological linkage areas (action 1.1.2). An important consideration could be annual plan allocation (e.g. a dedicated contestable environmental enhancement fund) for funding of biodiversity restoration and enhancement initiatives within the District (action 2.3.7). Successful initiatives should be publicised and used as educational material.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (PM, PR)	DOC, NRC, BN	Current Resources	Education, Annual Plan, LTP

Action 3.1.5	Provide information to, liaise with, and collaborate when required with external organisations and bodies (such as government departments and agencies, other Councils, business associations, environmental groups, resident/ratepayer groups, landcare/coastcare groups) to promote integrated management of natural resources and protection and enhancement of biodiversity			
Explanation	Collaboration is essential when it comes to biodiversity management. It can allow resources and expertise to be combined to create more effective outcomes. In addition, significant biodiversity often crosses local authority boundaries, and a collaborative approach to managing these areas can be required. One such organisation promoting a collaborative approach to biodiversity management in the region, is Biodiversity Northland. Council has been a member of this since its inception, and should continue to take an active role. In addition, information and research about biodiversity is most valuable when shared with all members involved with the management and enhancement of biodiversity. This avoids duplication, complication, and can facilitate a collaborative approach to biodiversity management.			
Priority/Timing	Lead Agency	Support Agencies	Cost Implication	Implementation Method
On-going	WDC (PM)	NRC, DOC	Current Resources	Education Collaboration

9 Monitoring and Review

It is necessary to monitor both the implementation of the Biodiversity Strategy and the state of biodiversity in the District to determine the long term trends regarding biodiversity in the District and whether the Biodiversity Strategy is having a beneficial effect on biodiversity.

A State of the Environment Report on Biodiversity was produced in 2011. It provides baseline information on the state of biodiversity in the District against which future reports can be assessed. This will enable trends relating to biodiversity to be established over time. Periodic Biodiversity Reports should be produced at least every 10 years. These can then be used to review the effectiveness of the Biodiversity Strategy in protecting and enhancing biodiversity in the District.

The implementation of the Biodiversity Strategy also needs to be monitored and reviewed. This should be carried out every three years to precede and coincide with the formulation of new LTPs. The implementation actions outlined in the Strategy can be assessed as to whether they have been implemented, partly implemented or not implemented. Depending on progress in implementing identified actions, a re-prioritisation may be required.

Indicators

A number of indicators relevant to biodiversity are already monitored in the Whangarei District. Some have been reported in the State of the Environment Report on Biodiversity (2011), and more recently in annual consents and complaints monitoring reports.

Indicators relating to biodiversity are also outlined in the Whangarei District Council Monitoring Strategy (2001). These inform District plan, consents and complaints, and state of the environment monitoring. Other useful information is captured by various Council departments and can be included as indicators to assess the state of biodiversity and implementation of the strategy.

A collaborative relationship with government agencies, other local authorities and community organisations will be required to access data. The Department of Conservation, Ministry for the Environment, Environmental Protection Authority, Parliamentary Commissioner for the Environment, National Institute of Water and Atmospheric Research, Northland Regional Council and other local authorities all compile data on the state of the environment which will be relevant to benchmark and monitor biodiversity in the Whangarei District. The New Zealand Landcare Trust, BNZ Save the Kiwi, Biodiversity Northland, QEII National Trust, landcare and coastcare groups will also collect relevant data.

Monitoring Indicators and Information Sources

Indicator	Information Source
Consents	
Number and percentage of lots with conservation covenants.	WDC – Consents Department
Spatial distribution of conservation covenants.	WDC – Consents Department and Land Records
The number of consents requiring a covenant as a condition of consent.	WDC – Consents Department
The number of consents requiring no cats, dogs and mustelids as a condition of consent.	WDC – Consents Department
Number and percentage of lots with esplanade reserves.	WDC – Consents Department
Spatial distribution of esplanade reserves.	WDC – Parks Department
Number and location of resource and building consents in relation to significant indigenous vegetation and significant habitats of indigenous fauna.	WDC - Consents Department
District Plan	
Number, type and distribution of reserves (recreation, ecological linkage).	WDC - Parks Department, Department of Conservation.
Public opinion, customer feedback and consultation relating to indigenous vegetation and habitat.	WDC - Policy and Monitoring Department
State of the Environment	
Indigenous vegetation and habitat (mapped and quantified).	Land Cover Database
Identified significant ecological areas.	Department of Conservation

Indicator	Information Source
Changes in formally protected land, e.g. covenanted areas, Council and DOC reserves (mapped, area, numbers).	WDC - Land records department, QEII National Trust, WDC Parks Department
Extent and location of ecological corridors (mapped).	Department of Conservation, Biodiversity Northland.
Re-vegetation and enhancement programmes (mapped, area, numbers).	NZ Landcare Trust, Northland Regional Council, Biodiversity Northland
Identified indigenous vegetation and habitats of indigenous fauna of significance to Maori.	Iwi/hapu management plans, local iwi/hapu.
Qualitative and quantitative assessments of indigenous vegetation and habitats of indigenous fauna.	Department of Conservation, Northland Regional Council
Modification or loss of indigenous habitat.	Land Cover Database
Change in number and status of threatened and at risk species.	Department of Conservation
Pest and weed invasion.	Northland Regional Council, Department of Conservation
Number and geographical extent of landcare, coastcare and other community groups involved in biodiversity protection and enhancement.	NZ Landcare Trust
Regulatory	
The number of complaints, incidents and investigations relating to indigenous vegetation (including contravention of the District plan)	WDC – Regulatory Department
Number, cause, and frequency of complaints relating to significant indigenous vegetation and significant habitats of indigenous fauna.	WDC - Regulatory Department
Complaints and incidents relating to presence of dogs, cats and mustelids in kiwi areas.	WDC – Regulatory Department

In addition, several monitoring actions are identified in the Strategy that will contribute information to assess the implementation of the Strategy and the state of biodiversity. These include action 1.2.1, which is to develop biodiversity monitoring indicators, and report on the state of biodiversity, action 1.2.2, to undertake a public and interest group survey on perceptions of biodiversity (perhaps as an extension of the current Communitrack survey on environmental questions), action 1.2.3, monitoring permitted activity vegetation clearance, action 1.2.5, monitoring the use of the environmental benefit lot rule in the District Plan, and action 1.2.7, continuing with the current programme of conservation covenant monitoring.

Appendices

Appendix 1 Mandate for (Whangarei) District Council Biodiversity Protection

Resource Management Act (1991)

Section 5 Purpose of the RMA

- (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 wellbeing 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.*

N.B “Natural and physical resources” includes land, water, air, soil, minerals, and energy, *all forms of plants and animals* (whether native to New Zealand or introduced), and all structures.

Section 6 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 areas), 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*

Section 7 Other Matters

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 have particular regard to –

- (c) *the maintenance and enhancement of amenity values*
- (d) *intrinsic values of ecosystems*
- (f) *maintenance and enhancement of the quality of the environment*
- (g) *any finite characteristic of natural and physical resources*

N.B. “Amenity values” means those natural or physical qualities and characteristics of an area that contribute to people’s appreciation of its pleasantness, aesthetic coherence and cultural and recreational attributes.

“Environment” includes –

- (a) Ecosystems and their constituent parts, including people and communities; and
- (b) All natural and physical resources; and
- (c) Amenity values; and
- (d) The social, economic, aesthetic, and cultural conditions which affect the matters stated in paragraphs (a) to (c) of this definition or which are affected by those matters

Section 31 Functions of Territorial Authorities

- (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*

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

Local Government Act (2002)

Section 10 Purpose of local government

- (b) *to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.*

Section 14 Principles relating to local authorities

- (1) *In performing its role, a local authority must act in accordance with the following principles:*
- (h) *in taking a sustainable development approach, a local authority should take into account—*
- (ii) *the need to maintain and enhance the quality of the environment; and*
 - (iii) *the reasonably foreseeable needs of future generations.*

New Zealand Biodiversity Strategy (2000)

Goal 3 Halt the decline in New Zealand’s indigenous biodiversity:

“Maintain and restore a full range of remaining natural habitats and ecosystems to a healthy functioning state, enhance critical scarce habitats, and sustain the more modified ecosystems in production and urban environments; and do what else is necessary to maintain and restore viable populations of all indigenous species and subspecies across their natural range and maintain their genetic diversity.”

Statement of National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land

National Priority 1

To protect indigenous vegetation associated with land environments, (defined by Land Environments of New Zealand at Level IV), that have 20 percent 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.

New Zealand Coastal Policy Statement (2010)

Policy 11 Indigenous biological diversity (biodiversity)

To protect indigenous biological diversity in the coastal environment:

- (a) *avoid adverse effects of activities on:*
- (i) *indigenous taxa that are listed as threatened 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;*
 - (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, duneland, 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 maintain biological values identified under this policy.*

Policy 13 Preservation of natural character

- (1) *To preserve the natural character of the coastal environment and to protect it from inappropriate subdivision, use, and development:*
- (a) *avoid adverse effects of activities on natural character in areas of the coastal environment with outstanding natural character; and*
 - (b) *avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas of the coastal environment;*
- Including by:*
- (c) *assessing the natural character of the coastal environment of the region or District, by mapping or otherwise identifying at least areas of high natural character; and*
 - (d) *ensuring that regional policy statements, and plant, identify areas where preserving natural character require objectives, policies and rules, and include those provisions.*
- (2) *Recognise that natural character is not the same as natural features and landscapes or amenity values and may include matters such as:*
- (a) *natural elements, processes and patterns;*
 - (b) *biophysical, ecological, geological and geomorphological aspects;*
 - (c) *natural landforms such as headlands, peninsulas, cliffs, dunes, wetlands, reefs, freshwater springs and surf breaks;*
 - (d) *the natural movement of water and sediment*
 - (e) *the natural darkness of the night sky;*
 - (f) *places or areas that are wild or scenic;*
 - (g) *a range of natural character from pristine to modified; and*
 - (h) *experiential attributes, including the sounds and smell of the sea; and their context or setting.*

Policy 14 Restoration of natural character

Promote restoration or rehabilitation of the natural character of the coastal environment, including by:

- (a) *identifying areas and opportunities for restoration or rehabilitation;*
- (b) *providing policies, rules and other methods directed at restoration or rehabilitation in regional policy statement, and plans;*
- (c) *where practicable, imposing or reviewing restoration or rehabilitation conditions on resource consents and designations, including for the continuation of activities; and recognising that where degraded areas of the coastal environment require restoration or rehabilitation, possible approaches include:*
 - (i) *restoring indigenous habitats and ecosystems, using local genetic stock where practicable; or*
 - (ii) *encouraging natural regeneration of indigenous species, recognising the need for effective weed and animal pest management; or*
 - (iii) *creating or enhancing habitat for indigenous species; or*
 - (iv) *rehabilitating dunes and other natural coastal features or processes, including saline wetlands and intertidal saltmarsh; or*
 - (v) *restoring and protecting riparian and intertidal margins; or*
 - (vi) *reducing or eliminating discharging of contaminants; or*
 - (vii) *removing redundant structures and materials that have been assessed to have minimal heritage or amenity values and when the removal is authorised by required permits, including an archaeological authority under the Historic Places Act 1993; or*
 - (viii) *restoring cultural landscape features; or*
 - (ix) *redesign of structures that interfere with ecosystem processes; or*
 - (x) *decommissioning or restoring historic landfill and other contaminated sites which are, or have the potential to, leach material into the coastal marine area.*

Policy 15 Natural features and natural landscapes

To protect the natural features and natural landscapes (including seascapes) of the coastal environment from inappropriate subdivision, use, and development:

- (a) *avoid adverse effects of activities on outstanding natural features and outstanding natural landscapes in the coastal environment; and*
- (b) *avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on other natural features and natural landscapes in the coastal environment;*

Including by:

- (c) *identifying and assessing the natural features and natural landscapes of the coastal environment of the region or District, at minimum by land typing, soil characterisation and landscape characterisation and having regard to:*
 - (i) *natural science factors, including geological, topographical, ecological and dynamic components;*
 - (ii) *the presence of water including in seas, lakes, rivers and streams;*
 - (iii) *legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes;*
 - (iv) *aesthetic values including memorability and naturalness;*
 - (v) *vegetation (native and exotic);*
 - (vi) *transient values, including presence of wildlife or other values at certain times of the day or year;*
 - (vii) *whether the values are shared and recognised;*
 - (viii) *cultural and spiritual values for tangata whenus, identified by working, as far as practicable, in accordance with tikanga Maori; including their expression as cultural landscapes and features;*
 - (ix) *historical and heritage associations; and*
 - (x) *wild or scenic values;*

- (d) *ensuring that regional policy statement, and plans, map or otherwise identify areas where protection of natural features and natural landscapes requires objectives, policies and rules; and*
- (e) *including the objectives, policies and rules required by (d) in plans.*

National Policy Statement for Freshwater Management (2011)

Objective A1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the use and development of land, and of discharges of contaminants.

Objective A2

The overall quality of fresh water within a region is maintained or improved while:

- a) *protecting the quality of outstanding freshwater bodies*
- b) *protecting the significant values of wetlands and*
- c) *improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.*

Objective B1

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

Proposed National Policy Statement on Indigenous Biodiversity (2011)

Policy 2

In considering the effects of any matter, local authorities shall, in addition to any area of significant indigenous vegetation or a significant habitat of indigenous fauna identified in, or by, provision of any relevant regional policy statement, or regional or District plan, regard the following as significant indigenous or significant habitat of indigenous fauna:

- a *the naturally uncommon ecosystem types listed in Schedule One*
- b *indigenous vegetation or habitats associated with sand dunes*
- c *indigenous vegetation or habitats associated with wetlands*
- d *indigenous vegetation associated with land environments, defined by Land Environments of New Zealand at Level IV (2003), that have 20 percent or less remaining in indigenous vegetation cover*
- e *habitats of threatened and at risk species.*

Policy 4

District plans and any relevant regional plans shall identify, using (where practical) maps and/or schedules, areas of significant indigenous vegetation and significant habitats of indigenous fauna. In identifying these areas, decision-makers must include in their plans the criteria of the relevant regional policy statement and, within five years of this national policy statement taking effect, the criteria of Policy 2a-d (to the extent that these may be broader in scope than those of the relevant regional policy statement) and 2e (to the extent that existing information enabling the application of this criteria is available).

Policy 6

To promote the maintenance of biodiversity outside of identified areas of significant indigenous vegetation and significant habitats of indigenous fauna, and to support the resilience and viability of population and species assemblages within identified areas and habitats, decision-makers should:

- a *recognise the contribution that all remaining areas of indigenous vegetation make to the maintenance or indigenous biodiversity and encourage the retention of as many elements as possible*
- b *recognise the full range of potential adverse effects on indigenous biodiversity including, but not limited to, population fragmentation, degradation of non-living components (e.g., water and soil),*

interruption to breeding cycles and migratory pathways, and increased exposure to invasive introduced plant and animal species that pose a threat to indigenous biodiversity.

- c *encourage the retention of existing vegetation, whether indigenous or not (but not including recognised pest plant), that provides:*
 - i. *habitat for indigenous species*
 - ii. *seasonal food sources for indigenous species*
 - iii. *ecological linkage between areas and habitats identified in accordance with Policy 4*
 - iv. *a buffer to indigenous vegetation for areas and habitats identified in accordance with Policy 4*
- d *when the retention of existing vegetation and habitat will not achieve sustainable management, encourage measures that mitigate and offset adverse effects on indigenous species during, and subsequent to, removal or modification of that vegetation or habitat through harvest or clearance or other activity that may threaten the survival of affected species populations*
- e. *encourage the planting of naturally occurring, locally sourced indigenous species and the creation of habitats for indigenous species as well as plant and animal pest control*
- f. *encourage the establishment of additional indigenous riparian vegetation as a means of increasing connectivity and enhancing freshwater habitat for indigenous species by interfering with their natural migratory movements*
- g *ensure human-made structures do not adversely impact on indigenous species by interfering with their natural migratory movements*
- h *consider both regulatory incentives (such as bonus development rights in exchange for protection and enhancement of vegetation and habitats) and non regulatory incentive, (such as technical advice and practical help) to support and encourage landowners to make appropriate land management decisions.*

Regional Policy Statement

Draft – October 2011 Regional Policy and Development Committee Version

4.6 Indigenous Ecosystems – maintaining and improving integrity of indigenous ecosystems

4.6.3 Policy – Protecting significant ecological areas and maintaining indigenous biological diversity

Protect significant ecological areas and maintain indigenous biological diversity by:

- a) *avoiding adverse effects of activities on:*
 - i. *indigenous taxa that are listed as threatened 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, that have become uncommon due to human activity, or are naturally rare;*
 - iv. *habitats of indigenous species that are at the limit of their natural range, or are naturally rare;*
 - v. *areas containing regionally or nationally significant examples of indigenous community types;*
 - vi. *outstanding indigenous ecological values of freshwater bodies;*
 - vii. *areas set aside for full or partial protection of indigenous biological diversity under other legislation ;and*
- b) *Avoiding significant adverse effects, and avoiding, remedying or mitigating other adverse effects of activities on:*
 - i. *areas of predominantly indigenous vegetation in the coastal environment;*
 - ii. *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;*

- iii. *habitats that are important during the vulnerable life stages of indigenous species*
- iv. *habitats of indigenous species 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.*

8 Special Places

8.2.1 Policy – Protecting outstanding special places

Avoid adverse effects of subdivision, use and development on the values, elements and characteristics which contribute to:

- a) *Outstanding natural character and outstanding natural features and outstanding natural landscapes in the coastal environment*

8.2.2 Policy – Maintaining integrity of special places

Avoid significant adverse effects and avoid, remedy or mitigate other adverse effects (including cumulative effects) on the values, elements and characteristics which contribute to:

- a) *Outstanding natural features and outstanding natural landscapes outside the coastal environment;*
- b) *Natural character and landscape values in the coastal environment, particularly:*
 - *Wetlands, rivers, lakes and estuaries and their margins; and*
 - *Undeveloped or largely undeveloped natural landforms between settlements, such as coastal headlands, peninsulas, ridgelines and dune systems; and*
 - *Areas of high natural character; and*
 - *Remnants of indigenous coastal vegetation outside urban areas and settlements, particularly where these can be linked to establish and/or enhance ecological corridors.*
- c) *Natural character of wetlands, rivers, lakes and their margins outside the coastal environment; and*
- d) *Locally significant historic heritage features*

Northland Conservation Management Strategy (2008) N.B. Current Strategy under review -2011

5 Protection management

5.2 Legal protection of habitats on land

Objectives

To achieve protection of the most threatened, rare, and/or representative natural areas.

To encourage landowners, the Northland Regional Council and local authorities to apply legal mechanisms to protect and restore remnant natural habitats.

5.4 Animal pest control

Objectives

To remove or minimise the threat and impact of animal pests on native plant, animals and habitats.

5.5 Plant pest control

Objectives

To control, and wherever possible, eradicate plant pests where they threaten significant natural and historic values.

5.11 Protected species

Objectives

To endeavour to prevent the extinction of any indigenous species in the Conservancy and maintain the diversity, viability and health of populations and communities of indigenous plant and animal species.

To maintain viable breeding populations of indigenous species in their appropriate habitat, and in particular improve the status of threatened species.

To increase public awareness of threatened species, their conservation requirements and opportunities for community involvement in species management.

5.13 Mainland restoration

Objectives

To restore selected degraded areas to a condition where indigenous natural processes continue as free from human and exotic influence as possible.

Long Term Council Community Plan (2012-2022) draft

Community Outcome:

“Clean, healthy and valued environment.”

As our District grows our natural and created environment is protected, maintained and enhanced to reflect our Sense of Place, mauri and identity. Our harbour, foreshore and waterways are clean and healthy.

Bream Bay Strategic Plan (2006)

5 Proposed management objectives and strategic approach

5.1 General

Dune systems and the general coastal environment are stable, allowing them to support their natural range of life-forms.

5.2 Site specific

The significant coastal habitats within the Ruakaka and Waipu estuaries are sustained and/or enhanced, so that they continue to provide “safe haven” for the full range of shorebird species frequenting the area. The adjacent land uses are closely monitored and action is taken so as to minimise impacts.

Specific management measures are in place to ensure the survival of endangered fauna species, notably Fairy tern and New Zealand dotterel.

Whangarei District Plan

Chapter 17 Indigenous Vegetation and Habitat

Objectives

17.3.1 *Maintenance and enhancement of the life-supporting capacity of ecosystems, and the biodiversity of the District.*

17.3.2 *Protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna from inappropriate subdivision, use and development.*

Policies

- 17.4.1 *To recognise as significant, and provide protection for, indigenous vegetation and habitats of indigenous fauna, including indigenous wetlands, which area of Moderate, Moderate-High and Outstanding value using the criteria set out in Schedule 17A.*
- 17.4.2 *To maintain the ecological values of significant indigenous vegetation and the significant habitats of indigenous fauna in the Living 3, Countryside, Coastal Countryside and Open Space Environments.*
- 17.4.3 *To promote the enhancement of areas of significant indigenous vegetation and significant habitats of indigenous fauna that have been, or may be, degraded by inappropriate subdivision, use and development.*
- 17.4.4 *To avoid, remedy or mitigate the adverse effects of land use activities on areas of indigenous vegetation and significant habitats of indigenous fauna, including areas of value to tangata whenua, as determined by Schedule 17A, so as to maintain its ecological values.*
- 17.4.5 *To avoid, remedy or mitigate the adverse effects of goats in areas of indigenous vegetation and habitats of indigenous fauna, particularly in areas where they have been eradicated at Mt Manaia and Bream Head.*
- 17.4.5A *To avoid the introduction of plant and animal pests where practicable*
- 17.4.5B *To encourage programmes for plant and animal pest control in areas of ecological value.*
- 17.4.5C *To recognise that dogs, cats and mustelids are a significant threat to kiwi.*

Whangarei District Growth Strategy Implementation Plan (2011)

Part A 3.3 Biodiversity Actions

- 1.1 *During the current review of the Regional Policy Statement (RPS), provide input to ensure that biodiversity issues in the Whangarei District are addressed, and that a statutory framework for protecting indigenous biodiversity values, and managing threats to biodiversity, is identified and implemented at a regional level.*
- 1.2 *During future reviews of the Regional Coastal Plan (RCP) and Regional Water and Soil Plan (RWSP), provide input to ensure strong provisions for protecting biodiversity values and managing threats to biodiversity are included.*
- 2.1 *Develop a long term biodiversity strategy and management plan which identifies and prioritises areas of significant biodiversity values and provides a management framework for the protection of biodiversity in the Whangarei District.*
- 2.2 *During development of new structure plans and reviews of existing structure plans, ensure that information on biodiversity is included and taken into account, including areas identified for protection.*
- 3.1 *Implement the requirements of national strategies and national policy statements relating to indigenous biodiversity and undertake changes to the District Plan when required.*
- 3.2 *Include effective provisions in the District Plan to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna e.g. no cat/dog covenants. Identify on the planning maps areas of significant indigenous vegetation and significant habitats of indigenous fauna.*
- 3.3 *Adopt a strategic approach that takes cumulative effects of development on indigenous biodiversity into account when assessing resource consents in areas of significant indigenous vegetation and significant habitats of indigenous fauna. Also ensure conditions on consents are adequate to protect indigenous biodiversity, particularly on consents close to areas of significant indigenous vegetation and significant habitats of indigenous fauna.*
- 4.1 *Consider the use of economic instruments, including financial incentives for protection of biodiversity to assist and advise landowners in protecting biodiversity on private land.*
- 5.1 *Include biodiversity protection and enhancement initiatives in asset/activity management plans and future LTPs when appropriate, along with budgetary commitments and funding sources.*
- 6.1 *Promote and consider initiating formal protection mechanisms for areas of significant indigenous vegetation and significant habitats of indigenous fauna where they are not protected already, e.g.*

purchasing land for reserves, open space covenants, regional parks and Nga Whenua Rahui kawenata.

- 6.2 *Provide information to, liaise with, and collaborate when required with external organisations and bodies (such as government departments and agencies, other Councils, business associations, environmental groups, resident/ratepayer groups, landcare/coastcare groups) to promote integrated management of natural resources and protection and enhancement of biodiversity.*
- 7.1 *Consult with, and facilitate participation of, local iwi and hapu in decisions regarding biodiversity management in the Whangarei District.*

Whangarei District Council State of the Environment Report (2011)

8 Conclusions and Future Options

8.1 Regulatory Mechanisms

- *Provide input to current and future national initiatives on indigenous biodiversity (e.g. National Policy Statements, national standards) to ensure they will be effective in the District.*
- *Provide input into regional planning documents (e.g. current Regional Policy Statement review) to ensure they will enhance indigenous biodiversity in the District.*
- *Review policies and methods relating to biodiversity in the District Plan, as intended as part of the rolling review, to ensure they will be effective in achieving biodiversity objectives. Have regard to the following:*
 - *Rationalise rules regarding indigenous vegetation clearance in outstanding and notable landscapes. Currently rules regarding indigenous vegetation clearance are more onerous in the Living 3, Countryside, Coastal Countryside and Open Space Environments than in outstanding and notable landscape resource areas, despite clear and strong statutory direction to protect the natural character of outstanding landscapes.*
 - *Consider including similar, less restrictive policies in identified buffer zones around significant natural areas as well.*
 - *Consider including District wide objectives, policies and methods in the District Plan for protecting other indigenous biodiversity, not just that classed as ‘significant’, as all indigenous biodiversity contributes to the life-supporting capacity of ecosystems. These could include:*
 - *No extinction of indigenous species from the District.*
 - *No significant reduction in the natural range of indigenous species across the District.*
 - *No loss of indigenous ecosystem types.*
 - *Include objectives, policies and methods (rules) in the District Plan to address the requirements of Policy 11 (Indigenous Biodiversity) of the New Zealand Coastal Policy Statement.*
 - *Strengthen objectives, policies and methods targeted towards protecting riparian margins. Also include methods to achieve Policy 11.4.6 (To maintain and, where appropriate enhance riparian vegetation).*
 - *Include effective methods (including rules) for achieving objectives and policies relating to indigenous biodiversity, e.g. 17.4.5C (To recognise that dogs, cats and mustelids are a significant threat to kiwi).*
- *Map or otherwise identify areas of significant indigenous vegetation and significant habitats of indigenous fauna in the District (as will likely be a requirement of the National Policy Statement on Indigenous Biodiversity) and include in the District Plan as a resource area. Include objectives policies and rules regarding the impacts of subdivision and land use on biodiversity in these areas e.g. no cat/dog covenants, restrictions on vegetation clearance, pest and weed control, etc.*
- *Include by mapping or otherwise identifying areas of high natural character, and natural features and landscapes in the coastal environment and include objectives, policies and rules required to*

preserve natural character and protect natural features and landscapes in the District Plan as required by the New Zealand Coastal Policy Statement (Policy 13).

- *Identify areas where the natural character of the coast, and natural features and landscapes require protection. Include provisions in regional and District plans to protect these areas from inappropriate subdivision, use and development, as required by the New Zealand Coastal Policy Statement (Policy 15).*
- *Ensure that esplanade reserves and/or strips are taken whenever the opportunity arises, particularly in esplanade priority areas. Develop and extend ecological corridors and improve public access.*
- *Ensure conditions on consents are adequate to protect indigenous biodiversity, particularly on consents close to significant natural areas. Impose mitigation measures to minimise any impact to the environment associated with resource consent applications, e.g. management plans specifying fencing, exclusion of stock, animal and plant pest control, restrictions on pest animals and plants able to be kept, re-vegetation, payment of a bond to ensure measures are carried out, and monitoring of consent conditions.*
- *Take District Plan objectives and policies into account when considering resource consent applications, not only rules, to ensure wider resource management issues are being addressed.*
- *Utilise non regulatory and other methods relating to achieving objectives for indigenous vegetation and habitat outlined in the District Plan (s17.5).*

8.2 Other Plans And Strategies

- *Implement the long term settlement pattern identified in the Whangarei District Growth Strategy to minimise development in areas in close proximity to significant natural areas and potential adverse effects on indigenous biodiversity.*
- ***Develop a Biodiversity Strategy for the Whangarei District in order to identify and address the significant threats to biodiversity, prioritise areas where biodiversity is most threatened and identify actions and methods to help protect and restore these areas. Include the importance of retaining urban biodiversity, and urban blue/green corridors. This will complement existing Reserves Strategy, Growth Strategy, and future Rural Strategy.***
- *Identify remnant indigenous vegetation, serving as ecological linkages for a 'green and blue network' plan. This should include a strategy for obtaining esplanade reserves when the opportunity arises. This will be able to prioritise locations for obtaining esplanade reserves, e.g. on private land in significant natural areas, in an integral part of a catchment, or part of an ecological corridor.*
- *Take iwi and hapu environmental management plans into account when formulating resource policy/rules.*

8.3 Protection, Restoration and Enhancement

- *Develop pest management plans for priority Council reserves.*
- *Lobby Northland Regional Council to create regional parks to increase protection of biodiversity. These could be targeted towards significant natural areas that are as yet unprotected, e.g. Brynderwyns and Ngunguru Sandspit.*
- *Identify and prioritise areas where existing human activity impacts on ecological/biodiversity health (e.g. waterways through the city centre). Target specific actions to minimise these impacts.*
- *In conjunction with other agencies, establish a network of connected protected areas to ensure habitat availability for indigenous biodiversity.*
- *Support the establishment of restoration projects in threatened ecosystems with local communities which incorporate connectivity, e.g. Ngahere o Pukenui Management Plan.*
- *Support community initiatives such as the New Zealand Refining Company project "Pohutukawa Coast – Colour the District Crimson". This initiative resulted in the planting of 36,500 trees on private and public land of community benefit between 1989 and 2008.*

- *Support community organisations involved in conservation and biodiversity enhancement, such as landcare groups, coastcare groups, Whangarei Heads Landcare Forum, New Zealand Kiwi Foundation, Friends of Matakohē/Limestone Island, Ngunguru Sandspit Protection Society, Bream Bay Action Group and others.*

8.4 Information, Monitoring and Research

- *Continue conservation covenant monitoring to gain information on the state of biodiversity on private land.*
- *Consider further monitoring/research of biodiversity in the District to improve understanding and make more robust decisions regarding land use and resource management. There needs to be more quality data and information to assess the state of some biodiversity and potential impacts of development.*
- *Undertake a survey of public and interest group perceptions of how well they feel these objectives are being achieved and how involved in /aware they feel about biodiversity issues in the District in order to assess progress on biodiversity education and engagement objectives.*
- *There is a need for more information on biodiversity in the District. Often determining the trends in species numbers and distribution is hampered by a lack of data. By measuring indicators at regular intervals, we will be able to make decisions over whether the methods and provisions in the District plan are adequate for protecting biodiversity.*
- *Regularly report on the state of biodiversity within the District to measure progress and effectiveness of responses to biodiversity, using the following indicators:*

Biodiversity

- *Threatened and at risk species present within the District*
 - Total number of threatened and at risk species present within the District (currently 205).*
 - Number of specific threatened and at risk species that are subject to management programmes and have data, e.g. Pateke (brown teal) and New Zealand fairy tern.*
 - Distribution area of North Island brown kiwi.*
 - Number of threatened species in the District that have become more threatened according to the New Zealand threat classification system.*
- *Total number and area (ha) of formally protected area in the District*
 - Total number and area (ha) of conservation covenants within the District.*
 - Total number and area (ha) of QEII covenants within the District.*
- *Distance of riparian margins protected by some mechanism, e.g. covenant, esplanade reserve, within conservation/reserve land.*
- *Total area (ha) of indigenous land cover loss.*
- *Macroinvertebrate Community Index – indicator of stream health.*
- *Stream habitat assessments.*

Threats

- *Percentage of lots created/land use consents granted in kiwi habitat.*
- *Percentage of lots created/land use consents granted in areas identified by Protected Natural Areas Programme.*
- *Percentage of lots created/land use consents granted in acutely and chronically threatened environments.*
- *Distribution/abundance of pest species, e.g. goats, pigs, deer.*

8.5 Education, Advocacy and Collaboration

- *Consider joint management strategies where significant ecological areas cross boundaries, e.g. Brynderwyns.*

- *Fund implementation of environmental education strategy and/or carry out education in the community on the existence of biodiversity information, and how it can be accessed and utilised.*
- *Decrease pollution through supporting incentives and education by Northland Regional Council e.g. Dairying and Clean Streams Accord 2003, Drains to Harbour Stormwater Awareness Programme.*
- *Collaborate with other agencies in formulating the Whangarei Harbour Integrated Management Strategy (WHIMS).*
- *Make available electronic databases and reports on biodiversity values, i.e. Protected Natural Area reports, Threatened Environment database, outstanding landscapes, Landcover Database 2, conservation covenants, to everyone involved in the resource consent process, i.e. Council staff, iwi, consultants, applicants, community groups.*
- *Promote and conduct interagency communication and collaboration, e.g. Biodiversity Northland, and inter-departmental communication and collaboration, e.g. resource consents, parks, policy and monitoring, with regard to resource consents. This is particularly important for facilitating the creation of protected areas, i.e. esplanade reserves and strips, conservation covenants, and as a feedback mechanism for rules in policy documents.*
- *Support the development of regional or District-wide umbrella groups. These would allow smaller groups to focus on project work without duplication of reporting, administration, compliance costs and responsibilities.*
- *Consider appointment of community biodiversity co-ordinator to:*
 - *Facilitate establishment of community groups.*
 - *Facilitate and encourage linkages between groups and communities.*
 - *Explore and develop strategic links between schools, migrant and disability communities and community environmental groups.*
 - *Co-ordinate/implement and biodiversity initiatives in the community.*

8.6 Economic Instruments

- *Apply for funding (such as the biodiversity advice and condition funds) to assist and advise landowners in protecting biodiversity on private land.*
- *Consider setting up an environmental enhancement fund, as has been done in the past to assist landowners to improve biodiversity on private land.*
- *Provide assistance to community groups and landowners involved in conservation and biodiversity enhancement. This may be in the form of advice, staff time etc.*
- *Recognise and include the benefits of biodiversity and ecosystem services in economic development strategies, tourism strategies, and marketing initiatives etc.*
- *Consider the use of development contributions for strategic purchase of open space and reserves, to protect and maximise benefits to biodiversity (e.g. biodiversity corridors).*
- *Implement the economic instruments/methods relating to indigenous vegetation and habitat outlined in the District Plan, such as:*
 - *financial contributions relating to subdivision development,*
 - *annual plan allocation for assisting other protection agencies,*
 - *provision of rates relief as an incentive and method of compensation for those landowners who voluntarily covenant land for the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna,*
- *Consideration of a waiver or reduction of subdivision consent application fees where the sole or principal purpose of the subdivision is protection of indigenous vegetation or significant habitats of indigenous fauna.*

Appendix 2 Schedules 17a, B, C & D

Schedule 17A Criteria for Ranking Significance of Areas of Indigenous Vegetation and Habitat

S17A.1 Outstanding Value

- 1 All sites which meet the following criteria:
 - a. Occurrence of an endangered endemic species;
 - b. Areas important to nationally vulnerable or internationally uncommon species (breeding or migratory);
 - c. Ecosystem or example of an original habitat type which is nationally rare;
 - d. Rare national example of a sequence or a mosaic.
- 2 All sites which contain wildlife species listed in Schedule 17B as 'Outstanding Value' – nationally endangered.
- 3 All sites which contain plant species listed in Schedule 17C as being of 'Outstanding Value' within the Northland context.

S17A.2 High Value

- 1 All sites which meet the following criteria:
 - Occurrence of a vulnerable endemic species;
 - Important habitat of a nationally rare species, or presence of rare Northland endemic species;
 - Example of a nationally uncommon habitat, sequence or mosaic;
 - Habitat type that is rare in that Ecological Region.
- 2 All sites which contain wildlife species listed in Schedule 17B as 'High Value' – nationally vulnerable.
- 3 All sites which contain plant species listed in Schedule 17C as being of 'High Value' within the Northland context.

S17A.3 Moderate-High Value

- 1 All sites which meet the following criteria:
 - Occurrence of a rare endemic species, or regionally threatened species, or endemic species of limited abundance throughout the country;
 - A habitat or sequence which is rare in that Ecological District;
 - Habitat which is uncommon elsewhere in that Ecological Region or District but contains all, or almost all, species typical of that habitat type (for that Region or District);
 - An area where any particular species is exceptional in terms of abundance or habit.
- 2 All sites which contain wildlife species listed in Schedule 17B as 'Moderate-High Value' – nationally rare or regionally threatened.
- 3 All sites which contain plant species listed in Schedule 17C as being of 'Moderate-High Value' within the Northland context.

S17A.4 Moderate Value

- 1 All sites supporting good numbers of species which are typical of a widespread habitat within an ecological region, and which have not been heavily modified by human influence.
- 2 All sites which contain wildlife species listed in Schedule 17B as 'Moderate Value' – restricted distribution.
- 3 All sites which do not contain any of the species listed in Schedule 17B or 17C, but which are viable areas of indigenous vegetation, or viable habitats of indigenous fauna.

S17A.5 Potential Value

- 1 All sites which meet the following criteria:
 - All are of some biological significance, whose biological values are limited by heavy modification, or other factors, but which would have increased biological value if left to regenerate or if managed or developed, (may include wildlife habitat which functions as a corridor, or which is sub-optimal habitat that may be necessary for maintaining genetic diversity).
- 2 All sites which do not contain any of the species listed in Schedule 17B or 17C, but which are viable areas of indigenous vegetation or viable habitats of indigenous fauna.

Note The application of these criteria within the Plan applies only to significant areas of indigenous vegetation and habitat rated 'Moderate' and above, as indicated in Policy 17.4.1.

Schedule 17B Status of Northland's Wildlife Species Applicable to the Whangarei District (Adapted from the Northland Conservation Management Strategy 1999).

Outstanding Value (Endangered Endemic Species)

Birds	Reptiles	Mammals	Freshwater Fish	Invertebrates (Molluscs)	Invertebrates (Arthropods)
Fairy tern	All marine turtles	Short-tailed bat	Black mudfish	Incomplete	Incomplete
Little spotted kiwi			Short-jawed kokopu		
NI brown kiwi					
Brown teal					

High Value (Vulnerable Endemic Species)

Birds	Reptiles	Mammals	Freshwater Fish	Invertebrates (Molluscs)	Invertebrates (Arthropods)
NZ dabchick	Robust skink	Long-tailed bat	Giant kokopu	Flax snail	Northland tusked weta
Black Petrel	Macgregor's skink		Lamprey		Freshwater crab
Buller's Shearwater	Tuatara			Incomplete	Incomplete
NI Weka	Hochstetter's frog				
Little shearwater	Poor Knights skink				
Australasian Bittern					
NZ Falcon					
NZ Dotterel					
Wrybill					
Stitchbird					
NZ pigeon					
Royal spoonbill					
Pycroft's petrel					

Moderate-High Value (Rare Endemic or Regionally Threatened Species)

Birds	Reptiles	Mammals	Freshwater Fish	Invertebrates (Molluscs)	Invertebrates (Arthropods)
Reef heron			Koaro	Incomplete	Incomplete
Banded rail			Banded kokopu		
Banded dotterel			Blue-gilled bully		
Caspian tern					
Cook's petrel					
Poor Knights bellbird					
White-fronted tern					
NI saddleback					

Moderate Value (Restricted Distribution)

Birds	Reptiles	Mammals	Freshwater Fish	Invertebrates (Molluscs)	Invertebrates (Arthropods)
Australian little grebe				Incomplete	Incomplete
Hoary-headed grebe					
Variable oystercatcher					
Grey plover					
Sharp tailed sandpiper					
Curlew sandpiper					
Knot					
Godwit					
Golden plover					
Turnstones far eastern curlew					
Siberian tattler					
Red-necked stint					
Long-tailed cuckoo					
Spotless crake					
North Island fernbird					
Red crowned parakeet					
Scaup					

Schedule 17C Threatened and Uncommon Plants of Whangarei District (Alphabetical List)

Species	Distribution
Outstanding Value	
<i>Asplenium Pauperequitum</i>	Rare on cliffs on Poor Knights Islands
<i>Clianthus Puniceus</i> Var. <i>Puniceus</i>	Previously Whangarei, Kaipara
<i>Crassula Hunua</i>	Old record from Wairua River. Already checked
<i>Hebe</i> Aff. <i>Bishopiana</i>	Hikurangi Swamp, once more widespread but still local
<i>Isoetes</i> Aff. <i>Kirkii</i>	Gone from Wairua Falls
<i>Lepidium Oleraceum</i> Ss.	
<i>Rorippa Divaricata</i>	Poor Knights, Hen and Chicken Islands
High Value	
<i>Anogramma Leptophylla</i>	P J de Lange record of two patches Waiomio Caves carpark
<i>Austrofestuca Littoralis</i>	Open coast beaches around Whangarei
<i>Baumea Complanata</i>	Was near Maungatapere, shrubland/gumland
<i>Calystegia Marginata</i>	Mostly coastal sites and open ground. Gone from Maungatapere
<i>Carmichaelia Williamsii</i>	Islands and mainland – Poor Knights to Hauraki Gulf
<i>Colensoa Physaloides</i>	Unbrowsed, high fertility forests
<i>Cordyline Kaspar</i>	Poor Knights, Hen and Chicken Islands
<i>Dactylanthus Taylorii</i>	Anecdotal record - Parahaki
<i>Desmoschoenus Spiralis</i>	Occasional on open coast
<i>Euphorbia Glauca</i>	Was around Whangarei Harbour, now Hen and Chicken Islands
<i>Hebe Actiflora</i>	Old record from Wairua Falls – needs checking
<i>Hibiscus</i> Aff. <i>Trionum</i>	Whangarei Heads
<i>Hibiscus Diversifolius</i>	Bream Head
<i>Ileostylus Micranthus</i>	Populations on totara, large population in Bay of Islands on Coprosma propinqua
<i>Marattia Salicina</i>	Punaruks, Whananaki, Matapouri, Pukenui, Motatau
<i>Meryta Sinclairi</i>	Local on Hen and Chicken Islands
<i>Picris Burbidgei</i>	Offshore Islands
<i>Pimelea Arenaria</i>	Whangarei Heads, Ocean Beach, major population at Pataua
<i>Pimelia Tomentosa</i>	Locally common on East Coast
<i>Pittosporum Obcordatum</i>	1000+ plants - Hikurangi
<i>Senecio Scaberulus</i>	Coastal – mainly east coast cliffs and banks – local
<i>Sicyos Australis</i>	Poor Knights, Hen and Chicken Islands
<i>Todea Barbara</i>	Poor Knights
Moderate-High Value	
<i>Adiantum Formosum</i>	Formerly recorded at Wairoa River
<i>Calochilus Paludosus</i>	Formerly recorded in Whangarei and Mangonui
<i>Caladenia Atradenia</i>	Shrubland in a number of localities
<i>Celmisia Adamsii</i> Var. <i>Rugulosa</i>	Kauri Mountain, Mt Manaia, Bream Head
<i>Doodia Aspera</i>	Formerly recorded at Waiomo

Species	Distribution
<i>Fuschia Procumbens</i>	A number of sites from Bay of Islands to Bream Head
<i>Korthalsella Salicornioides</i>	Locally common on manuka and kanuka
<i>Mazus Pumilio</i>	Large patch in Council covenant at Whananaki
<i>Pallaea Falcate</i>	
<i>Plectranthus Parviflorus</i>	One collection from Tangihua Forest
<i>Pomaderris Paniculosa Ssp. Novae-Zealandiae</i>	Mt Manaia
<i>Rorippa Divaricata</i>	Poor Knights, Hen and Chicken Islands
<i>Tetragonia tetragonoides</i>	

Schedule 17D Criteria for Ranking Significant of Areas of Indigenous Vegetation, Habitat and Restoration Potential in Relation to the Environmental Benefit Rule (73.3.2).

Since first human settlement in the District, large areas of native forests and shrub lands, freshwater indigenous wetlands, mangrove forest, mudflats, and coastline have been lost or modified by direct or indirect human impacts (Chapter 17.2 Overview). About 26% of Northland's original forest and tall shrubland remain today, most of it in public ownership.

The preservation of privately owned land containing a 'feature' such as:

- A stand of indigenous vegetation;
- An indigenous fauna habitat;
- An indigenous wetland, including ephemeral wetland; or
- An area of appropriately designed indigenous re-vegetation or enhancement,

through covenanting or other process, is available with use of the Environmental Benefit Rule (73.3.2) during subdivision.

Indigenous vegetation and habitats in the District are described in Chapter 17 of this plan. This section also contains the following schedules:

- Schedule 17A – Criteria for Ranking Significance of Areas of Indigenous Vegetation and Habitat
- Schedule 17B – Status of Northland's Wildlife Species Applicable to the Whangarei District
- Schedule 17C – Threatened and Uncommon Plants of Whangarei District

In accordance with the ranking criteria in Schedule 17A, overleaf is a table summarising the criteria for ranking the quality of a feature referred to in Rule 73.3.2. It is followed by the descriptions for all of the value categories.

Table 1 Criteria for Ranking Value of Feature

Value	Outstanding	High	Moderate High	Moderate	Potential Restoration
Minimum Vegetation, Dune, Fauna Habitat or Wetland Areas Required	0.5ha	1.0*	1.5ha	2.0ha	To achieve the same criteria specified in 'Moderate Value' category, as a minimum. Restoration to be completed within 4 years See following requirements.
Minimum width of feature	50m	50m	50m	50m	
% Canopy cover (native)**	>75%	>50%	>25%	>25%	
Species richness (plants)**	>40	>30	>20	>12	
Ecotones ¹	≥4	≥3	≥2	≤2	
Intactness (i.e. Canopy tiers)**	Intact Ground; Mid; Canopy	Intact Ground; Mid; Canopy	Disturbed ground and Mid Canopy; Intact Canopy	Disturbed ground and Mid Canopy; Intact Canopy	
Introduced flora and fauna	Minimal	Minimal	Minimal-Moderate	Moderate	
Human Modification	Nil Except for walking tracks and pest control	Nil Same	Grazing, selective logging	Grazing, selective logging, water course changes	
Quality: (Schedule 17A) or (Schedules 17B & 17C)	Outstanding	High	Moderate-high	17B or Northland Protection Strategy ²	

* except for peat bog, which must contain a good coverage of indigenous canopy trees and have a minimum area of 0.5ha.

** not including epiphytes

*** except for dunes, which may be forested but considered to be of good quality, with a covering of spinifex or pingao (the latter considered to be High Value in Schedule 16C)

Outstanding Value

- 1 Contains the best quality representative examples in the Ecological District and/or Region of a particular ecological unit, or combination of units. Best quality can be measured by the presence of:
- A mature indigenous vegetation community with a coherent, well developed canopy that comprises in excess of 75% indigenous late-successional species appropriate to the vegetation type; and
 - Intact and dense ground, mid and canopy tiers (Intactness); and
 - A very high level of diversity, i.e. species richness (>40 species of indigenous plant⁷) and/or a suite of four or more native vegetation units/community types forming an ecotone¹ within the proposed protected feature; and
 - The particular ecological unit, or combination of units, is unmodified by humans and introduced species of flora and fauna are absent (*Naturalness and Long-term viability*).

Or

- 2 Contains a representative example of an ecological unit, or combination of units that is very poorly represented in protected areas in the Ecological District of Northland², in particular:
- Riverine swamp forest and flood plain forest
 - Dune forest

- Broadleaf forest on alluvium and volcanic soils; or
- Podocarp forest (other than secondary totara forest).

Or

- 3 Contains plants and animal (permanent/migratory/seasonal) considered to be rare/threatened in the opinion of a qualified and experienced terrestrial ecological with local knowledge of the District's flora and fauna and/or listed in the "Outstanding Value" categories of Schedules 16B and 16C. An explanation shall be provided regarding the long-term sustainability of these species within the habitat (e.g. potential threats and management requirements).

Ecological features complying with any of the above criteria must meet the following size and shape parameters:

- The proposed area for protection is of sufficient size and shape to maintain its intrinsic ecological values. The minimum size for an area of this level of significance is 0.5 hectares of contiguous vegetation. The minimum width of the feature, at any one point, must be no less than 50 metres.
- The exception to this is where the feature comprises a strip of vegetation forming the riparian margins of a significant watercourse, or lake⁵. In this case the minimum area of contiguous vegetation must be 0.5 hectares, and the minimum width of the riparian strip need only be 10 metres along each bank or 20 metres along the edge of a lake or watercourse, where only one bank is owned.
- Large areas surrounded by, or adjoining protected land along >50% of its boundary will be regarded as having greater ecological value and sustainability. This will give added weight for subdivision and covenanting.

High Value

- 1 Contains high quality representative examples in the Ecological District and/or Region of a particular ecological unit, or combination of units. High quality can be measured by the presence of:
- A mature indigenous vegetation community with a coherent, well developed canopy that comprises in excess of 50% indigenous late-successional species appropriate to the vegetation type; and
 - Intact and moderately dense ground, mid and canopy tiers; and
 - A high level of diversity, i.e. species richness (>30 species of indigenous plant⁷) and/or a suite of at least three native vegetation units/community types forming an ecotone¹ within the proposed protected feature; and
 - The particular ecological unit, or combination of units, is unmodified by humans but some introduced species of flora and fauna may be present. Any such disturbance would be shown to have only minor impact on the long-term viability of the feature.

Or

- 2 Contains a representative example of an ecological unit, or combination of units that is under-represented in protected areas in the Ecological District of Northland², in particular:
- Peat bogs
 - Podzol gumland
 - Coastal indigenous wetland including saltmarsh
 - Coastal herbfield, shrubland and forest
 - Predator-free islands
 - Ephemeral inland wetlands³
 - Dunes including dune lakes
 - Riparian margins of lower and middle-order⁴ streams⁵; or
 - Buffers to, and linkages between, key areas for conservation management.

Or

- 3 Contains plants and animal (permanent/migratory/seasonal) considered to be rare/threatened in the opinion of a qualified and experienced terrestrial ecologist with local knowledge of the District's flora and fauna and/or listed in the "High Value" categories of Schedules 16B & 16C. An explanation shall be provided regarding the long-term sustainability of these species within the habitat (e.g. potential threats and management requirements).

Ecological features complying with any of the above criteria must meet the following conditions:

- The proposed area for protection is of sufficient size and shape to maintain its intrinsic ecological values. The minimum size for an area of this level of significance is 1.0 hectare of contiguous vegetation. The minimum width of the feature, at any one point, must be no less than 50 metres.
- The exception to this is where the feature comprises a strip of vegetation forming the riparian margins of a significant watercourse, or lake⁵. In this case, the minimum area of contiguous vegetation must be 0.5 hectares, and the minimum width of the riparian strip need only be 10 metres along each bank or 20 metres along the edge of a lake or watercourse, where only one bank is owned.

Areas of sufficient size and shape that adjoin protected land along part of their boundary, or that link or buffer other significant ecosystems, will be regarded as having greater ecological value and sustainability. This will give added weight for subdivision and covenanting.

Moderate-High Value

- 1 Contains moderately high quality representative examples in the Ecological District and/or Region of a particular ecological unit, or combination of units. Moderately high quality can be measured by the presence of:

- A mature indigenous vegetation community with a coherent, well developed canopy that comprises in excess of 25% indigenous late-successional species appropriate to the vegetation type; and
- An intact, dense canopy tier but mid or ground tiers may show some evidence of past disturbance, i.e. stock grazing, exotic plant material; and
- A moderately high level of diversity, i.e. species richness (>20 species of indigenous plant⁷) and/or a suite of at least two native vegetation units/community types forming an ecotone¹ within the proposed protected feature;
- The particular ecological unit, or combination of units, may show evidence of modification by humans, e.g. selective logging, hydrological manipulation, stock grazing and/or introduced species of flora and fauna that may be having a moderate impact on the long-term viability of the feature.

Or

- 2 Contains a representative example of an ecological unit, or combination of units that is uncommon in protected areas in the Ecological District of Northland², in particular:

- Mangrove forest
- Kauri forest
- Volcanic lakes
- Serpentine shrubland
- Broadleaf shrubland
- Upland broadleaf forest

Or

- 3 Contains plants and animals (permanent/migratory/seasonal) considered to be rare/threatened in the opinion of a qualified and experienced terrestrial ecologist with local knowledge of the District's flora and fauna and/or listed in the "Moderate-High Value" categories of Schedules 16B & 16C.

An explanation shall be provided regarding the long-term sustainability of these species within the habitat (e.g. potential threats and management requirements).

Ecological features complying with any of the above criteria must meet the following conditions:

- The proposed area for protection is of sufficient size and shape to maintain its intrinsic ecological values. The minimum size for an area of this level of significance is 1.5 hectares of contiguous vegetation. The minimum width of the feature, at any one point, must be no less than 50 metres.
- The exception to this is where the feature comprises a strip of vegetation forming the riparian margins of a significant watercourse, or lake⁵. In this case, the minimum area of contiguous vegetation must also be as for the 'High Value' category, that is 1.0 hectare, and the minimum width of the riparian strip need only be 10 metres along each bank or 20 metres along the edge of a lake or watercourse, where only one bank is owned.

Areas of sufficient size and shape that adjoin protected land along part of their boundary, or that link or buffer other significant ecosystems, will be regarded as having greater ecological value and sustainability. This will give added weight for subdivision and covenanting.

Moderate Value

- 1 Contains moderate quality representative examples in the Ecological District and/or Region of a particular ecological unit, or combination of units. Moderately high quality can be measured by the presence of:
 - A coherent, well developed, appropriate canopy of indigenous species.
 - An intact, dense canopy tier but mid or ground tiers may show evidence of past disturbance, i.e. stock grazing, exotic plant material.
 - A mature indigenous vegetation community with a coherent, moderately developed canopy that comprises in excess of 25% indigenous late-successional species appropriate to the vegetation type. Early (primary) successional communities (e.g. kanuka/manuka shrublands), may be accepted under this value category if they have a high level of intactness and naturalness and if there is evidence of the future establishment and retention of late-successional vegetation. i.e. presence of occasional late-successional canopy species in the upper and lower tiers.
 - A moderate level of diversity, i.e. species richness (12 or more species of indigenous plant⁷) and/or two native vegetation units/community types which may form an ecotone¹ within the proposed protected feature;
 - The particular ecological unit, or combination of units, may show evidence of modification by humans, e.g. selective logging, grazing, hydrological manipulation and/or introduced species of flora and fauna that may be having a significant impact on the long-term viability of the feature.

Or

- 2 Contains a representative example of an ecological unit, or combination of units, that is adequately represented in protected areas in the Ecological District of Northland², in particular:
 - Mixed lowland kauri-podocarp-broadleaf forest
 - Manuka-kanuka shrubland – where the level of maturity is such that at least 75% of the canopy is 3 metres or over in height.

Ecological features complying with any of the above criteria must meet the following conditions:

- The proposed area for protection is of sufficient size and shape to maintain its intrinsic ecological values. The minimum size for an area of this level of significance is 2.0 hectares of contiguous vegetation. The minimum width of the feature, at any one point must be no less than 50 metres.
- The exception to this rule is where the feature comprises a strip of vegetation forming the riparian margins of a significant watercourse, or lake⁵. In this case the minimum area of contiguous vegetation must be as for the 'High Value' and 'Moderate-High Value' categories, that is 1.0 hectare and the minimum width of the riparian strip need only be 10 metres along each bank or 20 metres along the edge of a lake or watercourse, where only one bank is owned.

Areas of sufficient size and shape that adjoin protected land along part of their boundary, or that link or buffer other significant ecosystems, will be regarded as having greater ecological value and sustainability. This will give added weight for subdivision and covenanting.

Potential/Restoration Value

There will be some remnants within the District that do not comply with any of the criteria 'Moderate' and above, due to high levels of modification and disturbance. Where a feature is marginal under these terms, but could be improved to a significant standard within a maximum of 4 years, a feature may have Potential/Restoration Value.

This criterion could apply to any ecosystem type, but where is it critically depleted within the Ecological District or Northland, a proposed restoration project will have maximum significance value. Ecosystems to which this applies to include, in particular⁶:

Coastal (dune including dune lakes, shrubland and forest)

- Riverine forest, swamp forest and podocarp forest on alluvium
- Broadleaf volcanic forest
- Swamps, bogs and riparian ecotones including estuarine.

An Environmental Benefit will not be offered upfront on the basis of a remnant having Potential/Restoration value. However, if a land owner should choose to undertake restoration of a feature, providing this is done following a comprehensive rehabilitation programme designed by a suitably qualified and experienced professional accepted by Council and achieves the criteria specified in the 'Moderate Value' category and to be completed within a maximum of 4 years, then the remnant will qualify for and Environmental Benefit.

The design of the rehabilitation programme shall ensure that the remnant can meet the assessment criteria for at least 'Moderate Value' representative vegetation (as detailed above) in the future. This will include the following requirements:

- Developing an appropriate, intact canopy, mid and ground tier of native species to ensure that weed species do not compete with natives for ground space; and
- Plant selection should bring the total species diversity present within the feature up to a moderate level, i.e. species richness (12 or more species of indigenous plant) and/or a suite of at least two native vegetation units/community types which may form an ecotone¹; and
- All plants must be eco-sources and maintained for a minimum of four years with a survival rate of at least 85% with a minimum planting density of 10,000 plants per hectare; and
- All modifying activities are prohibited and any man-made structures are removed (except for those integral to the feature's management, e.g. fences, culverts, weirs etc) or naturalised and all weed and animal pest species are actively managed. This is to ensure that the feature achieves a high level of naturalness and long-term viability (see Criterion 1 of Outstanding Value category).

Ecological features with Restoration/Potential value must also meet the following size and shape parameters once restored:

- The total area proposed for protection is of sufficient size and shape to maintain its intrinsic ecological values. The minimum size for an area of this level of significance is 2.0 hectares and the minimum width of the feature, at any one point is no less than 50m.
- The exception to this rule is where the feature comprises a strip of vegetation forming the riparian margins of a significant watercourse, or lake⁵. In this case, the minimum area of contiguous vegetation must be as for the 'High Value', 'Moderate-High Value' and 'Moderate Value' categories, that is 1.0 hectare and the minimum width of the riparian strip need only be 10 metres along each bank or 20 metres along the edge of the lake or watercourse, where only one bank is owned.

Areas of sufficient size and shape that adjoin protected land along part of their boundary, or that link or buffer other significant ecosystems, will be regarded as having greater ecological value and sustainability. This will give added weight for subdivision and covenanting.

Bonding

Where an Environmental Benefit Lot is awarded on the basis of revegetation/restoration, a s224 certificate will not be issued for a proposed Environmental Benefit Lot unless/until re-vegetation/restoration has been successfully completed, consistent with performance in the Criteria or the consent holder provides a bond to the satisfaction of Council to a value of not less than 150% of the value of the works.

Access to bonding shall not be available until one year after planting, where there is evidence to Council's satisfaction of the successful initial implementation of an approved management plan.

The management plan is to include matters of the following type:

- Named species appropriate to the location
- Size at planting
- Density
- Seed source
- Weed clearance/release
- Pest control
- Fertiliser application
- Irrigation requirements (at Council's discretion).

Council shall retain discretion not to accept bonding where there is a potentially harsh environment or other factor(s), which represent a significant risk in its assessment to successful re-establishment. Evidence of the degree of risk should form part of any related proposal.

Council may also elect to recover related actual and reasonable costs.

s.224 certificate arrangements

Legally effective post s.224 certificate arrangements are required which:

- Secure the retention of re-planted vegetation;
- Establish responsibility for the continued execution of the management plan until its objectives (tree height, percentage canopy cover or both) and/or term are satisfied (this may require a community-owned management structure, depending on the number of subsequent owners);
- Ensures Council access to the land in the even the bond is to be executed.

These requirements may necessitate a bond to be complemented by covenants or other legal instruments.

Notations

- 1 Natural vegetation sequence occurring over an environmental gradient or in relation to landform, e.g. in an estuarine environment, the ecotone might be from mangroves to saltmarsh to freshwater wetland to coastal shrubland (note that mangroves and saltmarsh may be in public ownership).
- 2 Information on priority for protection of indigenous ecosystems has been sourced from Section 6.3 of the Northland Protection Strategy – a report to the Nature Heritage Fund Committee. This report should also be referenced for descriptions of these ecosystem types.
- 3 Wetland ecosystems should function hydrologically, as naturally as possible. Artificial (i.e. man-made) ponds (used for water supply) do not qualify under this criterion, as they do not represent natural habitat or function naturally in a hydrological sense. Established indigenous wetland vegetation surrounding a man-made pond may comply but must meet the minimum size criteria. The open water of a man-made pond cannot contribute to this size requirement. Indigenous wetlands in which the water levels are controlled by a man made structure (e.g. a weir) which is expressly for the purpose of maintaining the water levels in order to maintain a viable ecology do comply with this criterion.
- 4 Stream order is a measure of the relative size of streams. The smallest first and second-order stream are in the upper part of a catchment and comprise the headwaters of a watercourse. A middle-order stream is further down the catchment and will be larger in size. A middle-order stream is downstream of the confluence of at least two lower-order streams.
- 5 Significant watercourses – where high instream values have been identified, i.e. a Macro invertebrate Community Index (MCI) score of 100+ or native fishery diversity and abundance data, and the upper catchment is already protected.
- 6 Information on restoration priorities has been sources from Section 6.3 of the Northland Protection Strategy – a report to the Nature Heritage Fund Committee.
- 7 Plant species that are rooted in soil and do not include epiphytes.

Notes

- 1 Although a minimum size for a complying feature is stated, **in all cases** the whole of the ecological remnant worthy of protection on the property must be made subject to legal and physical protection at the time of consent and no area of the feature can be left out or divided for the purposes of obtaining additional lots at some later date.
- 2 An Environmental Benefit will only be granted subject to a condition placed in the subdivision consent specifying weed and pest control management.