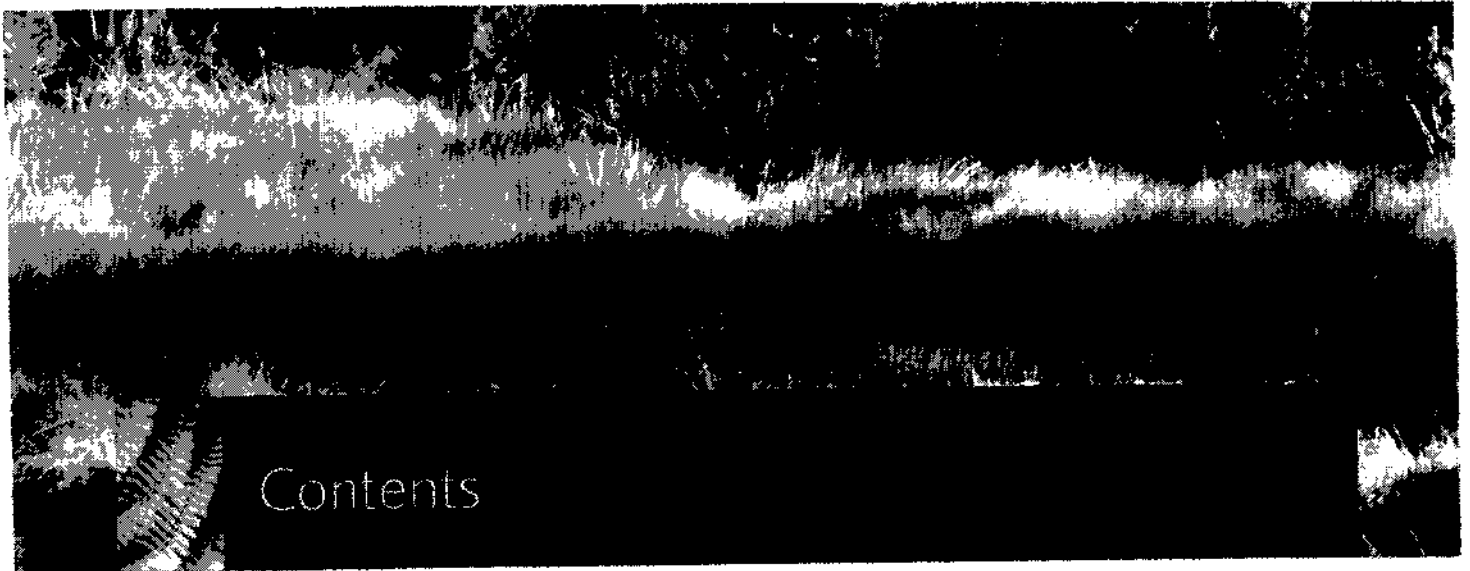






















Waitakere City Council
Biodiversity Strategy and Action Plan



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1. Introduction

Why we need a biodiversity strategy

The purpose of this Biodiversity Strategy is to collate and re-focus many of the policies and actions already adopted by the Council and the community for a range of different purposes, and to propose some new actions, to provide good biodiversity outcomes from all land management practices. The strategy does not duplicate policies already contained in the District Plan, draft Parks and Open Space Strategy, reserve management plans, Stormwater Strategy and integrated catchment management plans.

New Zealand has an obligation, as signatory to the international Convention on Biological Diversity, to protect its indigenous biodiversity. Domestic legislation, such as the Resource Management Act 1991 and the Biosecurity Act 1993 reinforce this obligation. Towards meeting this obligation, the New Zealand Biodiversity Strategy was prepared to provide a framework for action. The Council's own Green Network strategic platform holds the vision that streams and forests will be full of life, and seeks to link the Waitakere Ranges and the sea, connecting the everyday lives of the people of Waitakere with the natural world.

The Waitakere Ranges make up more than half of the City's land area and provide a home to a wide range of rare and common native plant and animal species. This expansive natural area has local, regional, national and international significance³ for one reason or another, and the City has the collective responsibility for ensuring that these natural values are maintained, enjoyed and enhanced.

Native vegetation in the lowland area, which is the urban part of the City, is fragmented and primarily restricted to gullies and stream margins. There are small forest remnants, and an area of approximately 30ha of gumland vegetation in Waikumete Cemetery, but largely the vegetation is in the regeneration stage and commonly mixed with exotic species. The Council's Green Network strategic platform envisages linking the Waitakere Ranges through the City to the coast bringing the natural world into people's lives.

Although there are numerous active restoration programmes underway in the City, being undertaken by both the Council and the community, there is currently a lack of targeted biodiversity outcomes in relation to these. The Biodiversity Strategy will draw together and summarise existing information and will provide specific biodiversity objectives and outcomes and an action plan to achieve the biodiversity vision for the City.

Section 31 of the Resource Management Act 1991 charges territorial authorities with 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. The legislative framework for having regard to biodiversity maintenance and management is provided in Section 2 of this strategy.

DEFINITIONS

Biological diversity or biodiversity is the variety of all biological life – plants, animals, fungi, and microorganisms – the genes they contain and the ecosystems on land or in water where they live. It is the diversity of life on earth and includes:

- **Genetic diversity:** The variability in the genetic make-up among individuals (and between populations) within a single species.
- **Species diversity:** The variety of species within a particular geographical area.
- **Ecological (ecosystem) diversity:** The variety of ecosystem types (forests, streams, wetlands) and their biological communities that interact with one another and their non-living environments.

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³Auckland Regional Policy Statement, 1999.

Ecosystem is an interacting system of living and non-living parts (sunlight, air, water, nutrients). Ecosystems can be small and short-lived (rotting logs on a forest floor), or large and long-lived (kauri forest, lake).

Biosecurity is about exclusion, eradication and effective management of pests and unwanted organisms. Where biosecurity and biodiversity issues cross over is in the potential for pest species to replace natives.

NEW ZEALAND'S CONTRIBUTION TO GLOBAL BIODIVERSITY²

New Zealand's biodiversity is internationally important. We boast the world's only flightless parrot (kakapo); a bird with nostrils at the end of its beak (kiwi); a primitive frog that lays eggs that hatch into adult frogs (*Leiopelma species*); a large insect which fills a role that small rodents play in other countries (giant weta); and many other exceptional species.

A high percentage of New Zealand's indigenous species is endemic (they are found nowhere else on earth) — a result of isolated evolution and the diversity of New Zealand's land and seascapes. This level of endemism is remarkable internationally. Both species of New Zealand bat are endemic, as are all four frog species, all 60 reptile species, more than 90 percent of insect species and a similar percentage of marine molluscs, about 80 percent of

vascular plants, and a quarter of all bird species. In contrast, Great Britain, which separated from continental Europe only 10,000 years ago, has only one endemic bird species (Scottish crossbill) and a handful of plant and invertebrate species (e.g. Swallowtail butterfly).

The ecosystems in which these species live are also highly distinctive. The kauri forests of the northern North Island, the braided river systems of the eastern South Island, and our geothermal ecosystems are some examples.

The uniqueness of much of New Zealand's indigenous biodiversity means that responsibility for its continued existence is entirely ours; it cannot be conserved in nature anywhere else in the world.

NEW ZEALAND'S BIODIVERSITY DECLINE

New Zealand, one of the last places on earth to be settled by humans, has one of the worst records of indigenous biodiversity loss. While biodiversity varies in natural cycles, nothing since the extinction of the dinosaurs (65 million years ago) compares with the decline in indigenous biodiversity in New Zealand over the last century.

The first phase of decline was the loss of New Zealand's larger bird species when humans first settled here, including the world's largest eagle and several moa species. By around 1600, about a third of the original forests had been replaced by grasslands although other habitats, for example wetlands and coastal areas, remained largely unchanged. From around 1850, the gathering pace of European settlement started a new wave of forest destruction. Since then, a further third of our original forests have been converted to farmland, and there has been extensive modification of wetlands, dunelands, river and lake systems, and coastal areas. Other bird species, such as the huia and laughing owl, also became extinct during this time.

As far as we know, in the last 700-800 years, humans and their accompanying pests have caused the extinction of:

- 32% of indigenous land and freshwater birds;
- 18% of endemic sea birds;
- three of seven frog species;
- At least 12 species of invertebrates such as snails and insects;
- One fish, one bat and perhaps three reptile species; and
- Possibly 11 plant species³.



Today, about 1000 of our known animal, plant, and fungi species are considered threatened, and it is likely that many presently unknown species are also threatened. Many populations of these threatened species have disappeared from areas where they were once found. This pattern of local loss of populations and shrinking of a species range is the forerunner to species extinction.

The challenge at the national level is to integrate biodiversity considerations across all sectors of government and the economy. The challenge regionally and locally is to translate national priorities and targets into local plans and programmes.

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²The New Zealand Biodiversity Strategy, Our Chance to Turn the Tide, 2000.
³Ministry for the Environment, The State of New Zealand's Environment, 1997.



WAITAKERE CITY'S BIODIVERSITY CHALLENGE

The Waitakere Ranges are botanically rich containing 20% of all New Zealand's flowering plant species and 60% of all native fern species⁴. Although the following statistics are drawn from a number of sources and subject to change, the Ranges are home to:

- 542 species of native plant (111 species of these being native ferns)
- 34 species of nationally threatened plants and 27 regionally threatened plant species
- 50 species of native bird
- 3 species of kauri snail (large land snail)
- 11 species of native freshwater fish
- 5 species of native reptile
- 1 native frog species
- 1 native mammal (long-tailed bat).

Although records are not complete, it appears that we have lost 11 native bird species from the Ranges and 15 species from the lowlands. The short-tailed bat was once common in the region but has not been recorded for some time.

There are now 240 plant species identified as actual or potential threats to native vegetation, and there are 19 introduced bird species, 9 introduced mammals and 2 amphibians, all competing with our native species.

Maintaining biodiversity is not just about ensuring the survival of rare and endangered species. It is the whole range of different species, rare and common, and the variation between populations within a species that is important. Different populations of the same species, if isolated and subject to different selection pressures will vary over time and is the species' insurance against extinction. The reason

for using eco-sourced or provenance plants in re-vegetation projects is first to ensure that the local gene pool of a species continues to survive, and secondly because the locally sourced material is well adapted to the local environmental conditions.

In summary, the challenge is to maintain the viability of local populations across the range of species that naturally occur in the region, the range of ecosystems, and to understand their significance and to facilitate community support and engagement in the long term.

WHY BIODIVERSITY IS IMPORTANT TO TE KAWERAU A MAKI

Kawerau A Maki's concerns are to :

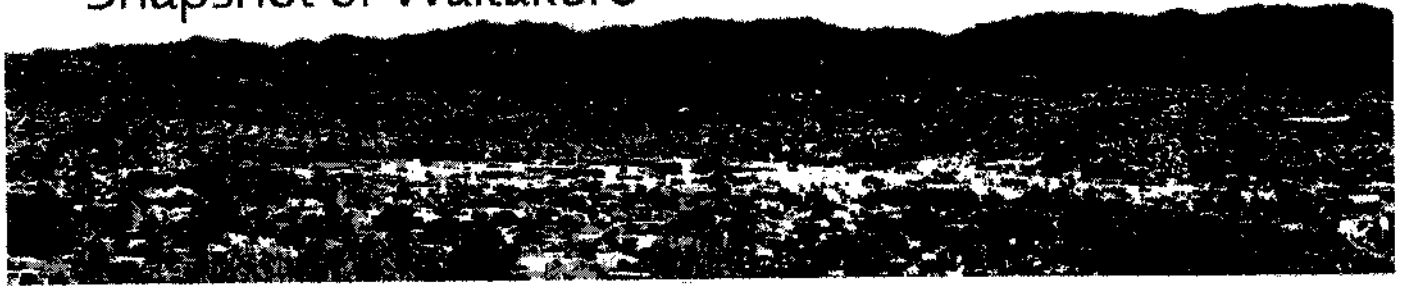
- have access to flora and fauna for harvesting and craft;
- ensure the protection and enhancement of native flora and fauna and their ecosystems;
- support the eradication of exotic plants and animals that are damaging, destroying or competing with native species or their ecosystems;
- participate in decisions regarding the introduction of exotic flora and fauna into New Zealand; and
- ensure that property rights are not ascribed to native species in breach of Treaty rights.



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⁴Waitakere Ecological District Survey Report, 1993

Snapshot of Waitakere



Area: 36,000 hectares

Open space: 18,239 hectares

Area of Open Space with significant vegetation:
5,246.8 hectares

Population: 168,750 (2001 census)

Climate: Warm temperate/sub-tropical.
14°-27° C in summer
8°-19° C in winter

Average monthly rainfall:

Slightly higher than other parts of the region.
90mm in summer
140mm in winter



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2. Policy and Legislation

INTERNATIONAL COMMITMENT

The Convention on Biological Diversity was adopted at the Earth Summit in Rio de Janeiro. This international convention concerns the conservation of biological diversity including the variety and variability of genes, species, populations and ecosystems which provide the foundation for the earth's ecological services.

New Zealand ratified the Convention in 1993, adopting the three main goals:



- The conservation of biological diversity
- The sustainable use of its components, and
- The fair and equitable sharing of the benefits from the use of genetic resources.

Other international initiatives in which New Zealand is involved include the World Heritage Programme (with three sites recognised in New Zealand: Tongariro National Park, South Westland and a group of five Sub Antarctic Islands), and the RAMSAR Convention for the conservation and wise use of wetlands and their resources (with five sites in New Zealand: Farewell Spit, Firth of Thames, Kopuatai Peat Dome, Waituna Lagoon and Whangamarino).

A special interest in Antarctica and the Southern Ocean has led to our being a party to the Convention on the Conservation of Antarctic Marine Living Resources, developed under the Antarctic Treaty.

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THE NEW ZEALAND BIODIVERSITY STRATEGY - OUR CHANCE TO TURN THE TIDE

The Convention on Biological Diversity, ratified by New Zealand in 1993, requires us to prepare national strategies or plans to set national goals to conserve and sustainably use biodiversity.

New Zealand made a commitment to prepare a national strategy to set clear goals for New Zealand's indigenous biodiversity in the Environment 2010 Strategy released in 1995⁵. In 1997 a "State of the Environment" report was prepared for New Zealand which identified just how bad things have become for our biodiversity⁶. In 1998, the Government adopted "halt the decline of indigenous biodiversity" as one of its ten Strategic Priorities.

The New Zealand Biodiversity Strategy was finally adopted in February 2000, identifying the conservation and sustainable use of New Zealand's biodiversity as a matter of national importance⁷. The Biodiversity Strategy aims to halt the decline in our biodiversity and sets out a vision where:

- New Zealanders value and better understand biodiversity;
- We all work together to protect, sustain and restore our biodiversity, and enjoy and share in its benefits, as a foundation of a sustainable economy and society;
- Iwi and hapu as kaitiaki are active partners in managing biodiversity;



⁵ Environment 2010 Strategy - A Statement of the Government's Strategy on the Environment, 1995, Ministry for the Environment.

⁶ The State of New Zealand's Environment, 1997, Ministry for the Environment.

⁷ The New Zealand Biodiversity Strategy: Our Chance to Turn the Tide, 2000, Department of Conservation and Ministry for the Environment.

- The full range of New Zealand's indigenous ecosystems and species thrive from the mountains to the ocean depths; and
- The genetic resources of our important introduced species are secure and in turn support our indigenous biodiversity.

THE STRATEGY INCLUDES FOUR MAIN GOALS FOR ACHIEVING THIS VISION:

Goal One: Community and individual action, responsibility and benefits

Enhance community and individual understanding about biodiversity, and inform, motivate and support widespread and co-ordinated community action to conserve and sustainably use biodiversity; and enable communities and individuals to equitably share responsibility for, and benefits from, conserving and sustainably using New Zealand's biodiversity, including the benefits from the use of indigenous genetic resources.

Goal Two: Treaty of Waitangi

Actively protect iwi and hapu interests in indigenous biodiversity, and build and strengthen partnerships between government agencies and iwi and hapu in conserving and sustainably using indigenous biodiversity.



Goal Three: 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 critically 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 across their natural range and maintain their genetic diversity.

Goal Four: Genetic resources of introduced species

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

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It has been recognised that one of the keys to achieving these goals is to address how the management of private land affects indigenous biodiversity. The Ministerial Advisory Committee on Biodiversity noted that achieving goals for biodiversity will not result from forced compliance or from increased public funding alone, and that it will take combined resources and co-operation from all involved to halt the decline in New Zealand's biodiversity⁸.

RESOURCE MANAGEMENT ACT 1991

Section 6(c) of the Resource Management Act (RMA) identifies the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna as matters of national importance, and section 7(d) requires particular regard to be had to the intrinsic values of ecosystems.

The Waitakere City District Plan protects these areas of significant vegetation and habitats identified in Waitakere City through the Protected Natural Area survey programme. However, this does not necessarily ensure protection or maintenance of biodiversity.

Section 6(e) identifies as a matter of national importance the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga. Maori hold a holistic view of the environment where people are part of nature and biodiversity. As the people are intrinsically linked with the natural world, the mana of the iwi, hapu or whanau is directly related to the well being of the natural resources within their rohe, or region. Understanding and valuing the Maori worldview is an essential step towards a bicultural approach to biodiversity management⁹.

Amendments to the RMA in 2003 have added a definition of indigenous biodiversity, and amended Sections 30 and 31 to clarify that managing biodiversity is an explicit function of both regional councils and territorial authorities. They must provide for the maintenance of biodiversity in regional and district plans.





NATIONAL POLICY STATEMENT

The Biodiversity Strategy anticipates a national policy statement on biodiversity and a preliminary wording document "Towards an NPS for biodiversity" was prepared in 2001 and consulted on. No further progress has been made.

AUCKLAND REGIONAL POLICY STATEMENT

The ARPS does not specifically address biodiversity but only contains policies and methods for protecting and enhancing natural heritage where it is degraded or potentially affected by development.

Objectives relating to natural heritage in the Auckland Regional Policy Statement are as follows:

(6.3) 2. To preserve or protect a diverse and representative range of the Auckland Region's heritage resources.

(6.3) 3. To protect and restore ecosystems and other heritage resources, whose heritage value and/or viability is threatened.

There are policies for establishing the significance of natural heritage, providing for kaitiakitanga, controlling the effects of land use on natural heritage, and use and access to natural heritage. Policies relating to restoration of natural heritage state:

Significant ecosystems that have been damaged or depleted should be protected and restored to the stage where their continued viability is no longer under threat.

The ARPS identifies areas of significance in Waitakere City. In particular:

- The Te Henga-Wainamu swamplands, lakes, dunes and native forest provide a complex of habitats with rich and diverse flora and fauna not found elsewhere in the region. The area is considered to be of national importance.

- The Waitakere Ranges is a biologically rich area considered to be of national and international importance.



REGIONAL PARKS MANAGEMENT PLAN

The Waitakere Ranges Regional Park encompasses more than 16,000 hectares and is managed by the Auckland Regional Council under the Regional Parks Management Plan. This plan contains general objectives and policies for habitat and ecosystem protection, restoration and enhancement, indigenous species protection and for species reintroduction for regional parks. The plan indicates that specific species management programmes will be developed, among other species, for:

- Waitakere Rock Hebe (*Hebe bishopiana*)
- Wood rose (*Dactyloctenium aegyptium*)
- Hochstetter's frog.
- Long-tailed bat.



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WAITAKERE CITY DISTRICT PLAN

Botanical surveys have been completed for the Waitakere Ecological District and for Waitakere part of the Tamaki and Rodney Ecological Districts (PNA surveys). The outstanding and significant vegetation identified from these surveys has been mapped and protected under the Waitakere City District Plan.

The District Plan's Objective for biodiversity is

Objective 2: To protect the City's native vegetation and fauna habitat, including protecting:

- The quality and resilience of the resource;
- The variety and range of species and their contribution to the biodiversity of the City;
- Their ecological integrity;
- Their healthiness as a potential source of harvest for cultural purposes.

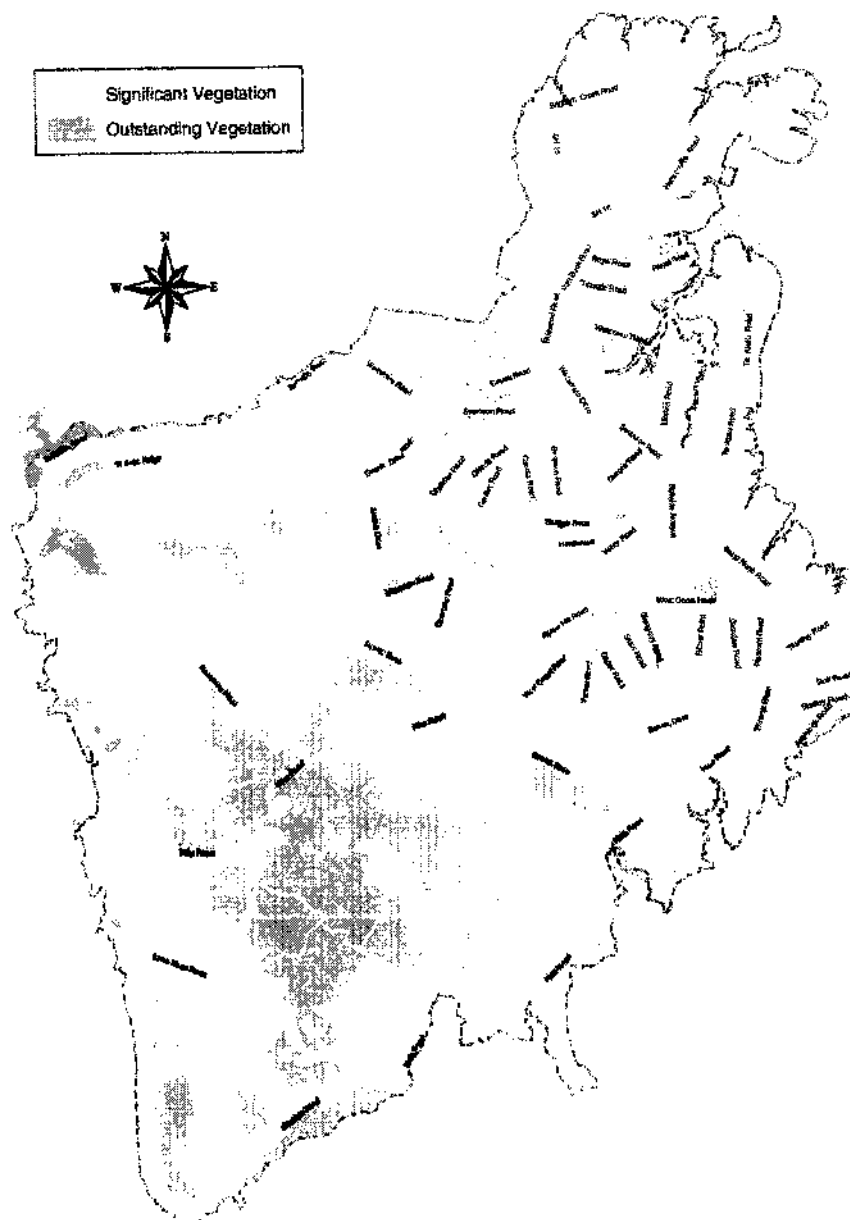
Rules in the District Plan regulate vegetation clearance, earthworking, natural area rules and riparian protection. The Plan further advocates for restoration of areas and:

Objective 5: To protect processes of natural regeneration within the City, and promote and maintain links between areas of significant and outstanding native vegetation and fauna habitat, so that their resilience is protected and enhanced.

Sites of Special Wildlife Interest have also been identified through the PNA surveys¹⁰ and listed in Appendix F of the policy section of the District Plan.

CONSERVATION ACT 1987

The Conservation Act establishes the Department of Conservation with specific roles and responsibilities for the conservation of New Zealand's natural resources including indigenous species. The Act also provides for the acquisition of land for conservation purposes including for national parks.



Outstanding and Significant Areas of Vegetation

RESERVES ACT 1977

The Reserves Act provides for the acquisition of land for reserve purposes including scenic, nature and scientific reserves and the protection of species of plant and animal within them.

WILDLIFE ACT 1953

This Act protects wildlife, with some specified exceptions, throughout New Zealand and its exclusive economic zone.

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¹⁰ Waitakere Ecological District, 1993. Ecological Survey of Waitakere City Lowlands, 1998, Rodney Ecological District Survey report, 1983-4.



LOCAL GOVERNMENT ACT 2002

This Act provides for local authorities to play a broad role in promoting the social, economic, environmental, and cultural well being of their communities, taking a sustainable development approach. Maintaining biodiversity is one of the critical measures of sustainability. Although there are many perspectives on sustainable development, there can be little argument that a world where species and ecosystems are being lost is not sustainable by any measure.

The state of biodiversity is therefore a core determinant of the success of local governance as defined by the Local Government Act.

Maintaining biodiversity obviously has environmental benefits but it also has:

Economic benefits in the form of ecosystem services (water quality, soil fertility, pollination etc.) tourism opportunities and potential commercial and medical uses.

Social benefits in the form of national identity, recreational and educational benefits.

Cultural benefits in the form of being able to recognise and continue Maori traditions, knowledge and customary uses.

LONG TERM COUNCIL COMMUNITY PLAN 2006-2016

The Council's Long Term Council Community Plan, prepared under Section 93, identifies sustainable development as one of the City's five priorities, including through supporting ecosystem capacity and respecting environmental limits. A key indicator of sustainability is the maintenance of local

biodiversity. The concept of sustainability is also supported by the Community Outcomes sought: Sustainable Environment and Environmental Protection. The Council's nine strategic platforms include the Green Network, which is about caring for natural areas.

The LTCCP targets the Waitakere Ranges for a higher level of protection, in particular, through managing weeds and pests, ensuring ecosystems are not compromised by urban sprawl or visitor pressure, and re-establishing corridors to link the Ranges to the sea. The LCCP includes funding to support this programme. Delivery is through the Green Network strategic platform.



WAITAKERE CITY STRATEGIC DIRECTION: GREEN NETWORK

The 2020 vision for the Green Network is that the Waitakere Ranges will be permanently protected. There will be a network of bush and trees from the Ranges, through town centres and suburbs, to the coasts, bringing the natural world into people's everyday lives and filling the streams and forests with life. This platform is about caring for natural areas. The City's parks, bush and streams form a green network that provides homes and highways for wildlife and recreational areas for people. It also assists with managing and filtering stormwater. Protection and enhancement is sought on both public and private land, community involvement is encouraged, as is the protection of landscapes, native plants, wildlife and ecosystems.

This strategic platform is incorporated into the Waitakere District Plan, and so has a regulatory and non-regulatory underpinning.

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BIOSECURITY ACT 1993

Regional Pest Management Strategies are prepared under the provisions of the Biosecurity Act.

BIOSECURITY STRATEGY FOR NEW ZEALAND 2003

Protect New Zealand, the Biosecurity Strategy for New Zealand has a three-pronged focus to protect New Zealand's economy, biodiversity and human health. The new focus is very much on protecting New Zealand's indigenous biodiversity.

AUCKLAND REGIONAL PEST MANAGEMENT STRATEGY 2002-2007

As well as providing a framework and priority ranking for the Council's plant and animal pest management, the Waitakere Ranges are identified as one of the few parts of the Auckland Region in which active management of a number of weed species is required. Active control of possums is also carried out by the Auckland Regional Council.

WAITAKERE CITY WEED MANAGEMENT STRATEGY 2000

The goal of the Weed Management Strategy is for the protection of the quality, resilience, biodiversity and ecological integrity of Waitakere City's natural habitat from the impacts of environmental weeds. The strategy contains criteria for prioritising weed management programmes as well as best practice guidelines. The 2006 review will provide a new five year prioritised work programme. The strategy is currently being reviewed.

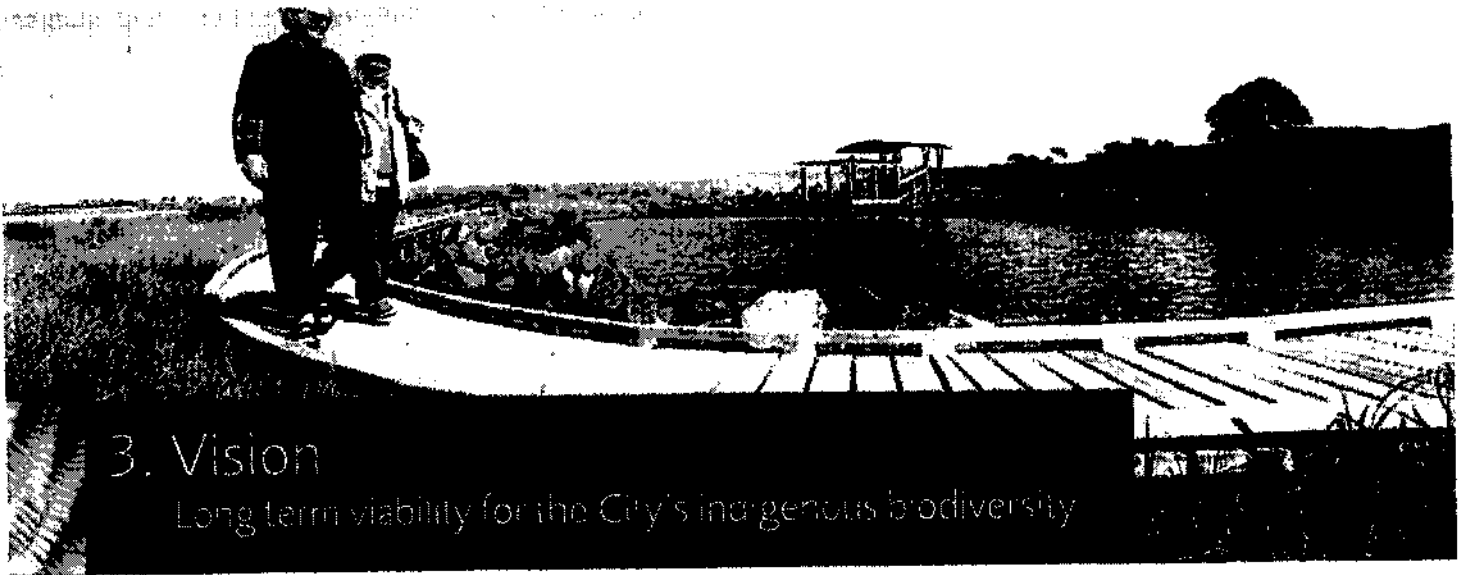
WAITAKERE RANGES HERITAGE LEGISLATION

The Waitakere City Council is currently promoting a local Bill to give greater recognition of and protection to the heritage features of the Waitakere Ranges (including the eastern foothills and coastal settlements). Native ecosystems have been identified as key contributors to the heritage value of the Waitakere Ranges, both for their intrinsic value, and for the contribution they make towards other heritage values such as landscape, recreation and water supply.

WAITAKERE RANGES HERITAGE BILL

This Bill establishes the Waitakere Ranges Heritage Area, states the national significance of the Heritage Area and establishes a set of objectives for the Heritage Area and its heritage features to ensure long-term protection.

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3. Vision

Long term viability for the City's indigenous biodiversity



Fulfilling this vision will involve commitment by Waitakere City Council, Auckland Regional Council, community groups and indeed all residents of Waitakere City.



VISION FOR THE FORESTS

Increased levels of legal protection for areas of native bush.

Increase in population of kereru.

Expansion in numbers and range of the long-tailed bat populations in the Waitakere Ranges and foothills.

Stabilisation in the occurrence and population levels of threatened plant species.

Increased visits by birds from the off-shore islands.

Land snails and other invertebrate species becoming more common in the Waitakere Ranges and the foothills.

Hochstetter's frog becoming more common throughout the Waitakere Ranges.

Successful re-introduction of species lost from Waitakere City.

VISION FOR THE FRESHWATER HABITATS

A weed-free Te Henga wetland.

A breeding population of fernbird at Orangihina.

Continuous vegetated riparian margins along streams.

Inanga found commonly in all streams.

Giant kōkopu becoming more common in streams.

VISION FOR THE COAST

Little Blue Penguins successfully nesting along the west coast.

Dotterels and terns successfully nesting at Whatipu.

Dunes of the west coast are protected from over-use, maintained as a natural and dynamic system, and re-vegetated to provide habitat for indigenous species.

A viable population of Maui's dolphin off the west coast.

VISION FOR THE URBAN AREA

Expansion and enhancement of native forests in the lowland/urban areas.

Kereru visiting gardens throughout the urban area.

Project Twin Streams rolled out across the rest of the City.

Banded rail along Henderson Creek.

Wildlife refuges established in reserves, for example, seeding grasses, nectar-producing flowers, fruiting native species, thick under storey below stands of trees.



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