



Biodiversity

Year End Review
30 June 2009

Biodiversity Coordinating Group

FOR MORE INFORMATION, CONTACT GREATER WELLINGTON:

#685080
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1. National issues

1.1 Regional Council Biodiversity Forum

As noted in the previous Biodiversity report, a Regional Council Biodiversity Forum has been established. The formation of the forum reflects that biodiversity is now a core activity of most regional councils and that there are experiences and approaches that can be beneficially shared. The forum had its first meeting in December 2008 and then met again in January and May of this year. The forum reports to the regional council Chief Executives group.

The following actions have been identified as priorities by the forum:

A. Reporting on National Priorities

In 2007 central government released a document entitled *National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land*. This non-statutory guidance document substituted for the now abandoned proposed National Policy Statement on Biodiversity. There is an expectation expressed in the national priorities document that local government will “have the lead in putting the statement of national priorities in place”. A copy of the document is appended to this report.

Because of this expectation, forum members felt that regional councils would benefit from developing a shared approach to measuring, and reporting on, the national priorities. There was general consensus that an assessment of how councils have taken up and acted on the priorities is worth undertaking. It is recognised that there are significant impediments in councils’ ability to monitor biodiversity, including resource constraints and the absence of robust methodology.

An informal poll of forum participants suggested that the national priorities are not explicitly taken into account in biodiversity programmes although with some minor amendments this could be achieved. The process of undertaking the assessment would therefore be as much about ensuring councils have the national priorities on their radar, as about assessing their ability to report against them.

The results of the assessment would be an appropriate first step in determining how best to report on national priorities and will be reported back to regional CE’s.

In Greater Wellington’s case, some work has been undertaken in relation to care group projects and the QEII National Trust covenant assistance programme. It is intended to extend this assessment and cover all biodiversity programmes.

B. Regional Policy Statement reviews: sharing learning

Most regional councils are in some part of the review cycle for their first generation regional policy statements. In the interests of consistency and avoiding having to “reinvent the wheel” it was believed that there would be

benefits in those councils that were well through the process (such as Greater Wellington) sharing their experiences and making background documents, drafts etc available to other councils in relation to biodiversity.

Greater Wellington agreed to lead this exercise.

C Research

The Foundation for Research, Science and technology (FRST) have recently undertaken a contestable process to determine which research projects should be funded in the Environmental Resilience area. This includes research in the pest management and biodiversity area.

A Regional Council Research, Science and Technology strategy has been produced which includes a number of objectives relating to ensuring research providers and funders understand regional council priorities. Some forum members have had an input at various stages of the FRSR funding round:

- providing input into the preparation of the request for proposal documentation
- providing coordinated feed back on a number of Crown Research Institute proposals prior to their being submitted to FRST for their consideration.
- being a part of the advisory group which provided advice to FRST on which proposals should be funded

D Monitoring biodiversity

A number of regions are considering how best to monitor the state of Biodiversity in their regions and the effectiveness of their Biodiversity programmes and strategies. It was agreed that this is an area where collaboration is required.

Auckland Regional Council has commissioned Landcare Research to prepare a monitoring strategy for the Auckland region. Landcare have agreed to expand the scope of their work so that the strategy can be used as a template for other regions as they consider their approach to monitoring.

2. Greater Wellington biodiversity programmes

2.1 Wetland ecosystems

Delivered by: Environmental Policy, Environmental Education, Land Management, Parks and Forests and Biosecurity departments

2.1.1 Wetlands incentives and advice programme (private land)

An application to the Biodiversity Condition Fund for funding a weed control programme in Te Hapua Wetland over 14 individual properties was successful in obtaining \$24,438 over three years. The implementation of this work has proceeded well, with full cooperation of landowners, site managed by local

biosecurity staff. As a result, one has indicated they are keen to legally protect the area with QEII National Trust.

An application was also successful for Te Harakiki (Rawakahia) Wetland weed control work for \$11,500 over three years. The contractors have been busy on the work at hand, site managed by local Biosecurity staff.

Implementation work is well underway on a hydrological monitoring network of Te Hapua Wetland. \$25,000 funding for monitoring equipment has been approved by the Kapiti Coast District Council in their annual plan. The monitoring equipment has mostly been located on private land to measure the hydrological characteristics of the wetland to guide future resource management decisions.

The Wetland Incentive Programme budget is fully allocated for the year, despite the tougher times for land owners. There are now 138 landowners participating in the Wetlands Incentive programme, 16 of whom joined in the 2008/09 year.

2.1.2 Wetland Key Native Ecosystems

Pest plant work is being undertaken in the following wetland KNEs:

Nga Manu wetland complex, Riversdale southern reserve, Te Hapua wetland complex, Te harakeke (Kawakahia) and Waimeha Lagoon.

2.1.3 Wetland covenant protection (private land)

Three wetland areas totalling 3.5 hectares were protected in perpetuity by QEII National Trust covenant with funding assistance from Greater Wellington at Gladstone, Mt Bruce and Pukerua Bay.

2.1.4 Parks and Forests wetland projects

A restoration plan for the Poplar Avenue wetland in Queen Elizabeth Park has been completed.

Willow and pampas infestations were controlled in Pounui wetland at Lake Wairarapa.

A fish survey of Lake Wairarapa was completed.

2.2 Coastal ecosystems

Delivered by: Environmental Policy, Environmental Education, Land Management, Parks and Forests and Biosecurity departments

2.2.1 Implementing the Coastal and marine biodiversity action plan

Control work has been done for targeted weed control of invasive species at Te Humenga Point and Ureti Beach. Site preparation and planting was done to a site identified by the Wildlands report as a high priority in Paekakariki, and

more planting work will be undertaken this winter by member of the local community and the surf club.

Work is underway to complete restoration plans for North Waitohu Stream Mouth, South Peka Peka, Waikanae Boating Club, Onehunga Bay Dunes and Wetland, Titahi Bay, Lyall Bay, and Island Bay. They have been sought collectively to reduce costs and project management time. The appropriate local authorities are being consulted also and are contributing to the cost of the plan preparation and assisting with consultation processes.

A fence has been constructed with the help of Rotary at Whangaimoana Beach, South Wairarapa to control vehicle encroachment onto the dunes and reduce damage to the indigenous vegetation.

2.2.2 Coastal Care Group activity

At Petone Beach the group has designed an interpretative sign for beach users.

The Riversdale Group also received funding from the Community Conservation Fund – a grant of \$24,000 to assist with the dune area to the south of the town

The Waikanae Dune Restoration Group has been focused on growing the plants needed for this winter's planting and working on a management plan.

The Waikanae Estuary Care group obtained funds from the Community Conservation Fund for site preparation for the 2009-10 season. Kenakena and Waikanae School students have been potting up seedlings through the Trees for Survival Programme which will be planted back into the estuary, as well as mulching at the site. The group has held a number of inter-agency meetings to improve communication about this highly significant ecological site and a communications strategy is in progress

The Friends of Queen Elizabeth Park were successful in obtaining a grant of \$26,000 from the Community Conservation Fund for the dune swamp podocarp remnant

2.2.3 Coastal Pest Plants work

Dunelands: Flat Point; Riversdale Dunes, Waitohu Dunes, Paraparamu Dunes, as well as coastal control work on Boneseed.

Dune Gravel Systems; Upper Wellington Harbour, Pencarrow, Ringitatau Point

Estuaries; Makara, Waikanae

Coastal Escarpments: Paekakariki Escarpment, Pukerua Bay Escarpment, Raumati Escarpment, Tarakena Bay

2.3 Freshwater ecosystems

Delivered by: Environmental Policy, Environmental Education, Land Management, Parks and Forests, Flood Protection and Biosecurity departments

2.3.1 Freshwater ecosystems action plan

A steering group comprising representatives of Council departments is overseeing the preparation of the Freshwater Ecosystems Action Plan. The Action Plan is intended to guide departments on operational practices that promote freshwater biodiversity. Rutherford and Blashcke are preparing the Action Plan.

2.3.2 Regionally significant waterbodies for freshwater fish

Greater Wellington is taking part in a project to identify criteria by which nationally, regionally and locally significant water bodies can be identified for the following attributes: salmonids; natural character, native fish, irrigation, wildlife, kayaking and swimming. The project is being funded through Envirolink with the Tasman District Council as the lead agency. The findings will assist identifying the purpose that water bodies are to be managed for in regional plans.

2.3.3 Porirua Stream restoration plan

A joint project with the Wellington City Council and Porirua City Council on priorities for ecological restoration in the Porirua Stream catchment has been completed. The report follows investigation and analysis of stream health, ecological and landscape conditions in the catchment. There were two meetings with community groups carrying out restoration in the catchment at a meeting and meetings were held with staff of all three councils.

2.3.4 *Streams Alive* riparian programme

This programme has achieved 3.9 kms of new riparian planting and 6.5 kms of maintenance planting in the 2008/09 year.

Work in the Streams Alive programme has again been concentrated in the Otaki, Waitohu and Mangaroa catchments. However, work has begun in the upper Waiohine catchment. A promotion programme is planned for 2009/10 to build on the initial successes in the Waiohine.

2.3.5 Freshwater care group activities

The Friends of the Otaki River (FOTOR) have been granted \$90,000 over three years from the Sustainable Management Fund (SMF) for a worker on site. The group was also successful with a \$15,000 application to the Community Conservation Fund for the restoration of the estuary. FOTOR have been active with the development of a planting plan in collaboration with GW. The plan sets out best practice restoration techniques and assesses potential planting sites' needs, in terms of restoration (preparation-planting-maintenance) and any identified flood risk for the next five years. FOTOR were also nominated as

recipients of the Honda Treefund, with \$2.25K allocated to the friends to spend on restoration efforts at Chrystalls Bend. A successful public planting day was held in May 2009, with local Honda car owners. 1000 native eco-sourced trees were planted on the other side of the Waimanu footbridge, constructed last year with Transpower and GW support.

The Friends of Owhiro Stream now have an operational website, are working on a tool shed, and have maintained their nursery over the summer. They have been doing site preparation at two locations for winter planting and have also submitted on a resource consent in the vicinity.

At Glenside, contractors have prepared the Rowell's Road site for planting this coming winter. At the debris arrestor site downstream 12 dead willow trees require removal as they are a danger to workers and road users and could fall and block the stream. Work commenced on this project which will involve Greater Wellington and the Wellington City Council.

Moehau Stream Care has been granted \$26,000 from the CCF for the removal of willows along the stream. This will expedite the restoration of the stream.

At Papawai, the first stage of a significant willow clearing operation was completed in March. This was funded by the Sustainable Management Fund (SMF) and Ara Tahi funds. Unfortunately, after receiving funds from the SMF for the first year of a three year grant, and despite a high level of achievement, the SMF has decided not to fund the project in subsequent years.

The Friends of the Waikanae River were successful in obtaining \$40,000 from the Community Conservation Fund for the restoration of the Otaihanga oxbow.

A large number of willows have been felled at both the north and south ends of the Hulls Creek restoration project. The group's plantings have now grown to a stage where the stream is once again looking like a natural waterway, providing habitat which has allowed the return of inanga that have not been previously identified in the stream

2.3.6 Pauatahanui Inlet catchment programme

This programme has been running since 2005 and is jointly funded by Greater Wellington and Porirua City Council with assistance from the NZ Landcare Trust and the Sustainable Management Fund. It involves working with private landowners to encourage them to retire erosion-prone land, fence out wetlands and fence and plant riparian strips. Since 2005 over 2,800 metres of fencing has been erected to protect approximately 37,000 plants. Twelve properties are currently actively involved in the project accounting for approximately 21% of the total catchment.

2.4 Indigenous forest ecosystems

Delivered by: Environmental Policy, Environmental Education, Land Management, Parks and Forests and Biosecurity departments

2.4.1 Indigenous forest covenant protection (private land)

In this year commitments were made to nine perpetual covenant projects with QEII National Trust protecting 38 hectares of indigenous forest. All nine fall into National Priority 1 under central government's *National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land*. Three examples of covenants secured as a result of Greater Wellington's funding assistance include:

- 4.2 hectares north of Masterton containing high value lowland indigenous forest and wetland. Only 2% of the original forest cover remains in the Wairarapa Plains Ecological District in which this area lies. Chronically threatened Brown Mudfish are present in the wetland. Greater Wellington is contributing \$3,160 towards fencing the block and \$395 towards pest plant control.
- 5.6 hectares near Gladstone. This area covers half of a "Recommended Area for Protection" (RAP #32) in the Eastern Wairarapa Ecological District of which only 3% of the original cover remains. It contains tall kahikatea, totara and beech and other nationally threatened and regionally rare plants. Greater Wellington is contributing \$3,315 towards fencing the block.
- 4.6 hectares near Gladstone containing secondary forest dominated by kowhai with totara and kanuka present adjacent to the Wainuioru River. Greater Wellington is contributing \$4,522 towards fencing the block.

2.4.2 Parks and Forests Indigenous forest projects (GW land)

Delivered by: Parks and Forests department

(a) Implementing the Parks Environmental Asset management Plan

Pest animal control

An extension of the Korokoro Valley bait station network was completed. The area under ongoing possum control increased from 240 to 400ha.

The mustelid trap network established in the Parangarahu Lakes block in October 2008 netted 33 mustelids, 20 hedgehogs and 38 rats.

Bait stations were refilled for ongoing possum control operations in Belmont and East Harbour Regional Parks, Battle Hill Farm Forest Park and Cannon Point in Akatarawa Forest.

Possum monitors were completed in Cannon's Creek (0%RTC) and Speedy's Stream (2.3%RTC) in Belmont Regional Park.

Professional ungulate control operations in the second half of the year resulted in the culling of 77 goats and 1 pig in Akatarawa and Pakuratahi Forests, while ranging staff culled 5 goats in the Parangarahu Lakes block in East Harbour Regional Park.

Pest plant control

The Parks “weed team” have controlled a number of pest plant infestations in all of the parks and forests, involving over 30 different pest plant species.

Contracts were completed for tradescantia control in the Wainuiomata Recreation Area, various pest plant infestations in Korokoro Valley and gorse in the Parangarahu Lakes area.

Biodiversity Monitoring

Hinau and tawa fruitfall plots were re-measured in East Harbour Regional Park.

In Akatarawa Forest, rata trees were re-photographed for digital analysis and foliar browse was assessed.

An aerial survey for introduced insects and fungi was completed in Pakuratahi and Akatarawa Forests as well as Kaitoke Regional Park and the northern block of East Harbour Regional Park.

Re-measurement of eight permanent plots in Akatarawa Forest was completed.

Rodent monitoring was undertaken in East Harbour Regional Park, Battle Hill Farm Forest Park bush remnant and on the dunes in Queen Elizabeth Park.

A new rodent monitoring regime was established in Korokoro Valley with the assistance of Korokoro Environmental Group volunteers.

Two new restoration planting plots were established by MIRO volunteers in the Parangarahu Lakes block in East Harbour Regional Park.

Rat control was maintained in the mainland island in East Harbour Regional Park, while a possum monitor showed numbers to be at 2.7%RTC (a good result for MIRO volunteers who service the traps). Bird surveys showed that at least one breeding pair of robins (released last year) was surviving.

Planning

A sustainable land management plan for Battle Hill Farm Forest Park was completed.

(b) Water Group Contract

Pest animal control

Planning for the Hutt 1080 possum control operation was completed, but the operation was delayed due to holdups with MOH approval, resulting from the swine flu epidemic.

Thirty-eight goats, 16 deer and 3 pigs were culled in professional animal controls operation in the Wainuiomata/Orongorongo and the Hutt water collection areas.

Monitoring

The forests of the Hutt and Wainuiomata/Orongorongo Water Collection Areas were surveyed aerially for introduced insects and fungi. The forests were reported to be in good health.

(c) Wainuiomata Mainland Island

Pest animal control

Bait fills and trap checks were completed on a two-monthly basis, as programmed.

Three deer, 4 goats and 27 pigs were culled during intensive ungulate control operations in the mainland island.

Monitoring

Quarterly rodent monitoring showed an increase in rat numbers in May to 14% tracking, though numbers were at 1% in the February monitor.

Planning

Preparations for a robin release into the mainland island were completed and the translocation proposal submitted to the Department of Conservation. This release is planned for March to August 2010.

2.4.3 Indigenous Forest Key Native Ecosystems and Reserves programme

The majority of the 19,000 hectares of land in the Key Native Ecosystem and Reserves programme areas involve indigenous forest. In the year under review the programme has been subject to a review involving internal and external stakeholders, the results of which will help to shape the programme into the future.

A proposal for an extension to the current Waihora Stream KNE programme into the northern Aorangi Range was discussed at a meeting in Martinborough during October 2008. The meeting was convened by the care group Waihora Watch and included representatives from GW, DoC, South Wairarapa District Council, iwi, other local landowners and interested parties. The proposed extension area is DoC Estate and its inclusion is part of a vision for the future which includes the reintroduction of rare species such as kiwi which are thought to have been present until the early 1960's. The proposal is only at the investigative stage and will require the involvement and approval of DoC as the major landowner.

Funding has been approved by WCC to allow intensive predator control to commence in the Long Gully KNE under the aegis of the Natural Heritage

Trust. Without this additional funding it is likely that the project would have lapsed. The area adjoins the Karori Wildlife Sanctuary.

The rodent and bird monitoring regime has been reviewed and fine-tuned to get the best results from less resources. Some sites have been abandoned and the rodent monitor will now be done bi-annually rather than quarterly. The invertebrate monitoring programme which is a valuable bio-diversity outcome monitor is also being re-evaluated. The feasibility of continuing this project with an amended methodology will be determined over the next few months.

3. Looking ahead

- Completing the Freshwater Ecosystems action plan to guide GW's implementation programmes.
- Continuing to work with private landowners to ensure high value indigenous ecosystems and habitats are legally protected and well managed.
- Contributing to the development of the inter-council Regional Coordinating Biodiversity Forum
- Providing input into Porirua City Council's Porirua Harbour and catchment's strategy
- Implementing the Indigenous Ecosystems provisions in the notified Regional Policy Statement
- Organising a robin release for Wainuiomata Mainland Island
- Consideration of the usefulness and practicality of the "Community Max" training scheme
- Supporting implementation of the Wairarapa Biodiversity Strategy
- Developing reporting mechanisms to assess GW's biodiversity programme outputs against the "National Priorities"



Protecting our Places

INTRODUCING THE NATIONAL PRIORITIES FOR PROTECTING RARE AND THREATENED NATIVE BIODIVERSITY ON PRIVATE LAND



Message from Ministers

Private landowners have a crucial role to play in saving New Zealand's at-risk native plants and animals. Some of our most rare and threatened ecosystems and species are now found only on private land; their long term survival will depend largely on the stewardship (kaitiakitanga) of landowners.

We are fortunate in New Zealand because many of our landowners are already showing a growing interest in and commitment to conservation. To build on this, and stimulate new thinking, the government has been exploring ways of supporting and encouraging private landowners in their endeavours.

We have already established a fund to provide financial assistance for conservation work on private land, and over \$10 million has been given in grants. Another \$40.6 million has also been provided through agencies like the QE II Trust and Ngā Whenua Rahui to help people covenant private land.

Nevertheless, there remains a need to provide a better framework for decision-making about biodiversity on private land, particularly for regional and district councils who work directly with landowners in local areas.

To this end, we have developed a statement of national priorities to focus conservation efforts on private land where the need is greatest. We have sought to do so while providing the flexibility for local decision-making.

Our expectation is that the priorities in this statement will be used to support and inform councils' biodiversity responsibilities under the Resource Management Act. We believe this can be best achieved within a cooperative rather than a legislative framework.

It is important to remember that many of the species and environments encompassed in this statement are crucial to our national identity. They are part of what makes our country such a spectacular place to live and they play a larger part than just scenery.

Our biodiversity provides important resources and services, such as clean air and water, fertile soils, pollution and flood control. As we adapt to the fluctuations and disturbances of climate change, we must remember that biodiversity helps provide stability and resilience, allowing ecosystems and species to cope with and adapt to change.

This statement of national priorities for protecting rare and threatened species on private land recognises these needs, and seeks to help landowners, councils, central government, the public and others play their part in preserving our heritage for all of us.



Chris Carter



David Benson-Pope

A handwritten signature in green ink that reads "Chris Carter".

Chris Carter
MINISTER OF CONSERVATION

A handwritten signature in green ink that reads "David Benson-Pope".

David Benson-Pope
MINISTER FOR THE ENVIRONMENT

Photos front cover:
Waikanae planting. *Photo: Dave Hansford*
Sand dunes at Oputere Beach, Coromandel. *Photo: Herb Christophers*
Kereru feeding on *Coprosma propinqua* berries, Kapiti Island. *Photo: JL Kendrick*
Kawaka-kauri forest remnant, Whakairiora, Northland. *Photo: Jan Doak*

Why the Statement of National Priorities has been developed

Much of our rare and threatened native biodiversity is found on private land – in fact, some species are now only found on private land. The national priorities in the statement identify the types of ecosystems and habitats most in need of protection.

The statement supports the government's pledge to maintain and preserve New Zealand's natural heritage. This began in 1992 when we signed the United Nations Convention on Biodiversity; followed in 2000 with the release of the New Zealand Biodiversity Strategy.

The statement will be of particular use to local government, which has the primary responsibility for protecting native biodiversity on private land – a role assigned to them under the Resource Management Act (RMA) 1991. Along with clear priorities, the statement provides a national perspective which councils can use in planning and decision-making.

Central government will work with local government and landowners to develop a broad programme of guidance about biodiversity protection, including the mechanisms available to achieve it and increasing knowledge about the national priorities at a regional and local level. Progress on biodiversity protection achieved through this work programme, including this statement, will be monitored over the next five years.

New Zealand has about 14 million hectares or around half of its original native vegetation left, of which about 8.2 million hectares are legally protected. Scattered across the country are 5.8 million hectares with no formal protection.

What's currently happening

Efforts by private landowners

Landowners' commitment to protecting indigenous biodiversity is reflected in the growing popularity of Queen Elizabeth II National Trust (QEII) covenants. It took about 20 years to register the 1000th covenant, but the next 1000 took half that time. By January 2005, more than 70,000 hectares had been covenanted.

Local government initiatives

Councils use a range of policy tools and other mechanisms to support biodiversity. There is an investment of \$4.26 million per year by regional councils in contestable biodiversity funds. Most councils support on-the-ground activities such as covenants, landcare groups, education and landowner advice.

Central government initiatives

The efforts of councils, communities, landowners and iwi have been backed up by funding of \$40.6 million for the QEII Trust, Ngā Whenua Rahui and the Nature Heritage Fund over the first five years of the New Zealand Biodiversity Strategy.

A further \$6.5 million has been allocated to community initiatives through the Biodiversity Condition Fund, with another \$3.6 million through the Biodiversity Advice Fund.

Whenuakite Kiwi Care
Group chairman Arthur
Hinds setting a trap for
stoats.
Photo: Dave Hansford



The National Priorities

Four national priorities for biodiversity protection have been set, and are described here. They are based on the latest and best scientific research available.

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.

Land Environments of New Zealand (LENZ) is a national classification system used to map areas that are similar to each other, regardless of where they occur. LENZ uses 15 climate, landform and soil variables that can influence the distribution of species to identify areas with similar environment or ecosystem character. These are known as 'land environments'.

By combining LENZ maps with satellite images from the Land Cover Database, as well as databases showing land tenure, we can identify changes in vegetation cover over time and see what vegetation is formally protected.

We now know that close to 468,000 hectares of unprotected native vegetation is in land environments reduced to less than 20 percent of their original extent. This is a concern, because scientific research has shown that the rate of biodiversity loss increases dramatically when native vegetation cover drops below 20 percent of what it was before humans arrived.



From left: Kahikatea forest remnant, Waikato.

Photo: Mark Smale

Relict short tussock and saline vegetation, Central Otago.

Photo: Bill Lee

National Priority 2: To protect indigenous vegetation associated with sand dunes and wetlands; ecosystem types that have become uncommon due to human activity.

Only 45,600 hectares of wetlands remain in New Zealand – just 9.4 percent of the original extent. It is probable that most wetlands in lowland areas are in private hands.

At least 20 percent of our vascular (sappy) plant species depend on short-lived (ephemeral) wetlands that occupy less than one percent of the country's land area.

Only 21,300 hectares of dunelands are left in New Zealand – 11.6 percent of their original extent. Coastal dunelands are identified as a national priority ecosystem under the New Zealand Coastal Policy Statement.

From left: DOC staff helping students plant pingao, Otago. *Photo: Nicola Vallance*

Toreparu wetland, Waikato. This 220 hectare wetland is mainly in private ownership, with a portion managed by the Department of Conservation as a wildlife reserve.

Photo: Karen Denyer



National Priority 3: To protect indigenous vegetation associated with 'originally rare' terrestrial ecosystem types not already covered by priorities 1 and 2.



Steam rising from Craters of the Moon, Wairakei. Foreground: prostrate kanuka occurs only in geothermal areas, here, colonising heated ground. Photo: Susan Wiser

This priority includes native vegetation associated with:

- 12 types of coastal systems, such as coastal turf and coastal rock stacks
- 25 inland and alpine systems, ranging from recent lava flows to braided riverbeds
- four types of other inland systems, such as salt pans and geothermal systems
- two types of semi-subterranean systems – sinkholes and cave entrances.

The full list of originally rare terrestrial ecosystem types is on the www.biodiversity.govt.nz website. The list was compiled by Landcare Research, and our knowledge will be updated as new research results come to hand. The ecosystem types are not necessarily found in all regions or districts, and some of them will be protected on public conservation land.

Originally means the ecosystem type was present when Māori arrived, and still exists today. *Rare* means the total extent of each originally rare ecosystem type is less than 0.5 percent of New Zealand's total area – that is, less than 134,000 hectares.

Originally rare ecosystem types encompass those that are small in area but geographically widespread, as well as those that are larger, but are geographically restricted.

In New Zealand, much indigenous biodiversity is concentrated in rare ecosystems (such as bluffs, karst, and geothermal vents and coastal turfs).

Originally rare plant community types make up about half of all nationally threatened plant species, but are present in only a small area. This makes them prime candidates for attention in biodiversity conservation initiatives.

Limestone cliffs at Sawcut Gorge, Marlborough. Photo: Supplied by Susan Wiser





National Priority 4: To protect habitats of acutely and chronically threatened indigenous species.

The Department of Conservation has direct responsibility for the protection of threatened species and carries out habitat protection work on public conservation lands. But many threatened species exist on private land as well as on public conservation lands, and some occur exclusively on private land. Protecting the habitats of species on private land will help towards protecting the species themselves.

Acutely and *chronically* threatened native species meet specific criteria in the *New Zealand Threat Classification System Lists* created by the Department of Conservation. Up-to-date lists are published on the department's website (see www.doc.govt.nz and search under New Zealand Threat Classification System).

At December 2006, 668 species were considered to be *acutely* threatened and 257 were listed as *chronically* threatened.

From left: The chronically threatened sand daphne, *Pimelea arenaria*, at Whakataki Beach, near Castlepoint, Wairarapa. Photo: Colin Ogle

The wrybill is the only bird in the world with a sideways-bent beak, and is one of New Zealand's most endangered birds. Photo: MF Soper

Wellington green gecko on manuka. Photo: Rod Morris

How the Statement of National Priorities can be used

It is expected that working to the same national priorities will help local and central government agencies coordinate their decisions and on-the-ground actions in relation to biodiversity.

Local government

Because of their responsibilities for biodiversity on private land (under Sections 30 and 31 of the Resource Management Act), councils have the lead in putting the statement of national priorities into practice.

They can do this in a number of ways, such as, in communications about biodiversity, management of their own council land, by bringing these priorities into their statutory RMA policies and plans,¹ and using the priorities to decide where to allocate council-provided funding for community and landowner-based biodiversity programmes.

Central government

The priorities in this statement will guide central government's grant decisions under the Biodiversity Condition and Advice Funds, jointly administered by the Department of Conservation and the Ministry for the Environment.

This statement will also be used to inform the government's own Crown land management programmes and government funding decisions that may affect biodiversity on private land; for example, funding decisions for the Queen Elizabeth II National Trust, Ngā Whenua Rahui, and the Nature Heritage Fund.

¹ The national priorities in the statement complement section 6(c) of the RMA, but are only part of councils' responsibilities for biodiversity under the RMA.

Stakeholders

The statement provides a focus for agencies that allocate science and research funding, as well as industry and private sector investors in biodiversity protection.

Other agencies and stakeholders (including industry groups, non-government organisations, environmental groups and landowners) can use the priorities to guide their decisions on where to focus their funds and efforts.

What the National Priorities mean for your region

Regional information will become available over the next year from your council and at www.biodiversity.govt.nz/

Terms used in this brochure

Biodiversity (biological diversity): This describes the variety of all biological life – plants, animals, fungi and micro-organisms – 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 diversity within species, between species, and of ecosystems.

Habitat: The place or type of area in which a living thing naturally occurs.

Ecosystem: An interacting system of living and non-living parts, including sunlight, air, water, minerals and nutrients. Ecosystems can be small and short-lived, for example, water-filled tree holes or logs rotting on a forest floor; or they can be large and long-lived, such as forests and lakes.

Indigenous (native) vegetation: A plant community containing naturally occurring native species. It includes vegetation that has regenerated with human help following disturbance, but does not include plantations or vegetation established for commercial and/or aesthetic purposes.

Land environment: Describes an area whose boundaries encompass similar environmental characteristics caused by non-living variables, such as climate, landform and soil.

Further information

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This brochure, and more information about the national priorities, is available on the biodiversity website, www.biodiversity.govt.nz/



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