# The Taranaki Biodiversity Forum Accord

A community response to protecting native plants, animals and habitats

### **Foreword**

New Zealand is estimated to have 80,000 species of native animals, plants, and fungi – many of which are yet to be scientifically described, named, and classified. While there is a lot of good work being done by land occupiers and others, much of our indigenous biodiversity is in a state of decline – approximately 85% of lowland forests and wetlands now gone and almost 2,500 native land-based and freshwater species considered threatened.

In Taranaki, there are many agencies, community groups and individuals that have an interest in biodiversity. Sometimes our interest is derived from a statutory function and responsibility, while for others it's a passion and we just want to do our bit. Until now, there has been no document that has attempted to set out agreed priorities and actions in order to coordinate and add value to our respective efforts.

This document is the *Taranaki Biodiversity Forum Accord –A community response to protecting native plants, animals and habitats* (the Accord). This Accord was an initiative arising out of the Third Taranaki Biodiversity Forum whereby signatories agreed to work together to set out an strategic vision, desired outcomes, priorities and actions that will:

- (a) Raise the profile of biodiversity generally and increase awareness and understanding of the issues
- (b) Provide a vehicle for dialogue, including information sharing, between like-minded but diverse interests
- (c) Identify common ground and establish a publicly-agreed policy position and partnerships
- (d) Make a commitment to positive action
- (e) Establish a collaborative framework to better work together and identify opportunities for obtaining the best results from finite resources.

This Accord is a non statutory document. As such it does not over-ride regulatory functions, roles and responsibilities, including statutory strategies and plans. Notwithstanding that, it allows signatories (Accord partners) to look beyond their narrow sectoral interests and identify opportunities to do what is best for Taranaki (i.e. Taranaki Inc). While the vision, outcomes and plan of action focus on maintaining and enhancing biodiversity generally, Accord partners also agree that there is a need for an immediate focus on Taranaki's most valuable, yet vulnerable, biodiversity assets.

The Accord identifies three immediate priorities for maintaining and enhancing biodiversity in the region. These are:

- 1. Protect the distribution and abundance of the 70 native animal species and 99 native plant species whose natural ranges include Taranaki and which have been listed as "threatened", "at risk" or "regionally distinctive"
- 2. Secure a full range of sites that provide core habitat for threatened, at risk or regionally distinctive species
- 3. Maintain the areal extent of systems that are historically rare or representative of a threatened ecosystem type where native vegetative is now reduced to 20% or less for that ecosystem type.

The priorities examine the adequacy of current protection given to our biodiversity assets. In so doing, they highlight specific species and sites warranting immediate further action. The priorities also highlight that, for many species, we do not have adequate information to

determine whether some species are locally secure or not in terms of population size, number of populations, or protected habitat. A key action of this Accord will be to investigate opportunities to address this information gap so that we are better placed to respond.

Section 6 of this Accord outlines a plan of action that consists of a broad range of methods that different Accord partners may be able to undertake. The methods range from being a land manager, including parks or reserves, providing works, services and or funding, enforcement, advocacy, advice and information, to monitoring and research. Responsibility for implementing the actions will depend upon who is 'best placed' to carry out the action, e.g. an organisation's statutory responsibilities and powers (if any), technical expertise and capacity.

The Plan of Action includes both existing and new actions by Accord partners. It acknowledges a lot of good things are already occurring on the ground but that there are opportunities and other actions we can take to build on the effort. Key actions identified in the Plan of Action include:

- Continue to implement and support existing programmes that protect the distribution and abundance of native plant and animal species, which are currently believed to be adequately protected in terms of population size or secured habitat
- Develop and implement new programmes to protect the distribution and abundance of native plant and animal species, which are currently believed to be inadequately protected in terms of population size or secured habitat
- Gather information on the distribution and abundance of native plant and animal species for which there is inadequate information to determine relative abundance and security
- Securing habitats that protect the broadest range of threatened, at risk or regionally distinctive species possible
- Maintaining the areal extent of ecosystems that are historically rare or threatened.

Finally, this Accord is but a starting point for local agencies and community groups to better work together on biodiversity outcomes. Over time we hope other organisations and groups, including Iwi and hapu, research and educational institutes, and industry, will become a signatory to the Accord. When that occurs, the Accord will be amended to include new signatories. In the meantime we look forward to working together in delivering better biodiversity outcomes for the region.

Tiaki Te Mauri O Paraninihi Trust	East Taranaki Environment Trust
Environmental Research Institute, University of Waikato	Federated Farmers New Zealand
Fish and Game New Zealand	M.A.I.N. Trust NZ
New Zealand Herpetological Society	Nga Motu Marine Reserve Society
North Taranaki Branch of the Royal Forest and Bird Society	Queen Elizabeth II National Trust
Rotokare Scenic Reserve Trust	Taranaki Kiwi Trust
Taranaki Tree Trust	South Taranaki Branch of the Royal Forest and Bird Society
New Plymouth District Council	South Taranaki District Council
Stratford District Council	Taranaki Regional Council

Department of Conservation.

## Statement of intent - tangata whenua

The Taranaki Biodiversity Forum Accord -A community response to protecting native plants, animals and habitats (the Accord) is a starting point for participating organisations, agencies and groups to work together more collaboratively across Taranaki. It, by no means, captures everyone, for example Iwi o Taranaki.

Accord partners recognise that local Iwi and hapu have a strong cultural interest in both the protection and the sustainable use of biodiversity in Taranaki. They are also a major land owner.

To Maori, all components of ecosystems, both living and nonliving, possess the spiritual qualities of tapu, mauri, mana, and wairua. Maori, as tangata whenua, are the kaitiaki (guardians) of these ecosystems and have a responsibility to protect and enhance them. This responsibility of people to other living things is expressed in the concept of kaitiakitanga - or guardianship.

Understanding and valuing the Maori world-view is an essential step in all parties working more collaboratively together in Taranaki.

The Accord, so far, has been the product of conversations

actively seek to address. In the meantime, this Accord is about starting a dialogue. Accord partners trust that it will

held largely within the Taranaki Biodiversity Forum. There has been limited Iwi or hapu involvement in the development of this Accord. Early conversations have been held with some Iwi and hapu about being a signatory to the Accord. However, for others there has been no conversation. This is a 'gap' that, over time, Accord partners will

stimulate wider interest and a sense of shared responsibility for all of us to better address biodiversity in the Taranaki region.

"Hei whakapumau mo inaianei, a mo nga uri whakahaere" - a Maori term to describe the inter-generational responsibility we have to not only pass on to our descendants in at least no worse condition, but to do everything we can to improve, the quality of their heritage.

### **Acknowledgements**

Many people and organisations have assisted in the development of this Accord. Accord partners would like to thank the following organisations and individuals for their assistance.

Representatives from the Department of Conservation (DOC), East Taranaki Environment Trust, Federated Farmers New Zealand, New Plymouth District Council, Queen Elizabeth II National Trust, Rotokare Scenic Reserve Trust, Royal Forest and Bird Society, South Taranaki District Council, Stratford District Council, Taranaki Fish and Game Council, Taranaki Kiwi Trust, Taranaki Regional Council, Taranaki Tree Trust, and Tiaki Te Mauri O Paraninihi Trust.

Finally the valuable assistance from the following individuals in providing information that contributed to the development of the Accord is gratefully acknowledged: Barry Hartley, Bill Clarkson, John Dodunski, Leigh Honnor, Donna Worthy (DOC), Rosemary Miller (DOC), Emily King (DOC), Jessica Scrimgeour (DOC), Bryan Williams (DOC), Graeme La Cock (DOC), Bart Jansma (Taranaki Regional Council), and Graham Young, on behalf of the Te Runanga o Ngati Ruanui Trust.

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### 1. Introduction

### 1.1 Purpose

This document is the *Taranaki Biodiversity* Forum Accord – A community response to protecting native plants, animals and their habitats (the Accord).

The purpose of this Accord is to set out a statement of intent as to an agreed vision, desired outcomes, priorities and actions for Accord partners<sup>1</sup> and, in so doing:

- (a) Raise the profile of biodiversity generally and increase awareness and understanding of the issues
- (b) Provide a vehicle for dialogue, including information sharing, between like-minded but diverse interests
- (c) Identify common ground and establish a publicly-agreed policy position and partnerships
- (d) Make a commitment to positive action
- (e) Establish a collaborative framework to better work together and identify opportunities for obtaining the best results from finite resources.

#### 1.2 Background

Taranaki is fortunate in that there are many organisations and individuals committed and taking action to maintaining and enhancing biodiversity in the region. Overall there is a positive working relationship between the different parties.

At least once a year, many local organisations and individuals with a shared interest in biodiversity participate in the Taranaki Biodiversity Forum. The purpose of the Forum is to promote networking, disseminate information, and build community capacity within the region in relation to biodiversity.

<sup>1</sup> 'Accord partners' refers to local agencies and groups that are signatories of this Accord (refer **section 1.3 of the Accord**) and have agreed to contribute to the Accord's vision, outcomes, priorities and action plan.

At the third Taranaki Biodiversity Forum held on 11 December 2009, Forum participants discussed opportunities for local agencies and organisations to better work together and add value to each others' projects. There was general consensus that the combined collective effort could be improved by developing a 'Taranaki Inc Strategy' – a strategy that does not belong to any one organisation but which captures all interested parties.

The concept of a 'Taranaki Inc Strategy' recognises that while there are already many national, regional and local strategies, plans and programmes addressing aspects of biodiversity in the region, these are limited to an individual organisation's particular interest or jurisdictional responsibilities. What was sought was a strategy that did not belong to any one organisation but one that could cover all key players with an interest in biodiversity.

The concept of the Taranaki Inc Strategy has since evolved into this Accord. The Accord sets out a strategic and collaborative framework for Accord partners to share information, pool resources, and take action to deliver better biodiversity outcomes for the region. It is a non statutory document to be jointly administered and implemented by its signatories (the Accord partners).

In terms of the Accord's development, a working group was established involving representatives from organisations attending the Taranaki Biodiversity Forum that indicated they would be interested in being an 'Accord partner'. However, others have also assisted in the development of the Accord through the provision of technical information and or peer reviewing information in the Accord.

Subsequently, this Accord has been approved and adopted by the agencies and organisations identified in section 1.3 below.

### 1.3 Accord partners

Set out below is a list of those organisations and agencies that have agreed to support and contribute to the vision, desired outcomes, priorities and plan of action set out in the Accord:

Department of Conservation

East Taranaki Environment Trust

Environmental Research Institute, University of Waikato

Federated Farmers New Zealand

Fish and Game New Zealand

M.A.I.N. Trust NZ

Nga Motu Marine Reserve Society Inc

New Plymouth District Council

New Zealand Herpetological Society

Queen Elizabeth II National Trust

Rotokare Scenic Reserve Trust

Royal Forest and Bird Society (both the south and north Taranaki branches)

South Taranaki District Council

Stratford District Council

Taranaki Kiwi Trust

Taranaki Regional Council

Taranaki Tree Trust

Tiaki Te Mauri O Parininihi Trust.

For a brief summary of the roles and responsibilities of Accord partners in relation to

biodiversity, please refer to section 3 of the Accord.

Over time, it is hoped other organisations and groups might be interested in being a signatory to the Accord. When this occurs,

the Accord will be amended to include new signatories (refer section 7.2 of the Accord).

# 1.4 Effect and duration of the Accord

The Accord is a non statutory document. It is not legally binding on Accord partners and in no way restricts any person in the exercise of any power or discretion under any statute.

The Accord sets out an agreement by Accord partners to work towards promoting common biodiversity outcomes in the Taranaki region (Figure 1) over the next ten years.

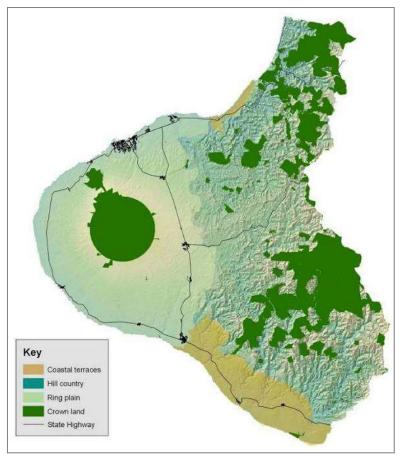


Figure 1: The Taranaki region

### 2. Context

# 2.1 Why is protecting local biodiversity important?

New Zealand is estimated to have 80,000 species of native animals, plants, and fungi. However, the report, *The State of New Zealand's Environment* 1997, concluded that biodiversity decline is New Zealand's most pervasive environmental issue. <sup>2</sup>

Approximately 85% of lowland forests, wetlands and sand dunes are now gone. Over the last 100 years, there have been 33 documented extinctions, including 16 birds, nine terrestrial invertebrates and six vascular plants (King 1984: Hitchmough *et al.* 2005). Of New Zealand's native species almost 2,500 are listed as threatened.

However there are many species yet to be scientifically described, named, and classified – over 3,000 species are classed as data deficient under New Zealand's threatened classification system.

# 2.2 State of Taranaki's biodiversity

Many landowners and individuals are actively taking action to protect Taranaki's indigenous biodiversity.

Much of this work is unseen by the wider public. Nevertheless it is considerable. For example, many landowners have covenanted their land to protect remnant forests, wetlands or dunes. In Taranaki, many farmers are undertaking invasive plant and animal control to protect biodiversity values on their land. Such works include possum control as part of the Self-help Possum Control Programme and or the planting and retirement of stream banks as part of the Riparian Management Programme. Hundreds, if not thousands of individuals also participate as volunteers in communityled biodiversity projects.

In Taranaki, approximately 40% of the region is in native forest and shrubland (Figure 2). Native forest covers 225,566 hectares (ha) and shrubland covers 64,495 ha. Collectively native forest and shrubland covers 290,061 ha with almost half of this (approximately 143,000 ha) being on privately owned land.

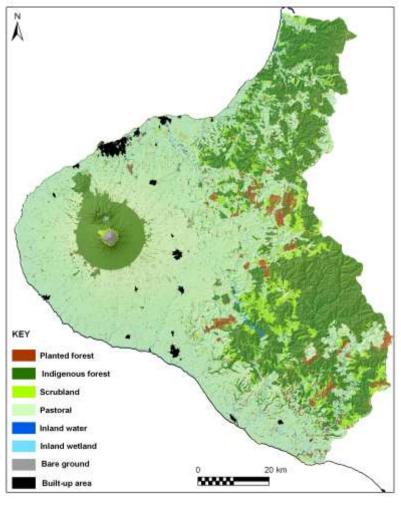


Figure 2: Land cover in Taranaki

<sup>&</sup>lt;sup>2</sup> Ministry for the Environment, 2008.

The majority of remnant forest remaining in Taranaki is montane (mountainous) forest associated with the eastern hill country and Egmont National Park (Figure 2). Like in other parts of New Zealand, Taranaki has experienced a disproportionate loss of lowland forests, wetlands and dunelands – particularly on the ring plain and coastal terraces.

On the ring plain and coastal terraces less than 10% of the original native forest now remains. Across Taranaki, only 8% of Taranaki's original wetlands remain while, for sand dunes, only 12% have their original vegetative cover.

Some ecosystem types have historically always been rare in Taranaki (refer Appendix I). Historically rare ecosystems include estuaries, dune wetlands, and coastal herb fields and their protection is nationally important.

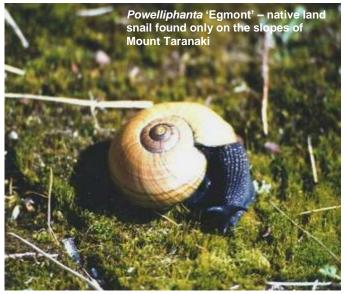
Taranaki is home to many native plant and animal species. However, some such as the kokako, brown teal, and yellow-crowned parakeet no longer have viable numbers to sustain wild populations. Local plant species believed to be extinct are *Hebe speciosa*, *Amphibromus fluitans* and the tussock sedge *Schoenus carsei*.

There are 66 animal species present in Taranaki that have been identified to be nationally threatened or at risk of extinction. Some, such as the Maui's dolphin and kokako, are currently close to local extinction.

For other threatened or at risk species such as kiwi, spotless crake, whio (blue duck), kaka, Northern New Zealand dotterel, falcon, kereru (wood pigeon), geckos and skinks, *Powelliphanta* snail, and *Notoreas perornata* moth, their range and abundance is much reduced.

Fifty native plant species found in Taranaki are also identified as threatened, and at risk. Appendix II identifies threatened and at risk native plant and animal species present in Taranaki.







Other native plant and animal species are identified as 'regionally distinctive'. Regionally distinctive species includes both threatened and non-threatened species that are worthy of protection because they are

largely confined to the region, are particularly uncommon in this part of the country, or because Taranaki represents the limit of their national distribution range (e.g. *Dactylanthus* and the grey-faced petrel).

Appendix II identifies four native animal species and 49 native plant species that, though not nationally threatened, have been identified as being 'regionally distinctive'.

# 2.3 Pressures on biodiversity

Much of the original Taranaki landscape has been modified over time from land clearance and drainage activities. A number of native plant and animal species once common to Taranaki have disappeared due to habitat loss or the impact of invasive plants and animals.

Habitat loss (through land clearance and drainage) has historically been the main pressure on biodiversity. While the rate of land clearance and

drainage has declined in recent times, the ongoing loss and modification of remnant habitats remains an issue, particularly on privately owned land in Taranaki. Even small losses of habitat can now have a disproportionate impact on remaining biodiversity – not only in terms of remnant sites having added value because of their rarity but also because they are more vulnerable to fragmentation and edge effects.

Much of the ring plain and coastal terraces has been cleared of its original native

vegetation and is categorised as acutely threatened (i.e. less than 10% of the original native vegetation for that environment type remains – refer Figure 3).

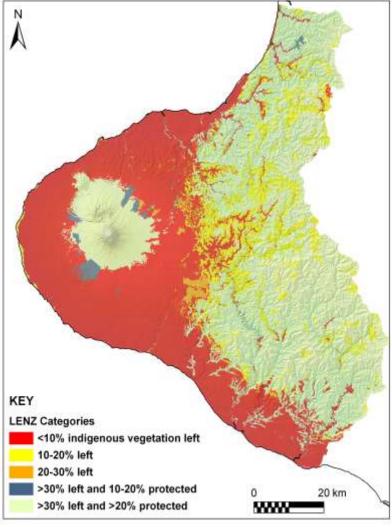


Figure 3: Threatened land environments in Taranaki

The loss of native vegetative cover means less habitat for native plants and animals. This is a forerunner to the extinction of native species.

Research charting the loss of native species over time has established a relationship between habitat loss and species loss. Studies note that, at first, the rate of species loss is relatively small as habitat area declines (usually the more vulnerable and or specialised species). However, as habitat area is progressively reduced, the rate of

species loss increases exponentially – particularly once vegetation cover declines below 20% and 10% of its original extent (Figure 4).<sup>3</sup>

Exacerbating issues associated with the loss of habitat is habitat fragmentation. Habitat fragmentation means declining connectivity between sites, which in turn, makes it more difficult for species that live within those habitats to successfully complete their life cycle (e.g. feeding, propagation, mate selection etc).

Habitat fragmentation also impacts on the robustness and resilience of ecosystems (e.g. remnants are more susceptible to edge effects and the spread of invasive plants and animals).

Today the most commonly recognised threats to biodiversity are the impacts of invasive plants (such as giant gunnera, old mans beard) and animals (particularly rodents, stoats, possums and feral goats) on native plants and animals through competition, browsing, foraging, and predation. Invasive plants and animals are reducing the quality and suitability of remnant habitats in terms of species richness and diversity.

Sustained invasive plant and animal control is an issue that applies to all land tenures – irrespective of whether it is privately owned or Crown land. It requires ongoing commitment.

Threats to fresh water biodiversity may also arise from habitat modification such as the drainage of wetlands, the channelizing or piping of streams, and discharges to water impacting on water quality and instream values.

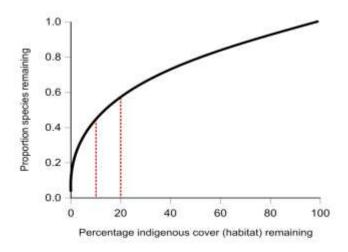


Figure 4: Relationship between declining habitat area on species loss



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<sup>&</sup>lt;sup>3</sup> Ministry for the Environment and Department of Conservation, 2007.

## 3. Roles and responsibilities of the Accord partners

Set out below is a brief summary of local organisations and groups that have agreed to be a signatory to this Accord thus far (i.e. Accord partner).

For central and local government agencies, the level of work that can be undertaken is largely determined through management plans and annual budgets. However, by agreeing to be a signatory to this Accord, the following organisations and groups have agreed to work towards the vision, desired outcomes, priorities and actions set out in the Accord.

#### Private landowners

Much of our rare and threatened native biodiversity is found on private land – in fact some species are now only found on private land.

Many private landowners have formally (legally) protected remnant forests, wetlands or dunes on their land through covenants. However, probably of more importance is the active management by landowners to 'protect' biodiversity values on their land. Such work includes undertaking invasive plant and animal control, the fencing of remnants bush and waterways to exclude stock, and the planting of native plants.

Many landowners are also actively involved with community trusts and participate in larger biodiversity projects.

#### Tangata whenua

As noted in the Statement of intent – tangata whenua (refer page iii of the Accord), Accord partners recognise that local Iwi and hapu have a strong cultural interest in both the protection and the sustainable use of biodiversity in Taranaki. Accord partners will investigate the interest of local Iwi and hapu to being a signatory to the Accord and contributing to its vision, outcomes, and actions.

### 3.1 Department of Conservation

The Department of Conservation has statutory responsibilities for managing biodiversity on public conservation land. In Taranaki, the Department manages 146,973 ha of Crown land (or 21% of the region) under the Conservation Act 1987, the National Parks Act 1980, the Wildlife Act 1953, and the Reserves Act 1977.

The Department of Conservation undertakes invasive plant and animal control on the public conservation estate. This includes possum control (at a level designed to preserve the forest canopy) as part of a regular 1080 treatment rotation, and feral deer and goat control (involving both the public conservation estate and private land).<sup>4</sup>

The Department of Conservation also undertakes other invasive plant and animal control, including mustelids, feral cat and rodent control for threatened species protection. Major weed control programmes include Chilean rhubarb on the South Taranaki coast (public and private land), spartina in the Patea estuary, climbing asparagus at Lucy's Gully, and climbing spindleberry on public and private land at various sites between Oakura and Tongapurutu.

The Department of Conservation is also responsible for protecting native plants and animals. All native animals are Crown property and the Department has considerable experience and expertise in wildlife management, including threatened species recovery.

<sup>&</sup>lt;sup>4</sup> Of note the Egmont National Park is the only national park free of feral deer and pigs. Other large herbivores such as goats and possum) are also controlled to low levels.

#### 3.2 District councils

There are three district councils in Taranaki - New Plymouth District Council, Stratford District Council and South Taranaki District Council. Each district council has objectives, policies and actions in their district plans addressing indigenous vegetation.

New Plymouth and South Taranaki district councils have identified a number of significant natural areas in their district. All councils have a fund to assist private landowners to protect significant natural areas, e.g. covenanting, legal, survey and fencing costs.

Each district council also has a number of council-owned parks, reserves and other lands and undertakes direct management of invasive plant and animal threats within these sites in accordance with management plans and their annual budgets.

# 3.3 East Taranaki Environment Trust

The East Taranaki Environment Trust (ETET) undertakes a landscape scale ecosystem project on around 13,000 ha. This is in the Matau/Purangi and Pouiatoa areas in eastern Taranaki. The Trust focuses on "...in-situ native species protection with a focus on kiwi".

ETET, with the support of around 45 local landowners, aim to have 500 pair of kiwi under protection from predators in Taranaki. This includes possum, mustelids, rodent, goat, and cat control. The Trust also promotes sustainable land management practices in the area.

ETET is also involved in the blue duck (whio) recovery programme in the Egmont National Park.

# 3.4 Environmental Research Institute, University of Waikato

The Environmental Research Institute, based at the University of Waikato, provides research, advisory and consultancy services

to a range of end-users on environmental issues.

The Institute has previously supported a number of biodiversity projects in Taranaki ranging from assisting in vegetative monitoring, the development of restoration plans to web development.

#### 3.5 Federated Farmers

Federated Farmers of New Zealand is a member-based organisation representing farming and other rural businesses.

With approximately half of Taranaki's remaining native forests and shrubland being on privately owned land, farmers are an essential part of any biodiversity management response. Federated Farmers have agreed to be an Accord partner to represent farmers' interests.

#### 3.6 M.A.I.N. Trust NZ

Mapping Analysis and Information Network Trust New Zealand (M.A.I.N. Trust) is a Taranaki-based charitable trust that provides online environmental, biodiversity and pest management data gathering and analysis solutions.

M.A.I.N. Trust maintains a website <a href="https://www.terrain.net.nz">www.terrain.net.nz</a>, which is free to users. A number of Taranaki community groups use the website to display their information and provide links to public maps about their work and results.

# 3.7 New Zealand Herpetological Society

New Zealand Herpetological Society aims to promote awareness and interest in amphibians and reptiles, including their conservation.

New Zealand Herpetological Society based in New Plymouth caters for all levels of interest in herpetology through advocacy and education. The Society also plays a key role in maintaining data on Taranaki lizards.

# 3.8 Nga Motu Marine Reserve Society

The Nga Motu Marine Reserve Society was formed in 1997 to promote the idea of a network of small reserves on the Taranaki coast. The society is made up of locals who are interested in the study and preservation of local coastal and marine areas.

To date the Society has successfully initiated the establishment of the Tapuae Marine Reserve and continues to survey, study and foster community interest in marine life on the Taranaki coast.

#### 3.9 QEII National Trust

The Queen Elizabeth II National Trust (QEII) is an independent statutory organization set up to encourage and promote the provision, protection preservation and enhancement of open space.

QEII works with landowners to formally (legally) protect natural and cultural features on their land. This involves negotiating open space covenants (or protection agreements) with landowners, and includes financial assistance towards the costs of surveying, covenanting and fencing.

In Taranaki there are 296 covenants totalling 5,351 ha (includes covenants approved but awaiting registration). The largest registered covenant in Taranaki is 333 ha, with the average sized covenant being 18.1 ha.<sup>5</sup>

# 3.10 Rotokare Scenic Reserve Trust

The Rotokare Scenic Reserve Trust has the following vision statement: "...Rotokare Scenic Reserve will be a flourishing indigenous ecosystem, highly valued by the community."

The Rotokare Scenic Reserve Trust has created 'mainland' island and manages a predator-exclusion fence that protects 230 ha of the Rotokare Scenic Reserve. The Trust

has eradicated all introduced mammal pests and is beginning to reintroduce many threatened native species back to the area.

The Rotokare Scenic Reserve Trust also operates a kiwi crèche as a joint project with TKT plus maintains an on-site environmental education centre and programme.

### 3.11 Royal Forest and Bird Protection Society

The Royal Forest and Bird Protection Society of New Zealand is New Zealand's largest national non-governmental conservation organisation. Its mission is to "...preserve and protect the native plants and animals and natural features of New Zealand."

There are two Taranaki branches of Forest and Bird: North Taranaki and South Taranaki. Through their volunteers, the branches carry out a significant amount of on-the-ground conservation work, including the management of Forest and Bird owned reserves at Te Wairoa and Tom and Don's Bush, plus predator control out at Mangemange.

Other significant activities undertaken by local branches include fund raising to support local conservation projects, running the Kiwi Conservation Club for Children, and advocacy to support the protection of Taranaki's native ecosystems and species.

# 3.12 Taranaki Fish and Game Council

The Fish and Game Council has statutory responsibility under the Conservation Act to sustainably manage New Zealand's fresh water sports fish and gamebird resources for the recreational interests of anglers and hunters. This includes managing the hunting of gamebirds, some of which are native species (e.g. NZ shoveler, pukeko, paradise shelduck, and grey duck).

The Fish and Game Council also have a duty to advocate for the protection of freshwater sports fish and gamebird habitats. Locally, the Taranaki Fish and Game Council are

<sup>&</sup>lt;sup>5</sup> Neil Phillips, email correspondence to the Taranaki Regional Council (Document 915902). Further information on <a href="http://www.openspace.org.nz/Site/Covenants/default.aspx#H6">http://www.openspace.org.nz/Site/Covenants/default.aspx#H6</a> 0213-7.

active in advocating for and promoting the protection of freshwater habitats, including wetlands.

#### 3.13 Taranaki Kiwi Trust

Taranaki Kiwi Trust (TKT) works throughout Taranaki "...to promote and facilitate the restoration and protection of sustainable populations of kiwi in Taranaki".

TKT's flagship programme is working with the Department of Conservation to restore a sustainable population of kiwi in Egmont National Park. This includes assisting with predator control over 7,000 ha of the Park. Through its Community Kiwi Protection Programme<sup>6</sup> it also supports private landowners interested in kiwi protection.

TKT maintains a regional database of kiwi records and has active education and advocacy programmes that include school visits, displays and resource kits.

### 3.14 Taranaki Regional Council

The Taranaki Regional Council has statutory responsibilities for managing biodiversity through the Resource Management Act 1991. Resource use, involving the coast, fresh water, air and soil conservation, is regulated by the Council via regional plans.

The Taranaki Regional Council also has statutory responsibilities under the Biosecurity Act 1993 for invasive plant and animal control. Of particular note, is the Self-help Possum Control Programme, which involves the Council and the landowners maintaining low possum numbers over most of the ring plain.

The Taranaki Regional Council's Sustainable Land Management Programme involves preparing property plans for landowners and making recommendations for riparian fencing and planting on the ring plain and the retirement of steep land in the hill country.

<sup>6</sup> This involves a TKT Field Officer working with landowners to establish predator control regimes on their properties, with trap boxes on long-term loan from the Trust. In 2008, the Taranaki Regional Council adopted its Biodiversity Strategy (2008), which focuses on working with and supporting land owners and other parties to protect sites with regionally significant indigenous biodiversity values (called Key Native Ecosystems).

#### 3.15 Taranaki Tree Trust

The Taranaki Tree Trust is a charitable trust, dedicated to the protection and enhancement of the region's ecosystems and landscapes. The Taranaki Regional Council administers and services the Taranaki Tree Trust and provides a part time coordinator.

The Taranaki Tree Trust assists landowners with the maintenance, restoration, enhancement or protection of wetlands, remnant native forest and bush (when not identified by the district councils as a Significant Natural Area, or the Taranaki Regional Council as a Key Native Ecosystem or regionally significant wetland), threatened land environments or habitats of threatened species, amenity planting, and projects consistent with the objectives of its Trust Deed.

#### 3.16 Tiaki Te Mauri O Paraninihi Trust

The Tiaki Te Mauri O Paraninihi Trust was established by Ngati Tama and the local community in March 2012 for the purpose of promoting the restoration and protection of the cultural and ecological value of Ngati Tama land.

The Tiaki Te Mauri O Paraninihi Trust, amongst other things, is undertaking conservation work over 1,860 hectares of primary coastal and lowland indigenous forest in Paraninihi. The work includes significant possum and predator control, and monitoring.

#### 3.17 Potential future signatories

Other organisations, trusts and community groups with an interest in biodiversity work,

and therefore maybe potential signatories in the future, include:

- Dune Restoration Trust of New Zealand, which promotes the restoration of sand dunes
- New Zealand Botanical Society, which caters for all levels of interest in botany
- New Zealand Ornithological Society, which caters for all levels of interest in birds
- Oaonui Sandy Bay Society Trust manages the conservation of Sandy Bay
- Rapanui Grey-faced Petrel Trust, which manages the conservation of the greyfaced petrel colony, including predator proof fence

- Tane's Tree Trust, which encourages land owners to plant and sustainably manage native trees for multiple uses
- Educational, research and business institutions.

On parties indicating their interest in being a signatory to the Accord, the Accord will be reviewed and updated in accordance with sections 7.2 and 7.3 of the Accord.

Figure 5 provides a 'snapshot' of some of the larger biodiversity project occurring in the region.

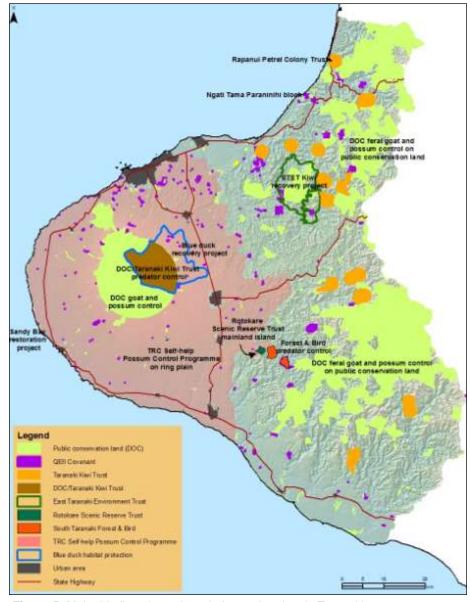


Figure 5: Major biodiversity projects being undertaken in Taranaki

### 4. Vision and desired outcomes

This section sets out an over-arching vision and desired outcomes for biodiversity in Taranaki.

#### 4.1 Vision

Taranaki residents and visitors better understand and value biodiversity; we all work together to protect, sustain and enhance our biodiversity; and Taranaki has a representative range of its original native ecosystems and species.

#### 4.2 Desired outcomes

In working towards that vision, Accord partners will implement the Plan of Action (refer section 6 of the Accord) to achieve the following outcomes.

**Outcome 1:** To maintain a full representative range of native species, habitats and ecosystems that occurs in Taranaki.

**Outcome 2:** To promote the maintenance and enhancement of indigenous biodiversity values generally in Taranaki.

**Outcome 3:** To promote efficient and effective biodiversity management through enhanced knowledge and understanding of biodiversity in Taranaki.

Outcome 4: To enhance community capacity and biodiversity gains through the pooling of resources, prioritising and coordination of effort by different agencies, trusts and community groups across the region.

#### **Explanation of outcomes**

Outcome 1 seeks to ensure Taranaki maintains a full representative range of species, habitats and ecosystems over the life of the Accord. This necessarily involves focusing on and prioritising the protection of the elements of indigenous biodiversity that are more vulnerable than others. This means protecting not just populations of regionally rare and distinctive species in the wild but also ensuring that there is a full range of habitats and ecosystem types available to support their long term future. Section 6 below expands upon this outcome to identify priorities for protecting our most valuable and vulnerable species, habitats and ecosystems.

Outcome 2 seeks to promote and enhance biodiversity generally over the life of the Accord. Much biodiversity, while not particularly significant in its own right, nevertheless is important as part of the wider ecological functioning of the environment, or because there is a general public desire to maintain more common native biodiversity elements in the landscape such as tui, bellbird and kereru in urban gardens.

Currently, there are gaps in scientific knowledge (e.g. as noted in Appendix II for many threatened species there is insufficient local data to determine their relative abundance, range and viability). Furthermore, there are often difficulties in accessing basic up-to-date information. So while there might be information on a particular topic that information can be scattered across a range of organisations, publications and databases and therefore is not very accessible. Robust, accessible, usable information is necessary to inform and underpin management actions. Accordingly Outcome 3 seeks to enhance the quantity and quality of information necessary to promote more efficient and

effective biodiversity management in Taranaki over the life of the Accord.

Outcome 4 recognises that resources are finite and shared between a large number of agencies, organisations, groups and individuals with differing priorities. To improve biodiversity generally, as appropriate, the different agencies, trusts and community groups across Taranaki will explore opportunities to pool their resources, share information and coordinate efforts. They will also work, over the life of the Accord, on building the pool of people and groups who are interested, active and skilled in biodiversity protection.



## 5. Immediate ecological priorities

This section identifies three immediate priorities for giving effect to Outcome 1, i.e. maintaining a full representative range of native species, habitats and ecosystems.

The priorities identify Taranaki's most valuable and vulnerable biodiversity assets. The identification of our most valuable and vulnerable assets is the first step in determining what immediate or short term action should be adopted in the action plan (section 6 of the Accord) to get the best results possible from finite resources.

When considering new projects, Accord partners should consider what represents 'best value'. Sometimes this might mean targeting actions or resources for different species or in a different place because of the greater gains to be achieved. This is similar in concept to the Department of Conservation's Project Prioritisation Protocol.

In brief, the Project Prioritisation Protocol involves nine steps:

- Step 1: Define objective, e.g. to secure the greatest possible number of unique species and habitats
- Step 2: List biodiversity assets, e.g. the component of biodiversity that one wishes to secure from extinction
- Step 3: Weigh the uniqueness or significance of a biodiversity asset, e.g. threat classification, adequacy of their protection locally etc
- Step 4: List management projects. For each biodiversity asset, identify the minimum set of actions necessary to secure the species or habitat
- Step 5: Estimate project costs
- Step 6: Predict project benefits to assets
- Step 7: Estimate likelihood of project success
- Step 8: State any constraints constraints generally related to lack of

resourcing or information

Step 9: Rank 'best value' projects having regard to steps 5 to 8 above.

# 5.1 Priority 1: Secure populations of threatened species

Secure viable populations of threatened, at risk or regionally distinctive species whose natural range include Taranaki.

#### Explanation

This priority seeks to ensure that native species currently present in Taranaki will continue to be present into the future. The most at risk of disappearing are those species identified as threatened or at risk nationally. However, Accord partners also want to ensure regionally distinctive species are adequately protected.

Taranaki has 70 native animal species and 99 native plant species that are identified as threatened, at risk, or regionally distinctive (refer Appendix II). In relation to these species, 29 animal species (41%) and 32 plant species (32%) are considered to be adequately protected in Taranaki in terms of population size, number of populations and or being secured within an area(s) that is formally protected and or actively protected (e.g. invasive plant and animal control).

The Action Plan (refer section 6.2 below) will include management programmes, often existing, to ensure that populations of these species are secure. However, the Action Plan will also support new programmes to address the 20 (29%) animal species and 21 (21%) plant species that are not yet adequately protected in Taranaki (Table 1).

In addition to the above, the Action Plan will seek to address information gaps on another 21 (30%) animal species and 46 (47%) plant species identified as threatened, at risk, or regionally distinctive. Currently there is insufficient information on the local range and abundance of these species to determine whether they are adequately secure or not in Taranaki.

Table 1 overleaf identifies those threatened, at risk, or regionally distinctive species identified as being inadequately protected in Taranaki or for which further information is needed.







Table 1: Species not confirmed to be secure in the Taranaki region

Native species iden	tified as not secure	Native species for which further information is required to assess their security			
Animal	Plant	Animal	Plant		
Australasian bittern Blue duck Black katipo spider Bluegill bully Freshwater mussel Goldstripe gecko Katipo spider Notoreas perornata "Taranaki coast" New Zealand dabchick North Island kokako North Island rifleman North little blue penguin Northern NZ dotterel Ornate skink Spotless crake Southern North Island speckled skink Striped skink Tadpole shrimp Variable oystercatcher Yellow crowned parakeet	Arthropteris tenella Brachyglottis turneri Craspedia 'Otakeho' Crassula Manaia Crassula peduncularis Euphorbia glauca Gratiola concinna Hebe speciosa Lepidium flexicaule Limosella "Manutahi" Myosotis brevis Myosotis petiolata var. pansa Peraxilla colensoi Peraxilla tetrapetala Pimelea aff. arenaria Pterostylis micromega (Hook f.) Ranunculus limosella Ranunculus recens var. recens Scandia rosifolia Sonchus kirkii Tetragonia tetragonioides	Banded rail Black stilt¹ Carabid beetle (Brullea antartica) Caspian tern¹ Ground beetle (Mecodema angustulum) Killer whale¹ Lamprey Long tailed bat (Nth Island) Long-tailed cuckoo New Zealand pied oystercatcher¹ New Zealand shore plover¹ Northern less long tailed bat (Nth Island) Pacific gecko Pied shag¹ Reef heron Royal spoonbill¹ Scarab beetle Torrentfish Wellington green gecko White heron¹	Adelopetalum tuberculatum Alepis flavida Astelia trinervia Baumea articulata Baumea teretifolia Carex litorosa Chaerophyllum "minute flower" Coprosma acerosa Coprosma x kirkii Corunasylis nuda Crassula mataikona Deparia petersenii Eleocharis neozelandica Forstera bidwillii var. densiflora Gahnia lacera Gunnera arenaria Hebe corriganii Isachne globosa Juncus caespiticius Juncus pauciflorus Leptinella dispersa ssp. dispersa Leptinella tenella Lindsaea virdis Litsea calicaris Mazus novaezeelandiae subsp. Metrosideros carminea Myosotis pygmaea var. pygmaea Nematoceras rivulare Nematoceras rivulare "Te Henui" Olearia albida Olearia solandri Olearia townsoni Parahebe lanceolata Pimelea carmosa Plagianthus divaricatus Prasophyllum hectorii Rorippa divaricata Schoenus carsei Schoenus tendo Sebaea ovata Selliera rotundifolia Thelymitra aff.paucflora Thelymitra species Utricularia dichotoma		
20	21	21	46		

<sup>&</sup>lt;sup>1</sup> A migratory or transient native species, which visits Taranaki but does not breed here.

# 5.2 Priority 2: Protect a full range of habitats of threatened species

Protect a full range of habitats of threatened, at risk or regionally distinctive species whose natural range include Taranaki.

#### **Explanation**

Taranaki has literally thousands of sites, of various sizes, providing habitat for species that are identified as threatened, at risk, or regionally distinctive. However, some sites are more important than others because:

- (a) They provide core habitats<sup>7</sup> for multiple (at least five or more) threatened, at risk or regionally distinctive species whose natural range include Taranaki
- (b) They provide core habitat for a single threatened, at risk or regionally distinctive species of very limited distribution or abundance in Taranaki (e.g. confined to one or two sites).

A desktop analysis undertaken on behalf of Accord partners identified 41 sites<sup>8</sup> that are exceptionally important in terms of providing habitat for threatened, at risk, or regionally distinctive species (Table 2). Habitats in these sites should be protected (both legally and in terms of active management) in order to secure populations of threatened, at risk or regionally distinctive species in Taranaki.

Of the 41 sites so far identified, 24 (59%) are already formally protected. For the formally protected sites, the Action Plan supports active management to maintain and enhance the sites, e.g. species recovery programmes, habitat restoration and sustained weed and pest control.

For the 17 sites (41%) that have no or only partial formal protection, the Action Plan will support active management as well as investigate any opportunities to promote the formal protection of those sites.

Table 2 identifies another 14 sites which are likely to provide core habitat for multiple threatened, at risk or distinctive species, however, further information is needed. The Action Plan will support the surveying and investigation of these sites.

Taranaki's most valuable habitats for threatened, at risk or regionally distinctive native plant and animal species are identified in Appendix III.





<sup>&</sup>lt;sup>7</sup> "Core habitat" for resident species means sufficient suitable habitat area to maintain a viable breeding population, whereas for migratory species, it means sufficient suitable habitat area to support temporary populations (e.g. wetland areas for migratory wading birds.

<sup>&</sup>lt;sup>8</sup> Refer Taranaki Regional Council, 2011. Note that sites identified represent a starting point only. Overtime, as surveys are completed, other sites are likely to be identified and added to the list.

Table 2: Taranaki's most valuable habitats for threatened, at risk or regionally distinctive native plant and animal

species

Species  Known habitats for nat risk, or regionally		limited distribution	for species of very on / abundance in anaki	<u>Likely</u> habitats with multiple threatened, at risk, or regionally distinctive species		
Formally protected	No / partial formal protection	Formally protected	No / partial formal protection	Formally protected	No / partial formal protection	
Awahou Scenic Reserve 1  Egmont National Park 1  Hutiwai Conservation Area 1  Julian's Pond 2  Lake Rotokare Scenic Reserve 1  Mohakatino Conservation Area 1  Mohakatino Swamp Conservation Area 1  Moki / Makino conservation areas1  Poulatoa Conservation Area 1  Pou Tehia Historic Reserve and Tongaporutu Conservation Area 1  Toro Road 2  Sugar Loaf Islands Marine Protected Area 1  Sutherland and Normanby Road ends 1  Waitaanga Conservation Area 1  Waitotara Conservation Area 1  Waitotara Conservation Area 1  Whitecliffs Conservation Area, Paraninihi, Mt Messenger Scenic Reserve and Conservation Area 1,2	Hawkens Lagoon and Swamp 1,2  Moumahaki Lakes and catchment 1,2  Pukatea 2  Puketapu Road End 2  Sandy Bay 1,2  Matau / Purangi (ETET) block 2	Donald Warea <sup>2</sup> Maitahi Scenic Reserve <sup>1</sup> Mimi Scenic Reserve <sup>1</sup> Otakeho Beach <sup>1</sup> Rapanui Petrel Colony <sup>2</sup> Three Sisters Coastal <sup>2</sup> Three Sisters Wetland <sup>2</sup> Waitara River Scenic Reserve <sup>1</sup>	Bayly Road Beach 1 Ihupuku Swamp Wildlife Management Reserve 1, 2 Kawau Pa Historic Reserve 1, 2 Mudfish 1 Wetland 2 Ngaere Swamp Forests 2 Patea Wetland 2 Stent Road Beach 2 Waihi Stream Wetland 2 Waipipi Dunes 1, 2 Waitara West Marginal Strip 1, 2 Waverley Beach 1	Kaipikari Road Forest Remnants <sup>2</sup> QEII Covenant 5/06/152 <sup>2</sup> QEII Covenant 5/06/001A & B <sup>2</sup> QEII Covenant 5/06/148 <sup>2</sup> Taramoukou Conservation Area <sup>1</sup> Tarere Conservation Area <sup>1</sup> Uruti Conservation Area <sup>1</sup> Uruti Scenic Reserve <sup>1</sup>	Condon's Bush <sup>2</sup> Kahu <sup>2</sup> Kuwhatahi <sup>2</sup> Matuku Bush <sup>2</sup> Ngakotana Gorge <sup>2</sup> Tarere Forest Extensions <sup>2</sup>	

<sup>\*</sup>Waitaanga Conservation Area lies outside the Taranaki Regional Council's administrative boundaries but falls within the Department of Conservation's Taranaki Area jurisdiction.

<sup>&</sup>lt;sup>1</sup> Crown land.

<sup>&</sup>lt;sup>2</sup> Privately owned land.

# 5.3 Priority 3: Maintain the extent of threatened ecosystems

Maintain the areal extent of historically rare ecosystems and threatened environments in Taranaki.

#### Explanation

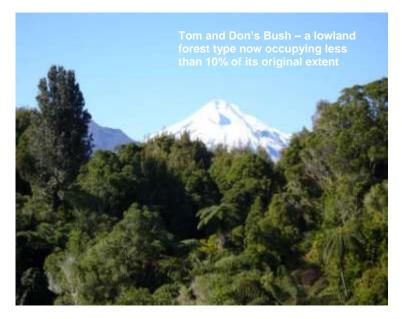
In addition to habitats of threatened, at risk or regionally distinctive species, other areas are important in their own right because they are of an ecosystem type that are nationally rare.

As appropriate, the Action Plan will focus on minimising, mitigating or avoiding habitat modification involving historically rare ecosystems and threatened ecosystems (environments).

Historically rare ecosystems in Taranaki include estuaries, dune wetlands, and coastal herb fields and turflands (Appendix I).

Montane environments are adequately protected in Taranaki (though the species within them may not be). Therefore the focus is on threatened ecosystems, which involve environments where native vegetative cover is now reduced to 20% or less of that environment (as classified under the Land Environments of New Zealand system). These environments include:

- Coastal and lowland forests
- Wetlands, and
- Sand dunes.







### 6. Plan of action

This section outlines an Action Plan for giving effect to the Accord vision, outcomes and priorities.

#### 6.1 General methods

The following are the suite of management tools that may be applied by one or more Accord partners. Responsibility for implementing the actions will depend upon who is 'best placed' to carry out the action, e.g. an organisation's statutory responsibilities and powers (if any), technical expertise, capacity, and interest.

METH 1: **Land manager** -administering or managing land, including parks and reserves.

METH 2: Service delivery –an organisation or community group organise, provides and or undertakes services and action. Service delivery of particular importance to this Accord includes:

- threatened species recovery
- invasive plant and animal control
- habitat restoration, including fencing, planting and earthworks.

METH 3: **Financial assistance** – providing funding to others to support biodiversity projects and initiatives.

METH 4: **Facilitation** – working with and bringing different parties together to promote and advance biodiversity objectives.

METH 5: **Advocate** – trying to persuade others to act.

METH 6: **Education** – providing information and advice to landowners, resource users and the wider public to:

- generally promote awareness to foster behavioural changes in relation to biodiversity
- provide technical assistance on best management practices and techniques
- support community engagement.

METH 7: **Monitoring and research** – gather information on the state of biodiversity and the effectiveness of management efforts.

METH 8: **Regulation** – administering and enforcing the law.

#### 6.2 Plan of action

This section identifies specific activities and actions proposed by Accord partners to give effect to the Accord vision, outcomes and priorities.

The Action Plan includes the specific action proposed, plus:

- The organisation(s) best placed to undertake or lead the action<sup>9</sup>
- Whether it is an existing or new action plus the indicative timeframe for its implementation
- The Accord outcomes and priorities the action contributes to.

<sup>&</sup>lt;sup>9</sup> Recognising that, over the life of the Accord, there will be opportunities for other Accord partners to contribute or support a particular action.

 Table 3: Plan of action for Accord partners to manage indigenous biodiversity in the Taranaki region

	Key actions	Lead responsibility	Existing or new action	Implementation timeframe	Main outcome / priority being achieved
	Continue to manage public conservation areas	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 1, 2 & 3
Land managers (inc formal protection)	Continue to manage the Rotokare Scenic Reserve	Rotokare Scenic Reserve Trust	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
iagers rotect	Continue to manage the Paraninihi covenant area	Paraninihi Trust	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
d mar nal pi	Continue to manage local parks and reserves	TLAs, TRC	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
Lan	5. Continue to secure covenants on privately owned land to formally protect natural values on that land, including historically rare ecosystems, threatened environments, and those core habitats identified in Table 2	QEII, TRC, DOC, private land occupiers	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
tion	6. Continue to implement and support activities for the protection of the 61 threatened, at risk or regionally distinctive species that are identified in Table 6 as being appropriately protected	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 1
protection	7. Support species recovery programmes to secure the 41 species identified in Table 1 as being inadequately protected	DOC	New	2017 onwards	Outcome 1 & 2; Priority 1
and p	8. Support the re-establishment of kokako in Taranaki	DOC	New	By 2017	Outcome 1 & 2; Priority 1
recovery	9. Undertake Western North Island brown kiwi recovery programmes in Taranaki in accordance with the relevant Taxon Plan, including on Egmont National Park, Parininihi, Rotokare Scenic Reserve, Pouiatoa/Purangi and in the eastern hill country	DOC, TKT, ETET	Existing	Ongoing	Outcome 1 & 2; Priority 1
	10. Undertake the whio recovery programme in Egmont National Park and adjacent farmland	DOC, ETET, F&G, TRC	Existing	Ongoing	Outcome 1 & 2; Priority 1
Species	11. Continue to undertake appropriate protection and management of Notoreas "Taranaki Coast" within coastal herbfields	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 1
	12. Undertake regular aerial possum control, on a 7-year cycle, in parts of the public conservation estate including Egmont National Park, Hutiwai, Parininihi, Pouiatoa, Moki/Makino, and Waitaanga conservation areas	DOC	Existing	2017/2018 (for Egmont National Park)	Outcome 1 & 2; Priority 2
	13. Continue with ongoing possum ground control operations in parts of the public conservation estate including on the Taranaki ring plain and northern reserves – Tarata, & Tauwhare bend (Mökau river)	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 2
	14. Continue ongoing possum ground control along boundary of Egmont National Park	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 2
control	<ol> <li>Undertake regular feral goat control in the public conservation estate focusing on the Egmont National Park, Parininihi and the Moki/Makino, Pouiatoa and Waitaanga conservation areas</li> </ol>	DOC	Existing	Annually	Outcome 1 & 2; Priority 2
animal c	16. Undertake regular deer management throughout Taranaki. Focusing on Egmont National Park, Moki/Makino, Parininihi, and Waitaanga conservation areas. Respond to illegal deer liberations as required. Continue to meet obligations regarding deer fencing regulations	DOC	Existing	Annually	Outcome 1 & 2; Priority 2
and	17. Undertake regular invasive plant control within Egmont National Park, ring plain reserves and other priority sites to protect vulnerable habitats and species	DOC	Existing	Annually	Outcome 1 & 2; Priority 2
ive plant	18. Undertake predator control in Egmont National Park, Parininihi, Pouiatoa Conservation Area and at Matau / Purangi to support kiwi recovery programmes	DOC, TKT, ETET	Existing	Ongoing	Outcome 1 & 2; Priority 2
Invasive	19. Undertake predator control in Egmont National Park and adjacent farmland as part of the whio recovery programme	DOC, ETET	Existing	Ongoing	Outcome 1 & 2; Priority 2
	20. Undertake predator and possum control at Parininihi, to support species recovery programmes	Paraninihi Trust	Existing	Ongoing	Outcome 1 & 2; Priority 2
	21. Maintain pest free site at Rotokare Scenic Reserve to protect kiwi, spotless crake, North Island fernbird, banded kokopu, long finned eel, freshwater crayfish, New Zealand falcon, grey duck, goldstripe gecko and ornate skink	Rotokare Scenic Reserve Trust	Existing	Ongoing	Outcome 1 & 2; Priority 2
	22. As part of the Self-help Possum Control Programme, support regular possum control in natural areas on private land on the ring plain	TRC, private land occupiers	Existing	Ongoing	Outcome 1 & 2; Priority 2
	23. Support predator control on privately owned Key Native Ecosystems that are habitats for threatened, at risk, or regionally distinctive species (and for which biodiversity plans have been prepared)	TRC, private land occupiers	Existing	Ongoing	Outcome 1 & 2; Priority 2
Restoration	24. Undertake fencing and/or planting (as appropriate) to support the restoration of ecosystems in Table 2 and any other sites that have been identified as regionally or locally important	DOC, TRC, TLAs, QEII	Existing	Ongoing	Outcome 1, 2 & 4; Priority 2 & 3
Resto	25. Undertake planting to support the restoration of other remnant forests, wetlands, sand dunes, coastal herbfields or habitats of native species	TTT, F&G, DOC	Existing	Ongoing	Outcome 1, 2 & 4; Priority 2 & 3
Funding	26. Provide financial or in kind assistance to land owners or community groups to secure the protection of natural values, including the protection and enhancement of values associated with habitats of threatened, at risk, or regionally distinctive species and original rare ecosystems and threatened environments	DOC, QEII, TRC, TLAs, TTT	Existing	Ongoing	Outcome 1 2 & 4; Priority 2 & 3
Fur	27. Provide financial assistance or in kind assistance to address information and research gaps relating to biodiversity in Taranaki	DOC, TRC, TLAs, TTT	Existing	Ongoing	Outcomes 1; & 2; Priority 1, 2 & 3

	Key actions	Lead responsibility	Existing or new action	Implementation timeframe	Main outcome / priority being achieved
	28. Provide advice and information on species protection to community groups and individuals	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 1
	29. Provide advice and information on habitat protection to community groups and individuals	DOC, TRC, F&G	Existing	Ongoing	Outcome 1 & 2; Priority 1; Priority 2 and Priority 3
u.	30. Provide property planning assistance to community groups and individuals wishing to protect regionally and locally important indigenous biodiversity values	TRC	Existing	Ongoing	Outcome 2 & 4; Priority 1; 2 & 3
and education	31. Provide planning extension service promoting protection of riparian planting to improve water quality and freshwater biodiversity and to enhance wildlife corridors	TRC	Existing	Ongoing	Outcome 2 & 43
Advice and	32. Provide information, technology, expertise and resources to empower community groups and individuals to protect, maintain and restore indigenous biodiversity	DOC, TRC, TLAs , TTT, HS, NMMRS, MAIN	Existing	Ongoing	Outcome 2, 3, & 4
Adv	33. Showcase projects and volunteer programmes to encourage community understanding of, and involvement in, programmes and activities to protect, maintain and restore indigenous biodiversity	Rotokare Scenic Reserve Trust, TKT, ETET, TTT, NMMRS Paraninihi Trust, DOC	Existing	As appropriate	Outcome 2, 3, & 4
	34. Support and implement a kiwi and penguin aversion programme for dog owners	TRC, DOC, TKT, ETET, NMMRS	Existing	By 2012	Outcome 1, 2, 3 & 4; Priority 1
	35. Train additional trainers to make the kiwi and penguin aversion programme more accessible to dog owners	TRC, DOC, TKT, ETET, NMMRS	New	By 2012	Outcome 1, 2, 3 & 4; Priority 1
	36. Continue existing monitoring programmes to determine biodiversity state-pressure-response in Taranaki, including the adequacy of protection measures	TRC, DOC, TLAs	Existing	Ongoing	Outcome 2, 3, & 4
	37. Investigate the distribution and abundance of the 67 threatened, at risk or regionally distinctive species identified in Table 1 for which there is currently inadequate information to determine the appropriate protection measures	DOC	New	By 2017	Outcome 2, 3, & 4; Priority 1
Iresearch	38. Develop a web-based database, which is accessible to interest groups, to manage information on locally important indigenous biodiversity values, including GIS data on locations and distributions of threatened, at risk and regionally distinctive species	TRC, DOC, TLAs	New	By 2017	Outcome 2, 3, & 4
ng and I	39. Develop protocols for managing and sharing information between Accord partners – particularly in relation to databases developed for storing information on sites of common interest	All	New	By 2015	Outcome 2, 3, & 4
Monitoring and	40. Develop and implement a biodiversity condition index for monitoring the ecological condition of Key Native Ecosystems over time (and for which biodiversity plans have been prepared)	TRC	Existing	June 2012	Outcome 1, 2 & 3
	41. Gather information on significant vegetation and habitats throughout Taranaki	TRC, DOC, TLAs	Existing	As appropriate	Outcome 1, 2 & 3; Priority 2 & 3
	42. Commission research into, and development of, new technologies and techniques to combat existing and emergent invasive plant and animal threats	DOC, TRC, ETET	New	As appropriate	Outcome 2, 3, & 4
ocate	43. Advocate, as appropriate, to central or local government, industry, and other groups on biodiversity issues of relevance to Taranaki	All	Existing	As appropriate	Outcome 1, 2, 3 & 4
Advoc	44. Support funding applications by Accord partners on biodiversity projects that contribute to the vision, outcomes and priorities set out in this Accord	All	Existing	As appropriate	Outcome 1, 2, 3 & 4
tator	45. Participate in the Taranaki Biodiversity Forum	All	Existing	Annually	Outcome 2, 3, & 4
Facilitator	46. Coordinate possum control and riparian management by private land occupiers on the ring plain	TRC	Existing	Ongoing	Outcome 2 & 4
	47. Use the Accord vision, desired outcomes, priorities and Plan of Action plus supporting information to inform planning and policy processes	All	New	Ongoing	Outcome 1, 2, 3 & 4; Priority 1; 2 & 3
>	48. Continue to regulate activities in public conservation areas and manage native wildlife	DOC	Existing	Ongoing	Outcome 1 & 2; Priority 1; 2 & 3
Regulatory	49. Continue to manage the effects of use and development on fresh water (including wetlands), the coastal marine area and soil conservation through the RMA	TRC	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
~	50. Continue to manage the effects of land use and development on sand dunes, forests and wetlands through the RMA	TLAs	Existing	Ongoing	Outcome 1 & 2; Priority 2 & 3
	51. Continue to manage game birds and sport fisheries	F&G	Existing	Ongoing	Outcome 1

DOC = Department of Conservation; QEII = Queen Elizabeth II National Trust; ETET = East Taranaki Environment Trust; NZHS = Herpatological Society; TLAs = territorial local authorities (district councils); F&G = Fish and Game; TRC = Taranaki Regional Council; TTT = Taranaki Tree Trust; NMMRS = Nga Motu Marine Reserve Society; MAIN = Mapping Analysis and Information Network Trust, New Zealand

### 7. Monitoring and review

# 7.1 Monitoring implementation of the Accord

Implementation of the Accord is the responsibility of Accord partners as per the action plan set out in section 6.2 of the Accord. In relation to their responsibilities, Accord partners will, where they are identified as the lead agency:

- Gather and review information in relation to their organisation on the delivery of activities and projects listed in section 6.2
- Annually meet with Accord partners to discuss progress towards completion of activities and projects listed in section 6.2.

Implementation of the Accord will also be reported by Accord partners to other groups with an interest in biodiversity through the Taranaki Biodiversity Forum.

#### 7.2 New signatories to the Accord

The signatories to the Accord currently represent key local agencies and community groups that have contributed to and agreed to be a signatory to this document. However, it is recognised that there are many other organisations and groups, such as Iwi and hapu, research and educational institutes, and industry that might be interested in becoming a signatory to the Accord over its life.

The addition of new signatories represents a potentially significant change to the Accord. When other parties indicate they are interested in being a signatory, Accord partners will undertake an interim review of the Accord to consider the matter (refer section 7.3 below).

#### 7.3 Review of the Accord

This Accord is a ten-year Accord. The Accord will remain in force until 30 June 2012. However, to ensure the Accord continues to be relevant and up-to-date, Accord partners will commence an interim review:

- Where relevant circumstances have changed to a significant extent since the commencement of the Accord, including the addition of new parties seeking to be a signatory
- Every five years to assess the efficiency and effectiveness of the Accord.

A review of the efficiency and effectiveness of the Accord will include:

- An assessment of the efficiency of the Accord in relation to the extent to which Accord actions were implemented (i.e. did we do what we said we would do)
- An assessment of the effectiveness of the Accord in relation to achieving the desired outcomes and addressing the priorities
- A report to the Taranaki Biodiversity Forum on the relevance, efficiency and effectiveness of the Accord.

Any amendment to the Accord will be subject to the agreement of Accord partners and reported to the Taranaki Biodiversity Forum.

For further information on the Accord, please contact the Biodiversity Section of the Taranaki Regional Council on:

Telephone (06) 765 7127 or Email info@trc.govt.nz.

### **Definition of terms**

This section provides the meanings for terms used in the Accord.

**Accord** refers to this document, which sets out a statement of intent between Accord partners on an agreed vision, outcomes, priorities and actions for biodiversity in the Taranaki region.

Accord partners refers to local agencies and groups that are signatories of this Accord (refer section 1.3 of this Accord) and have agreed to contribute to the achievement of the Accord vision and objectives, give effect to its principles and priorities, and its implementation.

Active management refers to physical works and action on land for the purposes of maintaining and enhancing biodiversity values. Active management includes species recovery programmes, habitat restoration and sustained weed and pest control.

**Areal** refers to an area.

At risk means a species facing a longer-term risk of extinction in the wild (either because of severely reduced or naturally small population size or because the population is declining but buffered by either a large total population or a slow rate of decline) as identified in the New Zealand Threat Classification System lists.

**Biological diversity (biodiversity)** means the variability among living organisms and the ecological complexes of which they are a part, including diversity within species, between species, and of ecosystems.

Capacity refers to the technical and technological ability, skills, knowledge and organisational structure required to undertake management actions, and to collect and interpret information.

Conservation refers to the preservation and protection of natural and historic resources for the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options of future generations.

Core habitat refers to specific areas of habitat or habitat types which are essential for the long-term survival and or recovery of a species. For resident species, this means sufficient suitable habitat area to maintain a viable breeding population, whereas for migratory and transient species, this means sufficient suitable habitat area to support temporary populations (e.g. wetland areas for migratory wading birds).

Ecosystem refers to an ecological community together with its environment, functioning as a unit, an interacting system of living and non-living parts such as sunlight, air, water, minerals and nutrients.

**Endangered species** means species in danger of extinction and whose survival is unlikely if the casual factors continue operating.

**Endemic species** refers to an indigenous species which breed only within a specified region or locality and is unique to that area.

**Exotic** means introduced, not native: See Introduced species.

Formally protected refers to the application of legal mechanisms, which provide long-term security of a geographically defined area for nature conservation purposes or to maintain biodiversity values. It may be either publicly or privately owned.

**GIS** refers to geographic information system.

**Habitat** refers to the place or type of area in which an organism naturally occurs.

**Hapu** refers to a Maori family or district groups, communities, a sub-tribe.

**Indigenous** means native to New Zealand.

Indigenous species means a species or genetic variant found naturally in New Zealand, including migrant species visiting New Zealand on a regular or irregular basis.

Indigenous vegetation means any local indigenous plant community through the course of its growth or succession consisting primarily of native species and habitats normally associated with that vegetation type, soil or ecosystem or having the potential to develop these characteristics. It includes vegetation with these characteristics that has been regenerated with human assistance following disturbance or as mitigation for another activity, but excludes plantations and vegetation that have been established for commercial harvesting.

**In-situ conservation** refers to the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings.

**Introduced species** refers to a plant or animal species which has been brought to New Zealand by humans, either by accident or design. A synonym is 'exotic species'.

Invasive species refers to introduced animal or plant species that can adversely affect indigenous species and ecosystems by altering genetic variation within species, or affecting the survival of species, or the quality or sustainability of natural communities.

**Invertebrate** refers to an animal without a backbone or spinal column, including insects, spiders, worms, slaters, corals, sponges and jellyfish. *See vertebrate*.

**Iwi** refers to tribe or grouping of Maori people descended from a common ancestor(s).

**Key Native Ecosystems** refers to terrestrial (land) areas identified by the Taranaki Regional Council as having regionally significant ecological values.

**Land environment** means a region or area (environmental domain) classified under the Land Environments of New Zealand system.

Land Environments of New Zealand or LENZ is a classification of environments mapped across New Zealand's landscape, derived from a comprehensive set of climate, landform and soil variables known to influence the distribution of species.

**Mainland island** refers to an area of land on mainland New Zealand, isolated by means of fencing or geographical features, and intensively managed for the purpose of protecting and restoring habitats and ecological processes.

Maintenance means 'no net loss' as achieved by the protection of existing areas and habitats and/or the restoration and enhancement of areas and habitats as may be required through biodiversity off-sets or other initiatives.

Migratory species refers to those species that visit a region on a regular basis as part of their migratory patterns, but which do not breed in that region. Certain habitat types in Taranaki may be of significant importance to maintain viable populations of migratory species, e.g., wetlands for migrating wading birds.

**Montane** means growing or living in a mountainous region.

Native species: See Indigenous species.

**Public conservation land** refers to land administered by the Department of Conservation for whatever purpose. It excludes land administered under conservation legislation by other parties.

Regionally distinctive species includes both threatened and non-threatened species that are worthy of protection because they are largely confined to the region, are particularly uncommon in this part of the country, or because Taranaki represents the limit of their national distribution range.

**Resident species** refers to those species that spend the majority of their time in a region, and maintain their breeding populations in that region.

**Resilience** refers to the ability of a species, or variety or breed of species, to respond and adapt to external environmental stresses.

**Restoration and enhancement** means the active intervention and management of degraded biotic communities, landforms and landscapes in order to restore biological character, ecological and physical processes.

**Significant Natural Areas** refers to natural areas identified as being significant in the *New Plymouth District Plan* and the *South Taranaki District Plan*.

**Species** refers to a group of organisms capable of interbreeding freely with each other but not with members of other species.

**Sustainable use** refers to the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.

Threatened land environments refers to land environments, defined by Land Environments of New Zealand at Level IV (2003), that have 20 per cent or less remaining in indigenous vegetation cover.

Threatened species means a species facing a very high risk of extinction in the wild and includes nationally critical, nationally endangered and nationally vulnerable species as identified in the New Zealand Threat Classification System lists.

**Transient species** refers to those species that visit a region from time to time, but do not breed in that region.

Vascular plants, include ferns, flowering plants and trees, but do not include mosses and liverworts.

**Vertebrate** refers to an animal with backbone; amphibians, reptiles, birds, mammals and fish. *See Invertebrate*.

Wetland includes permanently or intermittently wet areas, shallow water, and land water margins that support a natural ecosystem of plants and animals that are adapted to wet conditions.

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# Appendix I: Threatened and historically rare ecosystems

Table 4: Land Environments of New Zealand (LENZ): threat classifications relating to Taranaki

Threat category	Acutely threatened	Chronically threatened	At risk	Critically under protected	Under protected	No threat category
Criteria	<10% native cover	10 – 20% native	20 – 30% native	>30'	% native cover remain	ing
	remaining	cover remaining	cover remaining	<10% legally protected	10 – 20% legally protected	>20% legally protected
LENZ IV in Taranaki	A5.1c, A5.3a, A5.3b, A7.2c			A6.1c		A1.1a
		B1.3a				
	C1.2a, C1.3a, C2.1a, C3.1a, C3.1b, C3.2b, C3.2c, C3.2d	C1.1a				C1.1b, C1.1c
		D2.1b	D2.2a, D2.3a		D2.3c	D1.1c, D1.1e, D2.1a, D2.3b, D4.1c, D4.1d
	F4.1a, F5.2a, F5.2b, F5.2c, F6.1d, F7.1c	F1.1e, F1.4a	F1.1c, F1.3a, F7.1b, F7.2a, F7.3c		F6.1a	F1.1b, F1.1d, F1.3b, F5.2c, F5.3a, F5.3b, F6.2a, F7.2b, F7.3a
	G3.3a		G1.1d		G5.1a	
	H1.3a, H3.1b	H1.2b, H1.2c			H1.3b	H2.2a, H4.1a, H4.1b, H4.1c,
	J4.1c, J4.2a	J4.2b, J4.3b			_	
						P4.1b, P4.1c, P7.1a, P7.1b, P7.1c, P8.2a, P8.2b

 $For a description of LENZ \ classifications, refer to website \ \underline{http://www.landcareresearch.co.nz/databases/lenz/products\_techguide.asp}.$ 

Table 5: Historically rare ecosystems

Coastal systems	Inland and alpine systems with raw or recent soils	Semi-subterranean	Other inland systems
Dune deflation hollows	Inland saline (salt pans)	Sinkholes	Volcanic dunes
Shell barrier beaches (Chenier	Strongly leached terraces & plains	Cave entrances	Calcareous screes
plain)	("Wilderness" vegetation)		Ultramafic screes
Coastal turf	Cloud forest		Young tephra (<500 years) plains
Stony beach ridges	Geothermal systems		and hillslopes
Shingle beaches			Recent lava flows (<1000 years)
Coastal rock stacks			Old tephra (>500 years) plains (=
Coastal cliffs on silicic bedrock			"frost flats")
Coastal cliffs on silicic-intermediate			Frost hollows
rock			Boulderfields of silicic-rocks
Mafic coastal cliffs			Boulderfields of silicic-intermediate
Calcareous coastal cliffs			rocks (non-volcanic)
Ultramafic sea cliffs			Volcanic boulderfields
Marine mammal influenced sites			Debris flow or lahar
			Boulderfields of calcareous rocks
			Ultramafic boulderfields
			Cliffs, scarps & tors of silicic rocks
			Mafic cliffs, scarps & tors
			Calcareous cliffs, scarps & tors
			Ultramafic cliffs, scarps & tors
			Ultramafic hills
			Inland sand dunes
			Inland outwash gravels
			Braided riverbeds
			Granitic sand plains
			Granitic gravel fields
			Sandstone erosion pavements
			Limestone erosion pavements

The following list has been compiled from scientific research undertaken by Landcare Research. The ecosystem types listed are not necessarily found in all regions or districts, and some will be protected on public conservation land. For further information on historically rare ecosystems, refer to website <a href="http://www.biodiversity.govt.nz/pdfs/protecting-our-places-detail.pdf">http://www.biodiversity.govt.nz/pdfs/protecting-our-places-detail.pdf</a>.

# Appendix II: Threatened, at risk and regionally distinctive species

Table 6: Threatened, at risk or regionally distinctive native animal species in Taranaki

Clas	-16:4:	Threatened, at risk or regiona	Ily distinctive species in Taranaki	Resident (R) or	Adequacy of
Classification Nationally		Common name	Scientific name	migratory (M) populations	current protection (at some sites)
	Nationally critical	Black stilt	Himantopus novaezelandiae	М	Unknown
	critical	Grey Duck	Anas superciliosa superciliosa	R	Adequate
		Killer whale	Orcinus orca	М	Unknown
		Maui's dolphin	Cephalorhynchus hectori maui	М	Adequate
		New Zealand shore plover	Thinornis novaeseelandiae	M	Unknown
		White heron	Ardea modesta	M	Unknown
	Nationally endangered	Australasian bittern	Botaurus poiciloptilus	R	Poor
	<b>g</b>	Black fronted tern	Sterna albostriata	M	Adequate
		Northern lesser short tailed bat	Mystacina tuberculata aupourica	R	Unknown
•	Nationally vulnerable	Banded dotterel	Charadrius bicinctus bicinctus	M	Unknown
		Blue duck (whio)	Hymenolaimus malachorhynchos	R	Poor
g		Bush falcon <sup>1</sup>	Falco novaeseelandiae "bush"	R	Adequate
Threatened		Caspian Tem	Hydroprogne caspia	R	Unknown
Ę		Long tailed bat (Nth Island)	Chalinolobus tuberculata	R	Unknown
		New Zealand dabchick	Poliocephalus rufopectus	R	Poor
		North Island kaka <sup>1</sup>	Nestor meridionalis septentrionalis	R	Adequate
		North Island kokako	Callaeas cinerea wilsoni	R	Poor
		Northern NZ dotterel	Charadrius obscurus aquilonius	R	Poor
		Pied shag	Phalacrocorax varius varius	R	Unknown
		Red-billed gull	Larus novaehollandiae scopulinus	R	Adequate
		Reef heron	Egretta sacra sacra	R	Unknown
		Southern Nth Island speckled skink	Oligosoma aff. infrapunctatum	R	Poor
		Western North Island brown kiwi	Apteryx mantelli	R	Adequate -
		Wrybill	Anarhynchus frontalis	М	Adequate

Classification		Threatened, at risk or region	nally distinctive species in Taranaki	Resident (R) or migratory (M)	Adequacy of	
JIASSII	iicatioii	Common name	Scientific name	populations	current protection (at some sites)	
D	Declining	Black katipo spider	Latrodectus atritus	R	Poor	
		Bluegill bully	Gobiomorphus hubbsi	R	Poor	
		Brown mudfish <sup>1</sup>	Neochanna apoda	R	Adequate	
		Flesh-footed shearwater	Puffinus carneipes	R	Adequate	
		Freshwater crayfish	Paranephrops planifrons	R	Adequate	
		Freshwater mussel	Hyridella menziesii	R	Poor	
		Giant kokopu	Galaxias argenteus	R	Adequate	
		Inanga	Galaxias maculatus	R	Adequate	
		Katipo spider	Latrodectus katipo	R	Poor	
		Koaro	Galaxias brevipinnis	R	Adequate	
		Lamprey <sup>1</sup>	Geotria australis	R	Unknown	
		Longfinned eel	Anguilla dieffenbachii	R	Adequate	
		Moth Notoreas 'Taranaki coast'1	Notoreas "Taranaki Coast"	R	Poor	
		New Zealand pied oystercatcher	Haematopus finschi	М	Unknown	
		New Zealand pipit	Anthus novaeseelandiae novaeseelandiae	R	Adequate	
		North Island fernbird <sup>1</sup>	Bowdleria punctata vealeae	R	Adequate	
		North Island rifleman	Acanthisitta chloris granti	R	Poor	
		North little blue penguin	Eudyptula minor iredalei	R	Poor	
		Ornate skink	Cyclodina ornata	R	Poor	
		Pied stilt	Himantopus himantopus leucocephalus	R	Adequate	
AL IISK		Redfin bully	Gobiomorphushuttoni	R	Adequate	
¥		Short jawed kokopu <sup>1</sup>	Galaxias postvectis	R	Adequate	
		Sooty shearwater	Puffinus griseus	М	Adequate	
		Striped skink*	Oligosoma striatum	R	Poor	
		Torrentfish	Cheimarrichthys fosteri	R	Unknown	
		Wellington green gecko	Naultinus e. punctatus	R	Unknown	
		White-fronted tern	Sterna striata striata	R	Adequate	
R	Recovering	Brown teal	Anas chlorotis "North Island"	R	Adequate	
	•	Variable oystercatcher	Haematopus unicolor	R	Poor	
-		Goldstripe gecko <sup>1</sup>	Hoplodactylus chrysosireticus	R	Poor	
R	Relict	Pacific gecko	Hoplodactylus pacificus	R	Unknown	
	tonot	Spotless crake <sup>1</sup>	Porzana tabuensis plumbea	R	Poor	
N	Naturally	Amphipod Tara Taranaki	Tara Taranaki	R	Adequate	
	incommon	Banded rail	Gallirallus philippensis assimilis	R	Unknown	
		Black shag	Phalacrocorax carbo novaehollandiae	R	Adequate	
		Carabid beetle	Brullea antartica	R	Unknown	
		Giant land snail 1	Powelliphanta 'Egmont'	R	Adequate	
		Ground beetle	Mecodema angustulum	R	Unknown	
		Little black shag	Phalacrocorax sulcirostris	M	Adequate	
		Little shaq	Phalacrocorax melanoleucos	M	Adequate	
		Long-tailed cuckoo	Eudynamys taitensis	R	Unknown	
		Royal spoonbill	Platalea regia	M	Unknown	
Region	nally	Grey-faced petrel	Pterodroma macroptera gouldi	R	Adequate	
listinc	tive (but not	Scarab beetle	Odontrio velutina	R	Unknown	
nreate	ned or at risk)	Tadpole shrimp	Lepidurus apus	R	Poor	
		Yellow crowned parakeet	Cyanoramphus auriceps	R	Poor	

 $<sup>^{\</sup>rm 1}\,\text{Nationally}$  threatened species that are also considered to be regionally 'distinctive'.

Table 7: Threatened, at risk or regionally distinctive native plant species in Taranaki

Classification*		Threatened, at risk or regionally distinctive species in Taranaki		Adequacy of current protection
		Common name	Scientific name	(at some sites)
	Nationally		Crassula peduncularis	Poor
ď	critical	New Zealand hazel	Pomaderris apetala subsp. maritima	Adequate
		Swamp hood orchid	Pterostylis micromega (Hook f.)	Poor
			Sebaea ovata	Unknown
	Nationally endangered		Myosotis brevis	Poor
		Forget-me-not	Myosotis petiolata var. pansa <sup>1</sup>	Poor
M eatelled		Tussock sedge	Schoenus carsei	Unknown
1	Nationally vulnerable	Minute succulent	Crassula manaia <sup>1</sup>	Poor
<u> </u>		Wood rose	Dactylanthus taylorii <sup>1</sup>	Adequate
			Gratiola concinna	Poor
		Napuka, Titirangi	Hebe speciosa	Poor
		Coastal cress	Lepidium flexicaule	Poor
		Cooks scurvy grass	Lepidium oleraceum	Adequate
		Dwarf musk	Mazus novaezeelandiae subsp	Unknown
		New Zealand water cress	Rorippa divaricata	Unknown
	Declining	Yellow mistletoe	Alepis flavida <sup>1</sup>	Unknown
		Kirks daisy	Brachyglottis kirkii var. kirkii <sup>1</sup>	Adequate
		Sea sedge	Carex litorosa	Unknown
		Sand coprosma	Coprosma acerosa	Unknown
		Sand spike sedge	Eleocharis neozelandica	Unknown
		Shore spurge	Euphorbia glauca	Poor
			Gunnera arenaria	Unknown
		Leafless rush	Juncus pauciflorus	Unknown
			Leptinella tenella	Unknown
		Pygmy forget-me-not	Myosotis pygmaea var. pygmaea	Unknown
		Stout water milfoil	Myriophyllum robustum	Adequate
		Scarlet mistletoe	Peraxilla colensoi	Poor
		Red mistletoe, pikirangi	Peraxilla tetrapetala	Poor
		Sand daphne	Pimelea aff. arenaria	Poor
		Kirk's kohuhu	Pittosporum kirkii	Adequate
		King fern	Ptisana salicina <sup>1</sup>	Adequate
;		Mud buttercup	Ranunculus limosella	Poor
		Dwarf buttercup	Ranunculus recens var. recens <sup>1</sup>	Poor
		Native anglelica	Scandia rosifolia <sup>1</sup>	Poor
			Selliera rotundifolia	Unknown
F	Recovering	N/A	N/A	N/A
F	Relict	Pingao	Desmoschoenus spiralis <sup>1</sup>	Adequate
		Swamp leek orchid	Prasophyllum hectorii	Unknown
		Native sowthistle	Sonchus kirkii	Poor
	Naturally uncommon	Kohurangi	Brachyglottis turneri <sup>1</sup>	Poor
l		Turf carrot	Chaerophyllum "minute flower"	Unknown
			Crassula mataikona	Unknown
		Creeping button daisy	Leptinella dispersa ssp. dispersa	Unknown
			Lindsaea virdis <sup>1</sup>	Unknown
		Mt Egmont shrub mahoe	Melicytus drucei <sup>1</sup>	Adequate
		Spider orchid	Nematoceras rivularis "Te Henui"	Unknown
		Shrub daisy	Olearia quinquevulnera	Adequate
		New Zealand spinach	Tetragonia tetragonioides <sup>1</sup>	Poor
		Sun orchid	Thelymitra formosa <sup>1</sup>	Unknown
	eficient	Spider orchid	Nematoceras rivulare	Unknown

Classification*	Threatened, at risk or regionally distinctive species in Taranaki		Adequacy of current protection
	Common name	Scientific name	(at some sites)
Taxonomically ndeterminate	Mud buttercup	Limosella "Manutahi" 1	Poor
Regionally	Bulbophyllum	Adelopetalum tuberculatum	Unknown
istinctive (but not nreatened or at risk)	Jointed fern	Arthropteris tenella	Poor
ireateried or at risk)	Kauri grass	Astelia trinervia	Unknown
	Mangrove	Avicennia marina	Adequate
	Jointed twig rush	Baumea articulata	Unknown
	Pakihi sedge / peat bog sedge	Baumea teretifolia	Unknown
		Blechnum blechnoides	Adequate
		Coprosma x kirkii	Unknown
	'Paritutu' Korokio	Corokia cotoneaster var. paritutu	Adequate
		Corunasylis nuda	Unknown
	Woollyhead	Craspedia 'Otakeho'	Poor
	- Troonymoud	Deparia petersenii	Unknown
	Akeake	Dodonaea viscosa	Adequate
	Neinei	Dracophyllum latifolium	Adequate
	Mountain neinei	Dracophyllum traversii	Adequate
	Wountain Homei	Forstera bidwillii var. densiflora	Unknown
	Cutty grass	Gahnia lacera	Unknown
	Snowberry		Adequate
	Showberry	Gaultheria oppositifolia	Unknown
	Observation with	Hebe corriganii	
	Shore koromiko	Hebe elliptica var. elliptica	Adequate
		Hebe stricta var. egmontiana	Adequate
	Mountain lacebark	Hoheria Iyallii	Adequate
	Green mistletoe	lleostylus micranthus	Adequate
	Swamp millet	Isachne globosa	Unknown
	Grass/flat-leaved rush	Juncus caespiticius	Unknown
	Mangeao, tangeao	Litsea calicaris	Unknown
		Lycopodium cernum	Adequate
	Clubmoss	Lycopodium deuterodensum	Adequate
	Wharangi	Melicope ternata	Adequate
	Northern rata	Metrosideros carminea	Unknown
	Willow-leaved maire	Mida salicifolia	Adequate
	Silver beech	Nothofagus menziesii	Adequate
		Myosotis brevis (syn pygmaea var. minutiflora)	Adequate
	Black beech	Nothofagus solandri	Adequate
	Hard beech	Nothofagus truncata	Adequate
		Olearia albida	Unknown
		Olearia solandri	Unknown
		Olearia townsoni	Unknown
	Parahebe	Parahebe lanceolata	Unknown
	Peperomia	Peperomia urvilleana	Adequate
		Pimelea carnosa	Unknown
	Tawhirikaro	Pittosporum cornifolium	Adequate
	Saltmarsh ribbonwood	Plagianthus divaricatus	Unknown
	Kauri sedge	Schoenus tendo	Unknown
	Swamp maire	Syzygium maire	Adequate
	Sun orchid	Thelymitra aff.paucflora	Unknown
		Thelymitra cyanea	Unknown
		Thelymitra species	Unknown
	Bladderwort	Utricularia dichotoma	Unknown

 $<sup>^{\</sup>rm 1}$  Nationally threatened species that are also considered to be regionally 'distinctive'.

# Appendix III: Taranaki's most valuable habitats for threatened, at risk or regionally distinctive species

