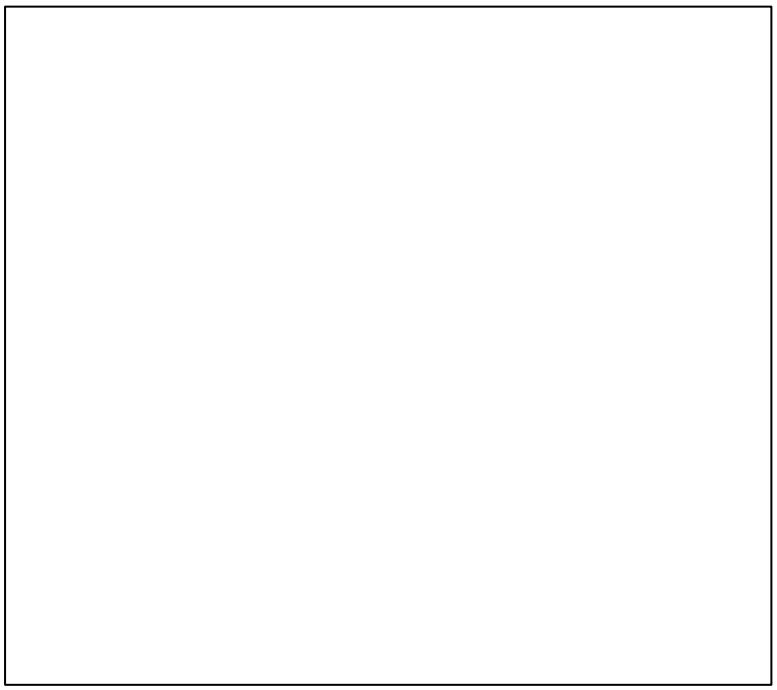
CONSERVATION MANAGEMENT STRATEGY

- **Wanganui Conservancy**
  1997 - 2007

- **Volume 1**



Rain forest near Taumarunui

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PREFACE

Since approval of this Conservation Management Strategy (CMS) in April 1997, a change to the Wanganui Conservancy boundary has been made. This change resulted in the western part of the Ruahine Ranges (formally part of the Hawke's Bay Conservancy) being transferred to Wanganui Conservancy. This boundary change is not identified in the CMS.

The Hawke's Bay Conservation Management Strategy, along with the Ruahine Forest Park Management Plan should be referred to for detailed management direction relating to this additional area.

Structural changes made to the Department during 1997 were also unable to be reflected in this CMS. These changes include the establishment of a new Central Regional Office in Wellington along with the establishment of new Area Offices in the Conservancy. Further detail on the impact of these changes on the CMS can be provided by Departmental offices within the Conservancy.

FOREWORD

Wanganui Conservancy contains a great diversity of landscapes, habitats, plants, animals, and areas of high natural and historic value. It also has a rich cultural tradition of both Maori and European origin. Over time, patterns of human settlement resulted in large areas of natural landscape being transformed, but also leaving significant natural areas intact. In order to undertake its management functions within the Conservancy, the Department draws on conservation traditions derived from both European and, with appropriate advice from Iwi, Maori traditions, to form a unique Wanganui ethic. This ethic is now embraced in the Wanganui Conservancy Conservation Management Strategy (CMS).

The CMS has been prepared in accordance with Part IIIA of the Conservation Act 1987. The Taranaki/Wanganui and Rangitikei/Hawkes Bay Conservation Boards, Tangata Whenua, local authorities and other interested groups and individuals have been consulted during its preparation.

The CMS provides a strategy for the integrated management of all land and marine areas administered by the Department in the Wanganui Conservancy. It also sets out policies which will guide the Department when carrying out other statutory responsibilities, when advocating conservation, in developing relationships with Tangata Whenua, and in working with other statutory agencies, with community and user groups and members of the public.

It sets management directions desired for the Conservancy for the next ten years and beyond and provides a framework for day to day management by Conservancy staff, volunteers, associates and friends.

A CMS is a statutory document which implements general policies and establishes objectives for the integrated management of natural and historic resources. The conduct of some activities on areas administered by the Department can only take place by, and in accordance with the CMS. It must be noted however that a CMS is generally a statement of intent and will not necessarily be applied in every given situation.

Work on the CMS commenced in 1993 with the release of an 'Issues and Options Public Discussion Document' which invited public input on issues to be dealt with in the CMS. A draft CMS was publicly notified in April 1995. Written submissions were received from 365 individuals and organisations. Of these, 49 submitters spoke in support of their submissions at formal hearings before representatives of the Department and the Taranaki/ Wanganui and Rangitikei/Hawkes Bay Conservation Boards.

After giving due consideration to all submissions and other public opinion, the draft was revised and a summary of submissions prepared. These documents were presented to the Taranaki/Wanganui and Rangitkei/Hawkes Bay Conservation Boards for their consideration in April 1996. Changes requested by the two boards, and which were supported by the Department, were incorporated in a revised draft CMS.

In October 1996, the revised draft CMS was recommended to the New Zealand Conservation Authority by the two boards for approval. The Authority consulted the Minister of Conservation and requested further amendments. The amendments were made and this CMS was subsequently approved by the New Zealand Conservation Authority in April 1997.

Sir Duncan McMullin

Chairman
New Zealand Conservation Authority
April 1997

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PART A

1. Introduction

1.1 WHAT IS A CONSERVATION MANAGEMENT STRATEGY?

Section 17D of the Conservation Act 1987, (as introduced by the Conservation Law Reform Act 1990) requires the Department to prepare Conservation Management Strategies (CMSs) for all areas administered by the Department and all natural and historic resources covered by its responsibilities.

A CMS is a statutory document which implements general policies and establishes objectives for the integrated management of natural (including land and species) and historic resources. The conduct of some activities on land administered by the Department can take place only in accordance with the CMS. Those preparing regional and district plans must have regard to any relevant CMS. It must be noted however, that a CMS is generally a statement of intent, and does not over-ride the provisions of legislation, general policy and agreements.

CMSs must identify and describe all protected areas administered by the Department. They are to be given effect to by the Minister of Conservation and the Department.

Cross Reference See Sec 16

Under Section 4 of the Conservation Act 1987, the Department is required to give effect to the Treaty of Waitangi in administration of the Act. A statement on the principles of the Treaty of Waitangi is included as Appendix 1.

Prior to the amendment of the Conservation Act in 1990, by the Conservation Law Reform Act, the Department was required to prepare individual management plans for each of its land units under the Conservation, Reserves, Wildlife and National Parks Acts. These plans were largely unrelated to one another and tended to focus on the specific management issues of individual areas. They did not provide an overall sense of direction for the Department's activities. The CMS, by dealing with issues throughout the Conservancy, provides a broader overview and establishes an overall direction for the Department's activities.

The CMS sets out to answer the following questions:

- What are the Conservancy's conservation objectives for the next ten years and beyond?
- What are the priorities?
- How will they be achieved?

The CMS:

- provides guidance to managers within the Department, conservation boards and to the public about how the Department will manage its natural and historic resources within the Conservancy in the future
- will help to co-ordinate and integrate the Department's functional activities, e.g. animal control and the provision of recreation facilities
- provides a means for resolving conflicts
- makes the Department accountable for its activities and decisions

- guides allocation of the Department's resources, in association with corporate and business planning, to ensure that resources are used effectively and efficiently and
- provides visions for conservation in the Wanganui Conservancy beyond its ten year timespan.

Visions contained in the CMS have been developed after taking into account the aspirations of the community, as expressed at public meetings and in written or verbal submissions made in response to earlier public participation opportunities.

The area covered by the CMS is shown on Figure 1. All areas administered by the Department are identified individually in the Land Inventory and on the maps contained in Volume 2 of this CMS, and are also generally described in Part B of Volume 1, in accordance with Section 17D(7) of the Conservation Act.

The CMS deals with:

- Management of land administered by the Department.
- The management of protected species on all land, regardless of ownership.
- Marine mammal protection, wild animal control, protection of freshwater fisheries, and other issues which affect natural and historic resources in the Conservancy, both on and off land administered by the Department.
- Areas which have high natural or historic values but are currently unprotected and discusses how, in some cases, protection could be achieved.
- The Department's priorities for increasing public awareness of conservation issues.
- Interpretation of natural and historic values on land administered by the Department.
- Priorities and direction for conservation management.

Cross Reference See Sec 44.4

The CMS provides the basis for management planning for all areas administered by the Department, although more detailed conservation management plans (CMPs) may be required for some areas in the future.

See Sec 47.1

It will be linked to the preparation of annual business plans for the Conservancy. The Conservancy Business Plan determines the relative allocation of resources between different activities of the Department for each business year (July to June). An important function of the business plan will be to ensure that the objectives and policies in this CMS are implemented.

1.2 USING THE CMS

This CMS comprises two volumes which should be considered together.

Volume One

Part A: Introduces the CMS and explains its purpose and scope. It gives a brief overview of the Conservancy by outlining its physical characteristics, its natural values and threats and its history. Visions for the future of conservation in the Conservancy are also included.

Part B: Divides the Conservancy into eight geographic places and focuses on the specific values and threats in each of these places. Detailed objectives for the management of natural, historic and recreational values in these places are provided.

Part C: Covers the Department's functional responsibilities. This section establishes broad objectives, identifies priorities, and outlines implementation provisions to achieve these objectives for the whole Conservancy.

Part D: Deals with implementation, review and monitoring of the CMS.

Part E: Contains references.

Part F: Contains the appendices.

Volume Two

Part G: Contains the land inventory which describes every separate unit of land administered by the Department.

Part H: Contains maps at a scale of 1:125,000 which identify all areas administered by the Department within the Wanganui Conservancy along with wildlife refuges, areas covered by protected private land agreements, conservation covenants on private land and walkways.

When referring to specific places:

(1) Look at the alphabetical listing of land administered by the Department at the beginning of Volume Two, Part G ;

(2) A Conservation Unit number is listed near the top left hand side of each inventory form. All land covered by the inventory is identified numerically using this system;

(3) The appropriate land inventory form in Volume Two should be referred to for detail on any particular piece of land;

(4) The form states on what map in Part H the particular piece of land is identified;

(5) The top panel on the inventory form also identifies in which of the eight geographic places the individual piece of land lies;

(6) Part B should be referred to for a description of the geographic place along with the management objectives for that place.

It is important that specific places are not considered in isolation from Part C, functional objectives, as these have general application across most places.

1.3 THE CMS PROCESS

The process for preparing a CMS is set out in the Conservation Act,and is summarised in Appendix 3.

This CMS was prepared after extensive consultation with the Taranaki/Wanganui and the Rangitikei/Hawkes Bay Conservation Boards, Tangata Whenua in the Conservancy and interested members of the public. There has been liaison with adjoining conservancies to ensure that co-ordinated management occurs across conservancy boundaries.

Conservation organisations and interest groups were notified that the CMS was being prepared. An 'Issues and Options Public Discussion Document' was published early in 1993. In excess of 100 submissions were received from a wide cross section of the community in response to this document. A CMS slide show was presented to 41 groups and organisations, including regional and district councils. A draft CMS was notified in April 1995 and 365 submissions received. Hearings were held before representatives of the Department and the two conservation boards. Submissions were summarised in a separate document and taken into account during preparation of the revised CMS. Wherever possible, public aspirations have been reflected. Input received in response to all public participation opportunities has been invaluable.

Tangata Whenua were also consulted prior to and during preparation of the draft CMS. The directions outlined in it are intended to recognise Maori cultural perspectives and serve as a basis for ongoing discussions and decision-making to achieve effective conservation management.

1.4 HOW THE CMS RELATES TO OTHER PLANNING PROCESSES

The Department is involved in many other planning activities apart from the CMS. Some of these activities require the preparation of plans which are prescribed by or issued under specific statutes while others are non-statutory. These include the following:

National Strategies are prepared at a national level by the Department to guide activities of all conservancies in a number of different functional areas. As at February 1997, these included national control plans for possums, wasps and feral goat control and species recovery plans for kokako, kiwi, and blue duck. Plans covering possum and goat control are issued under Section 5(1) (d) of the Wild Animal Control Act 1977, and therfore have statutory effect.

Conservation Management Plans implement conservation management strategies. They establish detailed objectives for the integrated management of natural and historic resources within a specific area and have statutory effect. They apply only where specified by this document (Section 17E(2) Conservation Act). They involve formal public notification and opportunities for public participation. Section 44.4 of this CMS indicates the specific areas of the Conservancy for which a CMP will be prepared. This Strategy will replace most existing management plans prepared under Section 41 of the Reserves Act 1977 or Section 26 and 63C of the Forests Act 1949. The existing management plans for Egmont and Whanganui National Parks must be retained and reviewed in accordance with the National Parks Act.

Functional Strategies are specific to a particular type of activity such as recreation, wild animal control, or the recovery of a threatened species. At the time of writing this CMS, the Conservancy had completed the following functional strategies, the first three of which have statutory effect:

- Fire Control Plan - required by the Forest and Rural Fires Act 1977
- Wild Animal Management Plan - prepared under the Wild Animal Control Act 1977
- Plan for Kaimanawa Wild Horses - prepared pursuant to section 41(1)(e) of the Wildlife Act 1953
- Historic Resources Strategy
- Recreation Strategy
- Old Man's Beard Control Strategy (covering Mangaweka and Palmerston North Field Centres)
- Marine Reserves Strategy
- Species Conservation Strategy
- Public Awareness Strategy
- Interpretation Strategy
- Pest and Weed Operations Plan - Outer Sugar Loaf Islands.

These documents provide guidance for management activities at a detailed level and are available to the public. They are reviewed from time to time as required. Strategies covering additional functional areas are likely to be prepared in the future.

Business Plans are prepared annually by all conservancies. The business plan outlines the conservation programmes proposed by the Conservancy for the financial year. It is guided by the objectives, and priorities of the CMS, but is also subject to Government and national priorities, the availability of resources and natural events and contingencies such as cyclones, drought, fire and the introduction or spread of pests and weeds. The business plan must be able to respond to shifts in Government priorities and targets specified by the CMS. Any significant departures will require amendment of the CMS in accordance with Section 17I of the Conservation Act.

Operational Plans are working plans to guide the operational activities of a particular programme. They are non-statutory, normally informal and "in-house" but can be subject to inspection through the business planning procedure.

1.5 DEPARTMENTAL RESPONSIBILITIES

The functions of the Department are set out in Section 6 of the Conservation Act 1987. They are to:

- Administer the Conservation Act 1987 and the enactments specified in the First Schedule of the Act, as listed under Appendix 4.
- Manage for conservation purposes, all land, and all other natural and historic resources, for the time being held under this Act, and all other land and natural and historic resources which the owner agrees should be managed by the Department.

- Preserve as far as is practicable all native freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats.
- Advocate the conservation of natural and historic resources generally.
- Promote to present and future generations the benefits of conservation of natural and historic resources.
- Prepare, provide, disseminate and publicise educational and promotional material relating to conservation.
- To the extent that the use of any natural or historic resource for recreation or tourism is not inconsistent with conservation, to foster the use of natural and historic resources for recreation and allow their use for tourism.

Under this Act, a function of the Department is to promote the conservation of New Zealand's natural and historic resources. The Department is also empowered and bound by a number of Acts and Regulations which set the framework under which the Department can act. Of these Acts, the Reserves and National Parks Acts also identify further significant functions for the Department. Appendix 4 (Part A) lists and describes acts and regulations the Department administers.

A New Zealand-wide network of field centres and bases, 14 conservancy offices and a head office based in Wellington provides national coverage for the Department of Conservation. Field centres and bases have responsibility for day-to-day management activities in the field, conservancy offices for stategic and operational planning and management across the conservancy while head office has a national policy, research and co-ordination role and manages issues at a national level.

2. Context

2.1 INTRODUCTION

The Wanganui Conservancy encompasses approximately 20,000 km² of land extending from the Mokau River in the north to the Manawatu River in the south and inland to the Ruahine Ranges and Mt Ruapehu. It is divided into seven field centres: New Plymouth, Stratford, Whanganui, Palmerston North, Mangweka, Pipiriki and Taumarunui. The Conservancy and field centre boundaries are shown on Figure 1.

The Department administers approximately 14% of the total land area within the Conservancy. This comprises two national parks and 713 reserves and conservation areas, making up 299,891 ha. In addition, the Department has an administrative role which may involve some active management of Wildlife Refuges, areas covered by Protected Private Land Agreements, and Conservation Covenants on private land, making up a further 1,048ha. Five walkways, totalling 66km, are also managed by the Department, along with one protected marine area. A breakdown of these areas is provided in Figure 2.

Almost all of the Conservancy, apart from the volcanic features, was formed from sedimentary materials such as sandstone, mudstone (known locally as papa), limestone, greywacke, or coastal unconsolidated sand. Much of the land was uplifted from the sea bed, and the resulting marine terraces so characteristic of the Conservancy, continue to be progressively uplifted.

The climate of the Conservancy is largely determined by the major weather systems affecting New Zealand as a whole. There are many microclimates throughout the Conservancy, brought about by topography and location.

Soil fertility varies throughout the Conservancy, and this is reflected in land use patterns. The ring plain of Mount Taranaki/Egmont has been cleared almost entirely for farming and horticulture, along with the Rangitikei and Manawatu Plains Ecological Districts. However, large tracts of native lowland forest remain in the Matemateaonga Ecological District, some of it in Whanganui National Park. Much of this forest has poor public access, where straying farm livestock has yet to be completely excluded and widespread animal and weed pest problems. North Taranaki also retains much native forest, particularly in rugged hill country areas, although coastal forest is a special feature of the region. The coastal Wanganui-Manawatu sand country has been largely modified and its lower fertility soils are now used mainly for exotic forestry. The Moawhango district has been extensively deforested by past fires, and now possesses the largest tussockland in the North Island.

Despite the extensive modification of many areas, the Conservancy contains a great diversity of landscapes, habitats, plants and animals, and areas of high natural and historic values remain. Many of these are on land administered by the Department.

FIGURE 1: WANGANUI CONSERVANCY

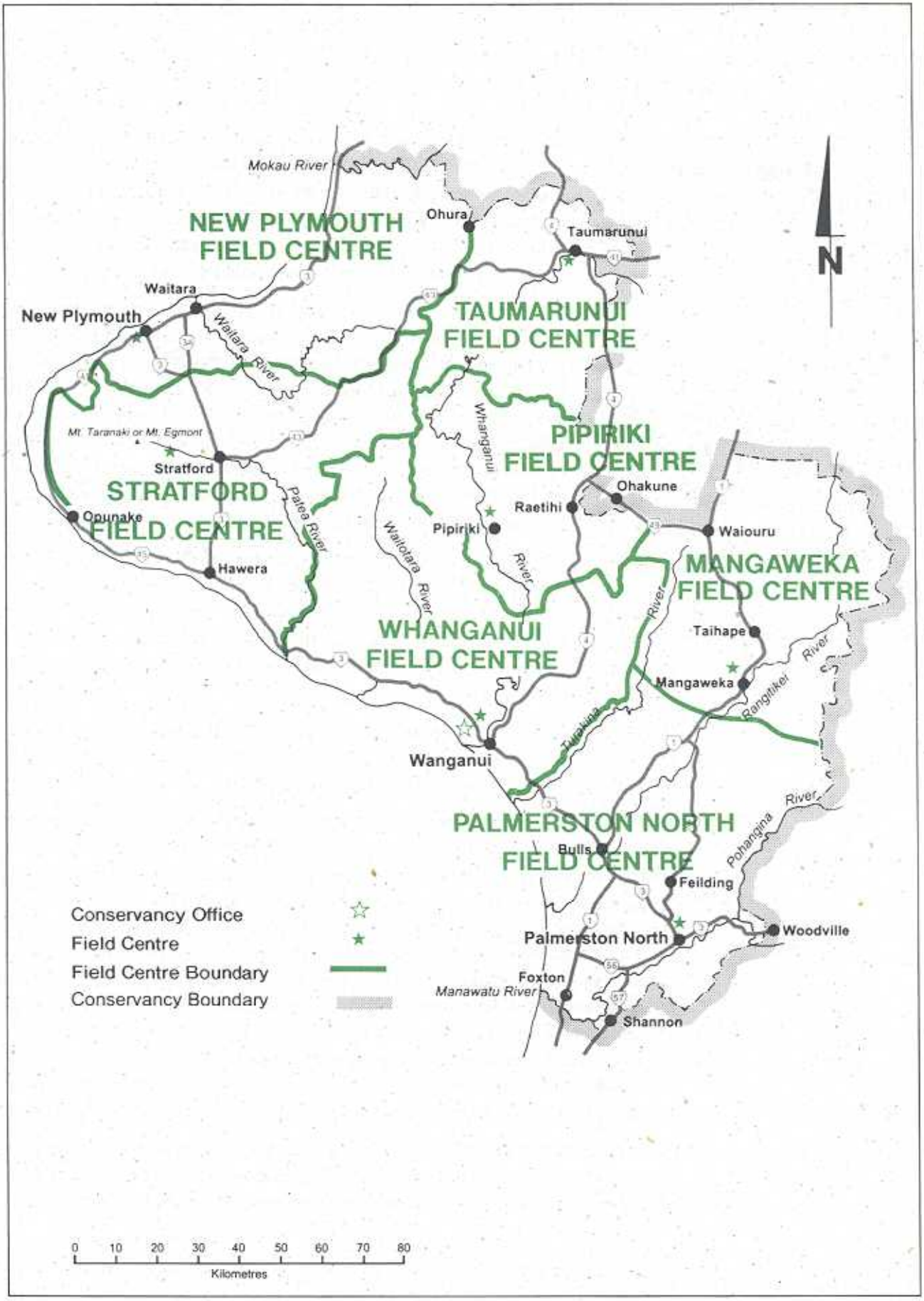


FIGURE 2: WANGANUI CONSERVANCY - LAND AREAS ADMINISTERED BY THE DEPARTMENT

AREA CLASSIFICATIONS	NUMBER	HECTARES
National Parks (National Parks Act)	2	108,085
Conservation Areas (Conservation Act)	361	166,596
Reserves (Reserves Act)	346	25,070
Reserves (Wildlife Act)	4	140
Total	**713**	**299,891**
LAND AREAS WHERE THE DEPARTMENT HAS AN ADMINISTRATIVE ROLE		
Wildlife Refuges	4	252
Protected Private Land Agreements	12	166
Conservation Covenants	29	630
Total	**45**	**1,048**
Walkways (2 gazetted)	5	66km

(As at April 1997)

2.2 FORESTS

Native forests are the most extensive natural areas of the Conservancy. Those which once covered the lowland plains and terraces, the Taranaki ring plain, and hill country with gentle to moderate slopes have been cleared or have been reduced to isolated, often small remnants. This leaves a broad, near-continuous tract of native forest on the rugged hill country that extends from the coast in North Taranaki through the country inland of Stratford to the Whanganui River. Egmont National Park and the upper Rangitikei River catchment contain other large areas.

(a) Inland Taranaki-Wanganui Forests

Forests of the inland Taranaki-Wanganui country are relatively uniform in composition and, apart from beech forests on narrow ridges, are mostly composed of broadleaved trees. Tawa and kamahi are the most common, with frequent northern rata, hinau, rewarewa, and mahoe. Podocarps are scattered throughout, with frequent rimu, and some totara, kahikatea and matai. The forest tract has enclaves of hill country farmland (much being converted to pines recently), and there are many areas of secondary growth forest and scrub where land was once farmed. Near the northern coast the forest is more diverse, with kohekohe, puriri, tanekaha, karaka, and mangeao. The total area of these inland Taranaki-Wanganui forests, including private lands, is about 322, 000 ha.

Today, the natural character of these forests is being lost to the depredation of two main agents, goats and possums, although feral cattle were the most common forest browsers in early times. After successively eating out their preferred food

plants over the past 40 years, possums are now causing widespread deaths of kamahi and rata. Goats preceded possums in some areas, or arrived later in others. Most are descended from goats which escaped from their intended roles to control weeds on farms. In forest, goats eliminate many ground cover plants and shrubs, and the combined browsing of goats and possums is leading to total forest collapse. This damage is still being compounded by uncontrolled domestic stock in many areas, and several species of deer are beginning to spread, with each having its own kind of impacts.

Despite changes, the hill country forests are still home to one of the country's three major populations of North Island brown kiwi, large numbers of bats and robins, occasional New Zealand falcon, kaka and kakariki and, very locally, kokako. This area is the southern limit for a number of native tree species and other plants, including mangeao and neinei. Nationally threatened plants, including king fern, *Dactylanthus* and mistletoes, occur very locally.

Cross Reference
See Secs 11.5 and 13.5

Control of browsing mammals is made difficult by the large area and very rugged terrain. Access is often difficult, enclaves of private land produce a very long boundary to the land for which the Department has administrative control (this makes total fencing very expensive), and aerial possum poisoning is not accepted by some adjoining landowners and other people.

In the early 1990s, the Department carried out aerial poisoning of possums in three priority areas of this large forest tract. These were Moki and Makino forests to enhance kokako habitat, Whitecliffs forest to protect the Conservancy's largest area of coastal and semicoastal forest, and Taramoukou, an inland area of kohekohe forest. Some goat control accompanied each of these operations. There is also regular culling of goats in the most visited parts of Whanganui National Park, including the Whanganui River trench.

(b) Upper Rangitikei forests

Podocarp and broadleaved forest in a gorge of the Rangitkei River.

Forest in the northwest of the Ruahine Ranges, but outside the Ruahine Forest Park, lies in Wanganui Conservancy. The largest portion is controlled by the Trust and is centred on . To its northwest is Hihitahi Sanctuary and several smaller reserves, each isolated by surrounding farmlands. Most of these forests are on limestone or sandstone, with deep gorges, cliffs, steep slopes and flat terraces and plateaux. They contain some of the most diverse forest types in the Conservancy, with many tree and shrub species. Kaka, blue duck, falcon, large land snails *(Powelliphanta)*, and threatened plants that include *Dactylanthus*, mistletoes, and several divaricating shrubs are in these forests.

Forests of Hihitahi and Aorangi are dominated in places by kaikawaka (native cedar) with much Hall's totara. Hihitahi has been well-known for several decades as an area with animal threats. In the past, large numbers of red deer ate out the broadleaved trees and shrubs which were replaced by thickets of unpalatable horopito (pepperwood). The many dead kaikawaka and Hall's totara have been attributed to natural deaths of old trees, or drought or other climatic factors. Recent work, however, has shown that possum browsing leads to the death of both species, although other factors

may pre-dispose trees to succumb. Possums also eat seedlings of many other broadleaved trees and shrubs which might otherwise have replaced some horopito after hunters reduced deer numbers. Weeds also pose threats, the most serious being old man's beard which is rampant in forest remnants down river from the large tracts of forest.

The Department reduced possum numbers in Hihitahi Sanctuary and several nearby reserves in 1992 by an aerial 1080 poison drop. Annual maintenance has followed.

Cross Reference
See Secs 2.4(c) and 10.5

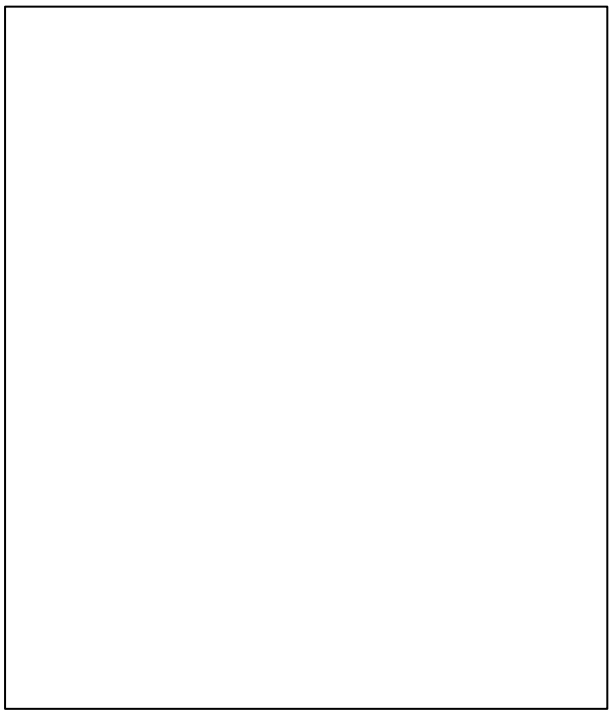
This part of the Conservancy also has podocarp forests, mostly of kahikatea and matai, growing on deep soils of terraces and toe-slopes. Divaricating shrubs are a significant part of the understoreys. The Aorangi area has stands of red, black and mountain beech, montane forest with mountain toatoa and pink pine, and scrub, as well as wetlands.

The natural absence of some otherwise widespread trees of the Conservancy is a feature of the upper Rangitikei forests. Kamahi, tawa, hinau, northern rata, and rewarewa are some of the absent species.

(c) Egmont National Park

See Sec 12.5.1

Clearance of the land surrounding the volcano of Mt Taranaki /Egmont and the Pouakai and Kaitake Ranges leaves the National Park with nearly all the forest remaining on the ring-plain.



Mt Taranaki / Egmont shows an altitudinal sequence of vegetation from lowland forest to alpine herbfields.

It has intact altitudinal sequences of forest from lowland zones to a treeline at some 1200m above sea level, but the coastal and semi-coastal portions of past sequences are now only tiny fragments outside the National Park. The park's forests contain threatened birds such as brown kiwi, and blue ducks have bred after being reintroduced to the park. Some plants and invertebrates are endemic to the park's forests and forest margins.

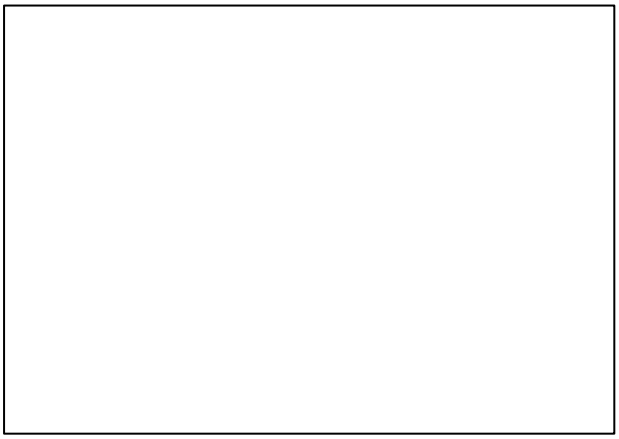
The park makes an interesting comparison with the forests of inland Taranaki and the upper Rangitikei, in terms of animal control. Intensive goat control began in the 1960s, and annual kills are now about equal to the natural growth of the population. Sub-alpine scrub that was largely dead in the 1960s has now almost recovered and forest understoreys, once dominated by horopito, are now dense and diverse. Total eradication of goats is feasible, and might be attempted if re-invasion from farms could be prevented.

As in the inland Taranaki forests, goat control is only part of the answer to restoring the forests of the park. Here, too, possums have devastated the canopies of the rata rimu kamahi forests. On the Kaitake Range, for example, many previous kamahi areas are now dominated by tree ferns. Large-scale possum control has been the only way to arrest this trend. There was total coverage of the park with aerially applied 1080 in 1993 and 1994. It is still too early to say whether the possum control will allow forest canopies to recover their former

splendour, but monitoring is continuing at various levels to try to detect improvements in the forest. Response of species such as Hall's totara has been encouraging.

(d) Lowland forest remnants

Despite their large areas, the main forest tracts do not contain the full range of indigenous biodiversity of forest ecosystems in the Conservancy. There are many forest species that are known only in some of the many forest remnants that are now isolated as islands in a sea of pasture. All the forests of the Manawatu and Rangitikei lowlands and Taranaki ring plain are remnant patches. These remnants range in size from several hundred hectares to small groves of native trees. Each of these is important as a representative piece of the vegetation history of the district in which it lies. Each is important in preserving indigenous landscape elements, especially in districts where little native vegetation remains. Collectively, the remnant forests provide habitat stepping stones for birds and other mobile animals.



A forest remnant protected from grazing animals by fencing (Ngaurukehu Scientific Reserve).

Managing remnants to keep their natural character and indigenous species poses different problems from those in the large forest tracts. Possums are still a threat, but their control is often easier because good access gives more options. Ring-fencing is usually a practical option to exclude other browsing mammals. However, small remnants are much more vulnerable than extensive forests to invasion by exotic weeds. Old man's beard is seen as a threat and receives most attention, but other vines such as banana passionfruit and cathedral bells, woody shrubs including cotoneaster, elderberry and cherry laurel, and ground smothering herbs such as wandering willie are all widespread.

(e) Tussocklands

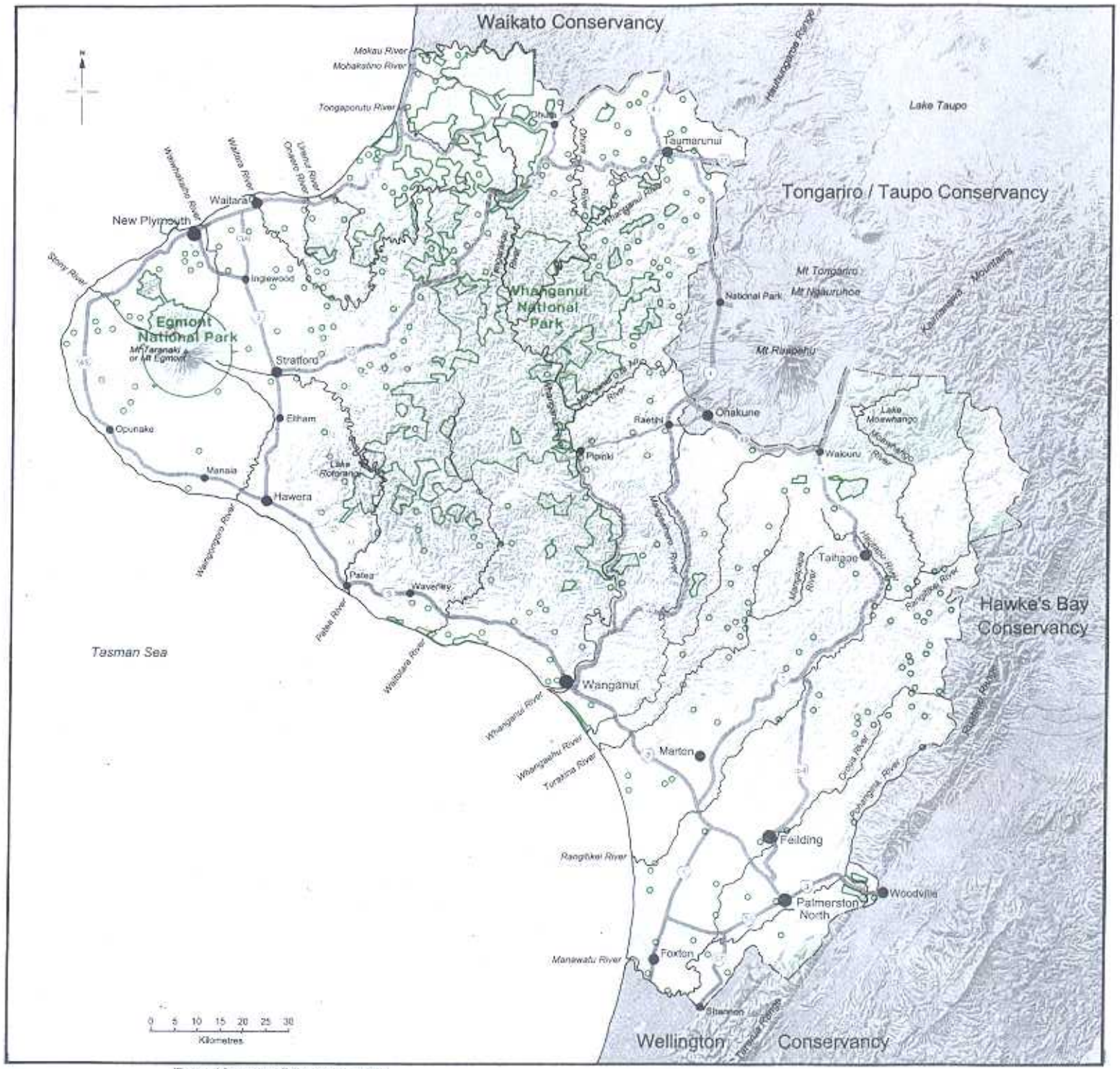
Cross Reference
See Sec. 20.5.3(c)

Wanganui Conservancy has the largest remaining area of red tussock grassland in the North Island. Most of this occurs in the northeast, in the Moawhango Ecological District. Shorter stature silver and hard tussocks are often mixed with red tussock, or may be dominant in the same general area, and a great variety of other indigenous plants occurs among them. Tussock grasslands also provide significant wildlife habitat for species such as the New Zealand falcon, pipit, banded dotterel and lizards.

Very little tussock grassland is in reserves; the largest tracts are on land administered by the Department of Defence at Waiouru and in the northwest Ruahine Range, mostly on land belonging to the Trust. Where land has not been cultivated and oversown, nor too frequently burnt or heavily grazed, there are still scattered patches of red tussock on steep slopes and wetland edges on farms and along roadsides in this part of the Conservancy. Maintaining tussock grasslands poses special problems, because most are on land which was once montane forest, removed by fires. Even without the added problems of weeds, wild horses, other grazing animals and human disturbance, tussock grasslands naturally revert to shrubland and finally forest.

Figure 3

Wanganui Conservancy Overview



Land Administered by the Department

Indigenous Vegetation

Wanganui Conservancy CMS - April 1997 - Contest

Department of Conservation
Te Papa Atawbai

Grasslands, dominated by red tussock, also occur in Egmont National Park. These occur as a narrow 500m wide belt between 1400m and 1600 m above sea level on Mt Taranaki/Egmont. Tussocklands also cover the high peaks and poorly drained tops of the Pouakai Range and dominates the .[11] These seem to be more stable than those of the northeast, being on land which is either too high or too wet for most indigenous shrubs.

(f) Shrublands

Scattered throughout the Conservancy are indigenous shrublands. These can be regarded as being either temporary or permanent. Temporary shrublands are mostly dominated by manuka and are common in the inland hill country of Taranaki-Wanganui. In the northeast of the Conservancy, manuka, or on colder sites, monoao, species of *Hebe* and shrub daisies, replace tussock grasslands. Permanent shrublands are quite variable, and range from salt tolerant coastal shrubs to leathery-leaved sub-alpine shrubs above the natural treeline of Egmont National Park. Inland cliffs can have quite mixed shrub communities, and shrubs also occur in swamps and around the fringes of lakes and estuaries.

Each kind of shrubland is also the habitat of other indigenous species, including brown kiwi in the inland manuka scrub and fernbirds among shrubs of wetlands. Lizards, orchids and even some of the associated shrub species themselves are among the threatened species in various kinds of shrublands.

2.3 COASTAL ENVIRONMENT

(a) Marine

The Wanganui Conservancy has a coastline of 315 km, which for most of its length, is exposed with high energy marine systems. It embraces a wide diversity of geomorphological landforms. Sandy beaches are the most common foreshore type throughout, although boulder and cobble beaches of volcanic origin occur around Cape Egmont and North Taranaki. Siltstone cliffs dominate the coastline north of Wanganui. The most distinctive coastal cliffs are found in North Taranaki where the 'Whitecliffs' extend to over 200m in height and are a well known scenic feature. Between the Whanganui and Manawatu Rivers, sand dunes dominate the coast.

Intertidal reefs are uncommon. Large, discrete reef systems are present in North Taranaki, around the Waitara River, and offshore of New Plymouth. A smaller reef system, consisting of mudstone with shell fossils, lies south of the Waitotara River. Large reefs, called the North and South Traps are located offshore from Patea. Smaller subtidal reefs may also occur. Associated with the reef systems is a large diversity of marine life, including fish species and encrusting animals such as sponges and anemone. Beaches south of Wanganui support surf clams and other burrowing shellfish.

Cross Reference
See Sec 12.5.4(e)

Only one marine area in the Conservancy is formally protected. The Sugar Loaf Islands Marine Protected Area is a group of islands and reefs, of volcanic origin, and is situated offshore from New Plymouth. The Department has made an application to establish a marine reserve at Parininihi in North Taranaki. The

application has been publicly notified and objections and submissions in support have been received. Detailed assessment of the application is progressing.

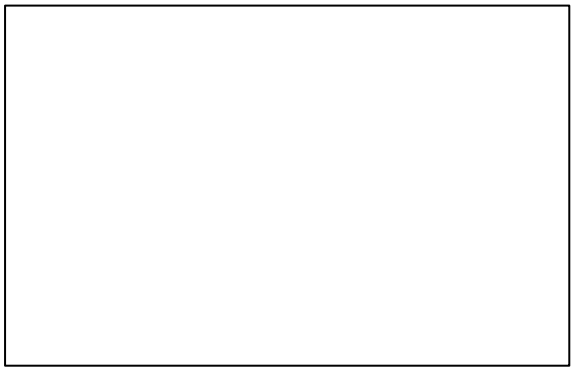
(b) Estuaries

Estuaries are a coastal feature from Patea southwards and from Waitara northwards. Both the Whanganui and Manawatu Estuaries are heavily used by a range of aquatic species and birds. The estuaries in the Conservancy were once an important source of kai for the Maori people but pollution has severely reduced estuarine food resources. Threats to the estuaries in the Conservancy include point source discharges both into the estuary itself and watercourses flowing into the estuary. Pollution in rivers from diffuse sources such as urban and farm runoff is also significant.

(c) Dunes and sea-cliffs

Cross Reference See Sec. 7.5, 12.5, 13.5

Dunes, estuarine edges and cliffs are the main habitats for terrestrial plants and animals of the coast. The Manawatu-Wanganui coast still has dunes which are dominated by the native sand-binders, spinifex and pingao, with hardy shrubs like sand coprosma. Damp dune hollows retain tall harakeke (New Zealand flax), toetoe, shrubs and ti kouka (cabbage trees), and further inland are dune swamps and lakes. Some dune hollows have temporary wetlands, (ephemeral) the habitat of some nationally rare plants.



Sand pimelea - a threatened plant of the Foxton Sand Country.

Small areas of dunes occur along the Taranaki coast as well, but cliffs predominate. Hardy plants, with fleshy, grey, or shiny leaves are typical of the cliffs, species such as native spurge, *Hebe elliptica* and, at their natural southern limits in North Taranaki, karo, pohutukawa and houpara. Although small in area, mats of tiny native plants on certain cliff-tops contain a range of unusual and rare native herbs. Fernbirds and gold-striped gecko are uncommon animals, and a number of insects are endemic, or are in few other places.

Many of the Conservancy's threatened species are dependent upon such habitats, and have already been lost from areas where the habitat has changed. Except for steep sites, many of these areas have been subjected to heavy damage from livestock, recreational users, commercial uses, urban developments, roading, weeds and other modifiers. Before human intervention, forest grew close to the entire coast, apart from the young dunes. Only a few fragments of these forests remain.

2.4 FRESHWATER

The Conservancy is located on the western and therefore wet side of the North Island. Rainfall is plentiful and well distributed throughout the year. Several nationally significant rivers flow through the Conservancy, including the Whanganui, its tributary, the Manganui o te Ao and the Rangitikei. The Manganui o te Ao and part of the Rangitikei are currently protected by Water Conservation Orders and the Hautapu and Stony Rivers are protected by regional rules.

Minimum flows exist for the upper reaches of the Whanganui River. In addition, the Whanganui River is under consideration for a Water Conservation Order. The Manawatu River has regional significance, as do the Mokau, Tongaporutu, Waitara and Mohakatino Rivers. These rivers provide important habitat for freshwater fish species.

Cross Reference
See Sec 14.5.4

Freshwater resources in the Conservancy can be grouped into the following types which reflect the diverse landscapes; rivers draining the mudstone country, rivers draining the greywacke mountain ranges, coastal lake and wetland systems, inland lakes and wetlands and the water resources of Taranaki which are very different from the other parts of the Conservancy.

The Conservancy's rivers, lakes and wetlands are important for a number of aquatic species, including birds such as blue duck and bittern, fresh water fish such as brown mudfish, eels, short jawed kokopu and other whitebait species, and invertebrates including tadpole shrimp.

(a) Mudstone rivers

Mudstone rivers drain most of the Conservancy, with the exception of Taranaki and the greywacke mountains. Water levels in these rivers rise and fall rapidly, have a very small groundwater component and carry a large suspended sediment load, compared with shingle rivers. Deforestation has had a significant impact on water quality. Land management in general and riparian management in particular are important issues in the mudstone country, in terms of sustaining aquatic ecosystems and providing water quality suitable for contact recreation in Whanganui National Park. The mainstems of the mudstone rivers are an important Mahinga Kai (food gathering place).

The upper reaches of some rivers, such as the Hautapu, Manganui o te Ao and Mangawhero contain rocks of volcanic origin. These rivers have a distinctive character until they flow off the volcanic plateau into mudstone formations.

(b) Rivers draining the greywacke ranges

The rivers draining the greywacke ranges tend to be clear and carry a large amount of shingle. Water clarity in these rivers reduces markedly as the rivers flow through farmed mudstone areas. There are two greywacke river systems in the Conservancy; the Rangitikei and Manawatu Rivers.

See Sec 25.2

The Rangitikei River is an important recreational resource. Activities include white-water rafting, canoeing and jetboating. The river and its many semi enclosed river valleys also have scenic appeal.

Certain tributaries of the Rangitikei draining the Ruahine Ranges, for example the Kawhatau, are braided rivers enclosed by high papa bluffs. These rivers form a unique landscape feature in the Conservancy. The open shingle beds of these rivers are under threat from invasion by weeds such as willows.

The Manawatu River is heavily used for recreation, particularly swimming. Most recreation takes place immediately upstream of Ashhurst and in the Pohangina River. Below Palmerston North, poor access to the river and pollution from industrial discharges and Palmerston North sewage treatment works limit the attractiveness of the river for recreation.

(c) Lakes and wetlands

Near the coast, between Hawera and the southern limit of the Conservancy, there are a number of lakes and wetlands. Lakes and wetlands are as much a feature of sand country as the dunes themselves, and were once just as mobile with changing vegetation. There are also lowland wetlands on river flood plains, though most have been drained. The greatest wetland loss was of the swamps which once dominated the Manawatu lowlands.

In the past, water levels of wetlands and lakes were highly variable, seasonally and from year to year. This environmental variability supported diverse ecological systems (and a wide range of plants and animals). Today, many of the wetlands and some lakes have been lost to land development and flood protection works. Those that remain are biologically less diverse than in the past, because of controls on water levels and exposure to grazing animals, weeds, introduced animals as competitors or predators of indigenous wildlife, nutrients in runoff from the land, and conflicting recreational uses.

Many of the Conservancy's threatened species are confined to wetlands. These include , brown mudfish, fernbird, swamp greenhood orchid and a tiny herb of temporary wetlands in dune hollows, *Sebaea ovata.* Because every remaining wetland of the Conservancy has a different history of modification, each is biologically different and all are needed to keep the Conservancy's wetland biodiversity.

Inland wetlands, especially those in the Moawhango Ecological District, are notable for their variety of plants, including threatened species and a number which are otherwise found only in the South Island. Reporoa Bog, Makirikiri Tarns, Kutaroa and Otahupitara Swamps and wetlands on Defence Department land east of Waiouru are the largest of these wetlands.

(d) Taranaki

The water resources of Taranaki are strongly influenced by Mt Taranaki/Egmont and are different to the rest of the Conservancy. Rainfall on the mountain is very high and runoff is rapid, causing the rivers draining the mountain to rise and fall rapidly.

Prior to the arrival of Europeans there were extensive wetlands and swamp forests around the base of the mountain, but only a few small ones remain. Egmont National Park contains some very important areas of wetland, including the . Baseflows in Taranaki rivers would have been maintained by seepage from the wetland system but now the majority of baseflow originates from the National Park and during droughts there is only a minor increase in river flows below the park boundary.

Water resources in Taranaki are the most heavily used in the Conservancy because of petro-chemical development, intensive dairy farming and urban demands. Spillages, abstractions, discharges and diffuse runoff are all major threats to the life-supporting capacity of Taranaki's water resources.

2.5 HISTORY OF HUMAN SETTLEMENT

Prior to 1800 the North Taranaki coast was closely settled by Maori due in part to the accessible narrow strip of flat land along much of the coast, the abundance of food and building materials and the easy river access. In South Taranaki the coast was more exposed, so sheltered inland areas were favoured. The Whanganui River provided access to the coast, inland forests and to many sheltered places which were ideal for settlement and food cultivation. As a result, river banks were densely settled, although not all sites were occupied at the same time. The Rangitikei and Manawatu areas were more sparsely settled by Maori who preferred sites near river mouths and dune lakes. Some settlements occurred along these rivers. The Foxton sand country was renowned for its pingao, much sought for weaving, and the Manawatu for its flax (harakeke).

The Iwi of the Conservancy are descendants of three waka (canoes): Tokomaru in North Taranaki, Kurahaupo in Cape Egmont, Rangitikei, and Manawatu; and Aotea in the South Taranaki and Wanganui area. There are 15 Iwi in the Conservancy (Figure 3).

Cross Reference
See Sec 4.2

Following the arrival of Europeans, the land, which had already been significantly modified by the Maori along the coastal areas, was progressively cleared of native vegetation. Farms and towns were established on land that was once cloaked in native forest. Europeans, like the Maori, chose to build their settlements on or near the coast, or along major river access ways.

2.6 COMMUNITY AND ECONOMY

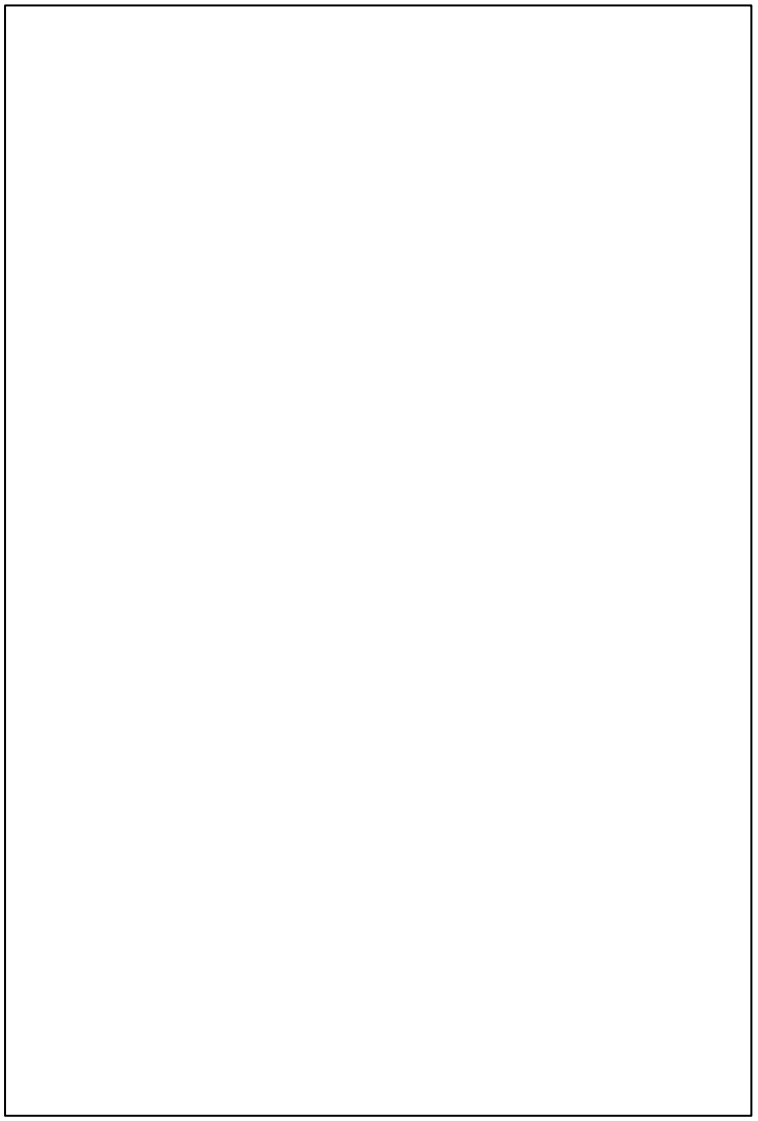
The Conservancy has a population of approximately 287,500, or 8.4% of the total population of New Zealand. The population of the Conservancy is the fourth largest in the country, after Auckland, Wellington and Canterbury. There are three main urban centres - Palmerston North, New Plymouth and Wanganui, which are the 6th, 12th, and 15th largest urban centres in the country respectively.

The economies of the urban areas are dominated by education, service industries, processing and light industries, while those in rural parts of the Conservancy are focused on farming, forestry and horticulture. The oil and gas industry is an important element in the Taranaki economy and of immense importance to New Zealand. Major polytechnics are located in Palmerston North, New Plymouth and Wanganui. Both Massey University and the International Pacific College are located in Palmerston North. Major military bases are located at Linton, Ohakea and Waiouru.

Exotic forestry is becoming increasingly important to the economy, particularly within the Manawatu/Wanganui areas, where production from exotic forestry is expected to increase 200-fold by the turn of the century. Further significant increases in production are also projected after this period.

2.7 VISITORS

In 1989/90 the Wanganui Conservancy received 6.5% of all travellers within New Zealand. Of these, 20% were international visitors and 80% were domestic (20% of these being local). This differs from the national average of 30% international, 70% domestic. By the turn of the century the Conservancy is expected to achieve a 30:70 ratio, but by then the national average is expected to be 50:50 international to domestic[62]. This is expected to be the result of the tourism industry's bid to increase the number of international visitors from 1 million to 3 million by the turn of the century. The relatively low proportion of international visitors to the Conservancy must be taken into account in planning for recreation. In 1990 the most popular activities carried out by visitors to land administered by the Department within this Conservancy were: sightseeing, touring, picnicking, camping, daywalks, tramping, canoeing, and hunting. These are expected to be the activities with the most potential to increase, and are therefore important in any future planning in the Conservancy.



Tracks give visitors the means to enjoy and appreciate our heritage.

3. Kaupapa

3.1 VISIONS FOR THE FUTURE

An important component of any strategy is the vision of the future, towards which the strategy directs future management direction. This section of the CMS states the visions for conservation within the Conservancy for the next 10 years and beyond.

Visions

- *The mission of the Department of Conservation is understood and supported by the public. The public is involved in all facets of the Department's work. The Department is supporting many public initiatives towards the conservation of New Zealand's natural and historic heritage. In short, the public is taking a lead in conservation and the Department is supporting these efforts with all its resources and through its own programmes.*
- *The staff of the Conservancy have collectively acquired all the skills necessary to implement the policies of the Conservation Management Strategy and are able to assist the public to achieve the same policies.*
- *The extent of natural areas in the Conservancy has increased and the level of protection has improved to the point that the full range of native plants and animals present in the Conservancy in 1997 is sustained and enhanced. Wherever possible, any native species lost from the Conservancy prior to 1997 are reinstated.*
- *All the best representative freshwater, marine and terrestrial natural areas are formally protected, both in law and 'on the ground'. In particular, all areas identified in Protected Natural Area reports are conserved and a network of marine reserves is in place.*
- *All rivers, estuaries and the coast sustain the full range of natural values present in 1997 and are suitable for a variety of water based recreation activities.*
- *The public find that the quality and availability of recreational experiences match their expectations where these are consistent with conservation needs.*
- *Historic resources on land administered by the Department are known and protected appropriately, and the Department plays a supporting role in the protection of other related historic resources.*
- *All significant natural landscape values in the Conservancy are recognised and protected from unsympathetic development.*
- *A mutually supportive arrangement is in place with Tangata Whenua to achieve conservation, historic resource protection and recreational objectives.*
- *The conservation of natural, historic and recreational values in the Conservancy is documented and explained and the public has access to this information.*

Post Script

It might be said that the above visions could apply anywhere in New Zealand. This ought to be so in that the Department's mission relates to the entire country. It is, however, also true that the features, natural values, threats, human communities and recreational opportunities of the Wanganui Conservancy are unique. Thus, the priorities, practicalities and opportunities to achieve the objectives of the vision are also unique to this Conservancy. The CMS sets out these distinct elements.

3.2 KEY PRINCIPLES

The Department is responsible for the management of approximately 299,891 hectares within the Conservancy, most of which is forested hill country. It also has responsibility, along with Manawatu/Wanganui and Taranaki Regional Councils for the protection of coastal marine areas, and is responsible for the protection of marine mammals and for the protection of indigenous species both terrestrial and aquatic.

Under the Conservation Act 1987, the Department may also advocate conservation generally, foster the use of natural and historic resources for recreation, and allow their use for tourism.

Financial resourcing of the Department ultimately determines the level to which its functions can be undertaken. Achieving a balanced overall management strategy through careful prioritising of different management actions was a crucial consideration in the development of this CMS, both within each functional area (e.g. control of animal threats, use management, management of threatened species etc.), and over the Conservancy territory as a whole.

The following key principles support the visions identified under section 3.1 above and guided the development of priorities within this CMS. These principles are:

(a) Bio-diversity

Priority will be given to retaining and restoring indigenous bio-diversity throughout the Conservancy.

Explanation

The Department will protect and advocate the protection of biological diversity in terrestrial, freshwater and marine ecosystems. The principle is that a diverse range of natural ecosystems provide greater opportunity for species, communities and processes to survive. Commitment to the Protected Natural Areas Programme (PNAP) within the Conservancy for instance recognises the importance of bio-diversity.

(b) Threatened Species

Priority will be given to the protection of threatened indigenous species.

Explanation

The protection of threatened indigenous species, whether plants or animals, will be based principally on the maintenance of viable ecosystems and habitats on which they

depend. This may be achieved through such actions as weed, animal pest and predator control. In some instances critical habitat may exist on private land and advocacy under the Resource Management Act will be important. National priorities determine much of this work. For the most critically threatened species, management directed specifically at those species will be necessary to prevent their extinction.

(c) Treaty of Waitangi

Priority will be given to meeting the Department's Treaty obligations.

Explanation

The Department's role is to manage all land and resources under its administration on behalf of all people,with recognition to the Crown's Treaty obligations. Section 4 of the Conservation Act 1987 states that "the Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi". The Department will take a proactive approach to meeting its responsibilities under the Treaty and will encourage new initiatives which facilitate this.

(d) Advocacy

Priority will be given to seeking protection of important natural and historic resources on private land through policies and plans prepared under the Resource Management Act 1991. Emphasis will be given to ensuring that critical habitats and ecosystems are sustained. Protection of these values will also be promoted in resource consents, particularly where important precedent is likely to be set.

Explanation

Section 6 of the Conservation Act 1987 enables the Department to "advocate" the conservation of natural and historic resources generally. Sections 5, 6 and 7 of the Resource Management Act 1991 provide the basis for seeking protection of these resources in policies and plans prepared by regional and district councils. There are considerable pressures on such resources in developed parts of the Conservancy, particularly in coastal and lowland areas of Manawatu and Taranaki where natural areas have been dramatically affected by farming and urban settlement. Advocacy for the protection of natural and cultural values associated with the many freshwater bodies in the Conservancy will also be an important activity.

(e) Historic Resources

Priority will be given to achieving greater protection for and knowledge of historic resources on land administered by the Department.

Explanation

Many parts of Wanganui Conservancy have a long history of human settlement. Although a number of historic resources are known to exist on land administered by the Department and already receive active management, the Department has incomplete knowledge of these resources on some land it administers. Effective protection of historic resources will require the fullest possible knowledge of the extent and nature of these resources.

(f) Public Awareness and Participation

Priority will be given to activities which raise public awareness of important conservation issues, build positive relationships and which promote greater public participation in conservation programmes.

Explanation

Public awareness is essential if the Department is to enhance public appreciation of and support for conservation and for the work of the Department. Relationships established with the large number of organisations that the Department interacts with need to be managed successfully if conservation objectives are to be advanced. Community involvement in conservation work benefits the Department in terms of the achievement of conservation outcomes and in fostering relationships. Events such as Conservation Week provide a chance for the Department to get key messages across and engage the public.

(g) Recreation

Priority will be given to the provision of recreation opportunities in high use front country areas in places such as roadends and close to urban areas. All recreation opportunities will be managed to ensure that they are safe, that the quality of the recreation experience is preserved and that adverse effects are minimal. Improved public access to areas administered by the Department, to rivers and the coast will be promoted.

Explanation

Public use and enjoyment of land administered by the Department is a vital part of creating support for conservation. Provision will therefore be made for low impact, road end recreation opportunities, catering for a majority of users, primarily day visitors. Generally no major new developments will occur in backcountry areas. Existing backcountry facilities will be maintained at current levels and some minor upgrading may take place. The Department will provide and advocate for improved public access to areas it administers, to lakes, rivers and the coast and encourage the provision of more recreation opportunities close to urban areas, particularly in the Palmerston North area. In parts of the Conservancy which receive high recreational use, such as Egmont National Park and parts of the Whanganui National Park adjoining the river, it will be important to ensure that the activity does not threaten the recreation experience which people come to enjoy or affect natural and historic values. In providing and maintaining recreation opportunities throughout the Conservancy the Department will ensure the highest possible standards of safety for both staff and the public.

(h) Commercial Activities

Priority will be given to ensuring that new commercial activities will not give rise to unacceptable effects on natural, historic or recreation values, and that adverse effects of existing activities are reduced. Cost recovery and rental charges from commercial activities on land administered by the Department, and charges for facilities or services will be managed to optimise funding for conservation.

Explanation

Proposals for commercial activities will generally be declined where the effects of the activities are contrary to the provisions of the Act or the purpose for which the land is held. A rental will be charged for all activities on land administered by the Department. Resource rentals will be charged where any concession conveys an exclusive right of use or imposes a restriction on public access or in other ways restricts the options of alternative uses and users.

4. Tangata Whenua

4.1 MAORI PERSPECTIVE

E te Atua
Te Kaiarataki o te Ao Marama
Te Matapuna o nga mea tapu katoa,
Nga mihi tuatahi.

E tu Te Ao Turoa o te wa
Ko Tongariro te Matapuna
Whanganui te awa
Taranaki te Whakaruruhau.

Nga waka o te uru: Aotea, Kurahaupo, Tokomaru mihi mai,
Mihi mai ki tenei marae kainga o te iwi
Kua haere Ki tua o te arai
no reira Ko ratou Ki a ratou
Ko tatou te hunga ora ki a tatou
Tena Koutou, tena Koutou, tena Koutou Katoa.

E tu ra te ngahere o te wao nui a tane
Hei Whakapae ururoa
Awhi mai, awhi atu
Tatou tatou e.

No reira e te iwi, Maori Pakeha,
nga uri o te Ao Hurihuri
O nga hau e wha
Rapua te huarahi whanui
Hei ara whakapiri
I runga i te whakaaro kotahi.

* * *

I greet the creator Tanenuiarangi
Creator of all life forms
Standing since time began is Tongariro
The source of the Whanganui River
and standing alone is Taranaki the Sanctuary.

Greet us the ancestral canoes
And those of our ancestors who have departed farewell.
Wherefore let the dead live with the dead and the living with the living.
Greetings.

Our forests the great domain of Tane Mahuta
Standing in time

Embracing us all.
Listen the people, our natural resources are diminishing
Take heed of the words of our ancestors
Seek the path that will unite the people of all races
So that a common understanding can be reached.

The Maori relationship with the environment has been summarised, by the Parliamentary Commissioner for the Environment, as 'protecting and respecting what we have and restoring what is lost'. The means to recognise this relationship is centred on the Treaty of Waitangi. Section 4 of the Conservation Act 1987 states that "... the Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi...." (see Appendix 1). In protecting the natural and historic values of the Conservancy, Tangata Whenua will need to be regularly consulted.

Understanding Maori values is an important first step in effective consultation between the Crown and Tangata Whenua. Three aspects of the Maori perception of the natural world, mauri, tapu and kaitiakitanga must be considered:

- **Mauri** or life force pervades all living and non-living things and maintains the correct balance between natural resources. If Mauri is disturbed all things suffer. Its presence might be symbolised by a stone buried in a forest or a stone placed in a river. By protecting the Mauri of a resource, a hapu could expect to receive a sustained use of that resource.
- A **Tapu** placed on a place, a person or a resource has the effect of protecting its life-giving qualities. Mauri and Tapu gave tipuna Maori a strong sense of continuity with nature. This relationship forms the basis of the Maori value system. The creation story illustrates this theme of unity between nature and Maori. Rangi the sky father and Papa the earth mother were once united in darkness, but were torn apart by Tane Mahuta to let in the light. The lament of the sky father for his beloved Papa is signified by mists and falling rain. In the most important rituals, water was used as the spiritual link between nature and man.
- **Kaitiakitanga** involves the excercise of guardianship, stewardship and responsibility by local Tangata Whenua. It is the means by which the Mauri of resources is restored, maintained and enhanced for present and future generations and for life itself.

The development of a shared conservation ethic with Tangata Whenua has much to commend it, as the two Treaty partners look toward a common future. Each partner needs to develop an appreciation and acceptance of each other's values and rituals. The Department needs to understand and accept the Maori value system and concepts and act with care and consideration in its relations with Tangata Whenua. Likewise, Tangata Whenua also need to understand the needs of conservation for all New Zealanders and for intrinsic values as well as their own interest.

Cross Reference
See Sec 16

By providing relevant information on conservation matters to Tangata Whenua, the goal is to facilitate understanding of Treaty obligations and advance the consultation process. The dissemination of this information and liaison with Tangata Whenua will need to be monitored and reviewed to ensure that Maori perspectives have been included in conservation decisions.

4.2 CO-OPERATION WITH TANGATA WHENUA

The basis for co-operation between the Crown and Tangata Whenua is laid down in the Treaty of Waitangi. Recent legislation and court decisions have begun to focus on the meaning of co-operation. Case studies examining the co-operative relationship between the Crown and Tangata Whenua are reported in significant detail in the Waitangi Tribunal hearings.

Cross Reference
See Sec 16.

The Department must give effect to the principles of the Treaty of Waitangi. The principles of partnership comprise one of the pillars of the Treaty. The "partnership" principle is a shorthand way of describing the elements which the Treaty envisaged would reflect the relationship between the Crown and Maori. These elements include notions of reasonableness, awareness of the partner's views, fairness and good faith. In short, co-operation.

Effective co-operation with Tangata Whenua will achieve mutually beneficial conservation outcomes along with the integration of Maori perspectives into the work of the Department. This could include such things as partnership strategies with Tangata Whenua, projects which enhance relationships, the identification and protection of Tangata Whenua taonga, and information sharing.

The ethic of stewardship provides a common foundation for managing the conservation of resources in the Conservancy for both the Department and Tangata Whenua. The Department is a guardian of the areas it manages and Tangata Whenua are the kaitiaki of the resource and its mauri. Both should be able to bring their contribution to the resolution of conservation issues.

Discussions with Tangata Whenua about co-operation have clearly shown that they expect the Department to advocate the conservation of natural and historic values in other resource management forums and with other agencies, including government departments and territorial authorities. Tangata Whenua need to gain skills to become more empowered in resource management and be encouraged to enter into an advocacy partnership with the Department. There will need to be an educational focus to this work throughout the Conservancy, which will require an active liaison with Tangata Whenua.

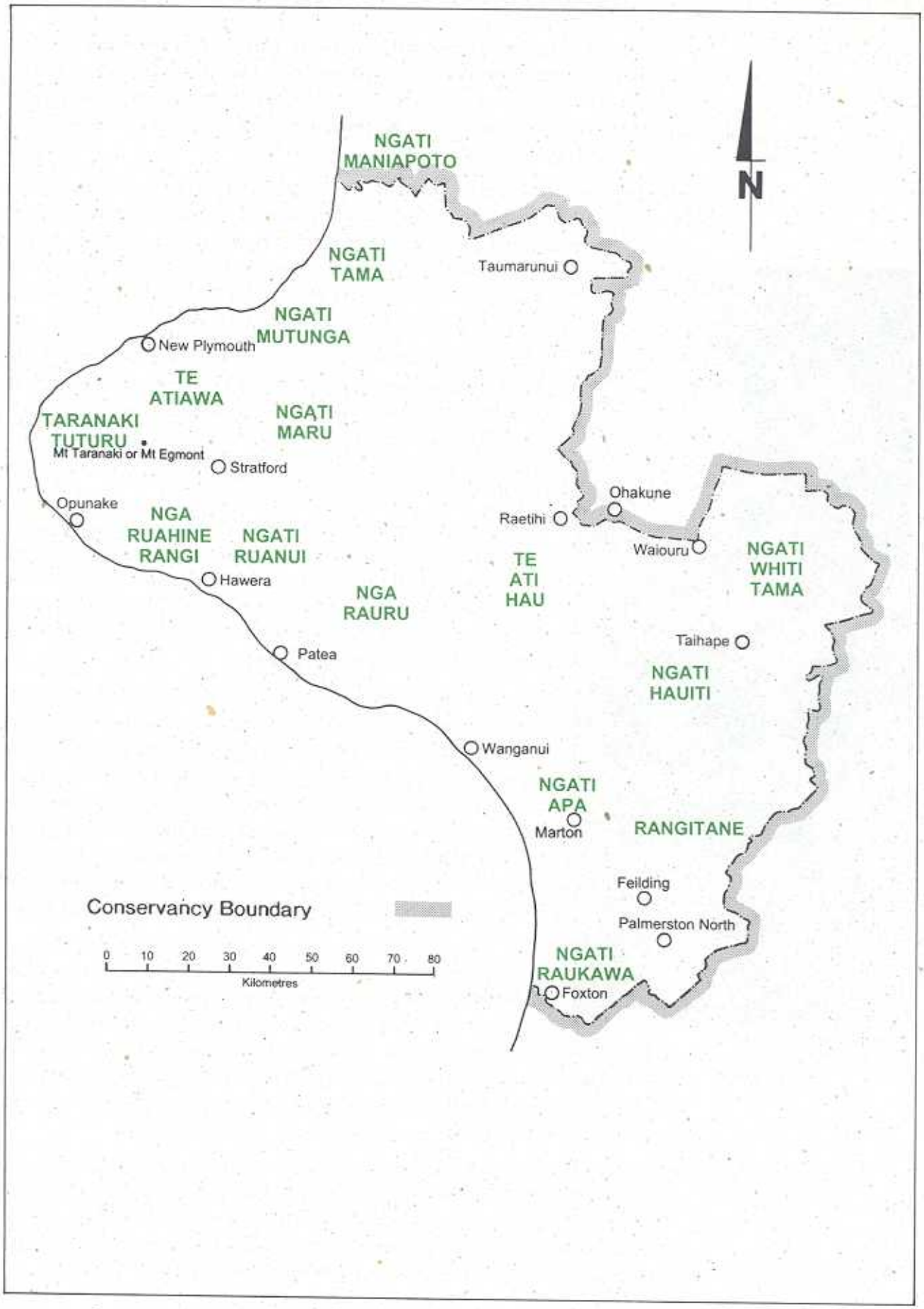
Regular consultation with Tangata Whenua and achievement of outcomes will need to be monitored and reviewed along with the degree to which Maori concerns have been incorporated into and dealt with in the Department's work. Some of the main concerns which have been identified are pollution of water, overfishing of rivers, lakes and sea, use of native species for restoration planting, preservation of native species and landscapes and protection of historic places.

Tangata Whenua are informed of Departmental projects that may interest them.

See Sec. 17

There are 15 Iwi in the Wanganui Conservancy, which can make consultation a complex and lengthy process. Figure 4 identifies these Iwi. It is known that other Maori groups are applying for Iwi status. The Department has continually sought active consultation with local Iwi on major issues, and will continue to improve the relationship the Department has with Iwi within the Conservancy.

FIGURE 4: IWI WITHIN THE WANGANUI CONSERVANCY



A high priority for the Department will be to strengthen the co-operation with Tangata Whenua and to make it work in a meaningful and constructive way within the Conservancy.

4.3 TE RANGA AGREEMENT

An agreement between the Whanganui Iwi and the Minister of Conservation was signed at Pipiriki in November 1995. This agreement provided for the establishment of the Te Ranga Forum to discuss and negotiate a range of matters which affect all Whanganui River Iwi. It agrees to disagree on certain issues but to continue to work together on those which can be jointly negotiated. It also recognises the need to progress discussion and to identify and respond to each other's declared positions on various issues. The agreement will be reviewed on a regular basis by Whanganui River Iwi and the Minister of Conservation.

The Whanganui Iwi Liaison Group comprises representatives from Tamaupoko, Hinengakau, Tupoho, Ngati Rangi, Ngati Kurawhatia (Pipiriki Incorporation), Mana Whenua and the Whanganui River Maori Trust Board. Opportunity for Tamahaki to participate in the group remains open. The Minister of Conservation is represented by senior Head Office, Conservancy and Pipiriki Field Centre staff.

Two key features of the agreement are:

- The development of a framework for working together for conservation in the Whanganui National Park and other areas administered by the Department within the Whanganui/Ngati Rangi tribal boundaries, and
- The development and completion of projects identified and agreed to by both parties.

Whanganui Iwi Liaison Group expect a Treaty of Waitangi relationship with the Minister of Conservation which reflects the equal status of both parties. The stated Iwi goal is to achieve ownership, management and control of the Whanganui National Park and other conservation areas within their tribal boundaries. The Department's goal on the other hand is to continue to meet its obligations as the management agency for Whanganui National Park under the Conservation Act 1987, National Parks Act 1980 and other Acts and Government policy.

The broad agreement of the relationship sees:

- Both parties being committed to protecting the natural environment for future generations.
- Recommendations arising through the Te Ranga Forum not prejudicing claims currently before the Waitangi Tribunal.
- Both parties recognising that there are substantial differences between their respective positions on power and control and on the ownership of natural resources which may not be capable of resolution in the Te Ranga Forum but which need not prevent discussions and negotiations taking place on issues mutually agreed to.

The co-operative agreement will influence conservation outcomes within Whanganui Iwi tribal boundaries and territories covering the Taumarunui, Matemateaonga, Manawatu Plains and Foxton Ecological Districts.

5. European Conservation Ethic

European conservation ethics have their origins in ancient times with the worship of nature. From the late eighteenth century these ethics were refined. European culture began to develop a philosophy concerning the individual's appreciation of wilderness which led directly to the setting aside of natural areas for protection. The ideal of preserving nature was to become an end in itself, along with the notion that nature was a place for the spiritual regeneration of all people. The concept of "protection" which emerged recognised that nature is not created solely for human needs. Rather, it was argued that humans had developed a capacity to destroy forever the natural order, that the natural order had its own intrinsic right to exist, and that humans, as part of that order, had a responsibility to protect nature.

The first fully protected national parks and reserves were created in countries like United States, Australia, Canada and New Zealand. Here the largely unmodified landscapes provided opportunity to preserve natural places as the common heritage for all citizens. These wilderness places were protected largely due to the politicking of preservationists like John Muir in the USA and William Fox in New Zealand.

In 1864 Muir led the campaign that eventually created Yosemite State Park and paved the way for Yellowstone National Park. The legislative language of the Yellowstone Act was borrowed in wording and spirit by the creators of the Tongariro National Park following gift of the land to the nation by Te Heu Heu in 1888. William Fox of Nelson promoted the first protective Forests Act, which became a reality in 1877.

While continuing to borrow conservation philosophy and tactics from the American preservationist movement, New Zealanders soon developed their own style and methods of protecting large areas of public land. Protected lands, often as scenic reserves and national parks, have been created on a consistent but irregular basis.

In the mid and late nineteenth century, individuals became disturbed at the apparent unrestricted destruction of forests and wildlife. In Taranaki, it was extensive forest loss for farmland and timber which provided the catalyst for the protection of Mt Taranaki/ Egmont in its natural state. In 1881, Mt Taranaki/Egmont and the forest contained within a six mile radius of the mountain was set aside as a provincial reserve. Nineteen years later it was to become New Zealand's second national park after Tongariro. Protection of forests alongside the Whanganui River was initiated by Alexander Hatrick in the early 1900s to preserve scenic qualities. By 1980, over 35,000 hectares of scenic, historic, recreation and scientific reserves were managed by the Wanganui River Reserves Board. This area, along with a further 39,231 hectares of Crown land was gazetted as National Park in December 1986 and is now part of one of the largest remaining tracts of lowland forest in New Zealand. A long history also accompanies many other areas of land administered by the Department in the Wanganui Conservancy.

The tradition of protecting wilderness gained an increasingly large public mandate as the earth's environmental crises became more apparent. Undoubtedly the scientific justification for the need to preserve a naturally occurring gene bank involving not just species, but whole ecosystems ('biodiversity'), has come to assume urgency. As recently as 1992, United Nations member countries ratified the 'Convention on Biological Diversity' at the 'Rio Conference'. New Zealand signed the convention in

early 1993. The Convention seeks global solutions to the unprecedented loss of the earth's biodiversity. It recognises that the variability among living organisms is valuable for ecological, genetic, social, economic, scientific, educational, cultural, recreational and aesthetic reasons.

The nature of the pressures on the environment have changed markedly over the years. They have shifted from localised low key use to the devastations of the industrial age, to today's pervasive air and water pollution of whole ecosystems and the destruction of these ecosystems by animal pests.

The greater leisure time available today and higher mobility mean that natural areas are facing increasing pressure from visitors and recreational users.

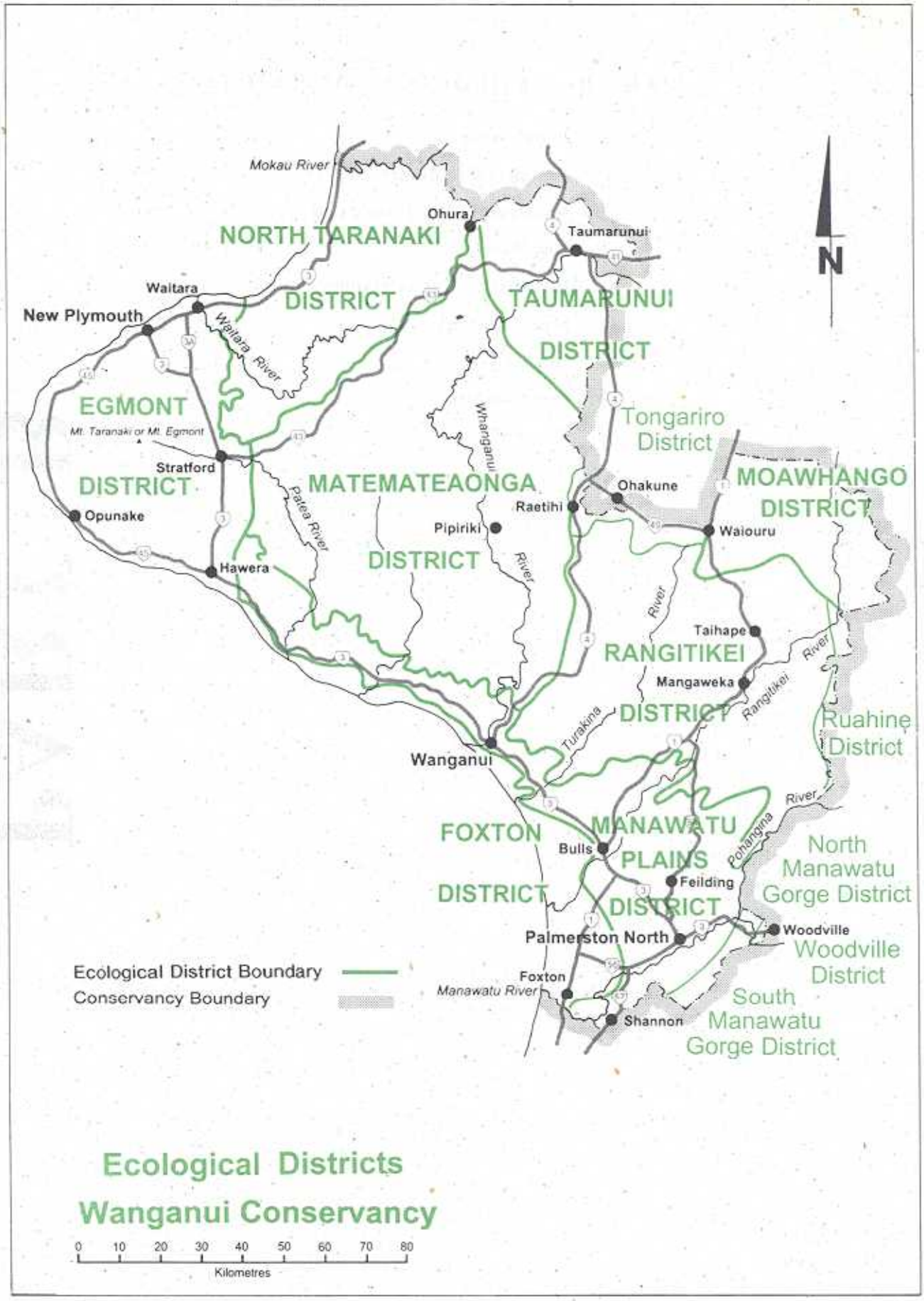
Therefore the Department must plan for change carefully and conservatively, not only taking into account the physical impacts of increased pressure on protected places, but also the social impacts on individuals and communities.

CONTENTS

PART B - ECOLOGICAL DISTRICTS

PART B

FIGURE 5: ECOLOGICAL DISTRICTS IN WANGANUI CONSERVANCY



6. Introduction

This section deals with broad objectives for conservation management in eight geographic parts of the Conservancy.

Although many of the conservation issues and policies addressed in this document apply across the whole Conservancy, the application of many are on a more local basis and some areas have unique values and problems. The division of the Conservancy into ecological districts was used in the 1993 "Issues and Options" CMS Discussion Document to illustrate conservation initiatives. Many respondents showed that they could relate well to these smaller geographic units. This same division of the Conservancy has been adopted for the CMS to help illustrate the application of detailed policy where appropriate.

The concept of ecological regions and districts precedes CMS by more than 10 years[55]. Because it was originally founded on features of the landscape to which people can easily relate - landform, climate, soils, native vegetation, and the human impacts on these features - an ecological district is a ready-made unit for linking people with the work of the Department.

In some parts of New Zealand, adjoining ecological districts which have a number of features in common are grouped into ecological regions[55]. As an example, the inland Taranaki-Wanganui hill country comprises the North Taranaki and Matemateaonga Ecological Districts, which together make up Taranaki Ecological Region. Where, however, ecological districts are quite unlike their adjoining districts, they are defined as stand-alone ecological regions such as the Egmont Ecological Region. For the purpose of simplicity all geographic units referred to in this CMS are identified as "ecological districts".

Although ecological districts are based on features of the terrestrial landscape, for the purpose of this CMS, the 3 ecological districts which adjoin the coast also incorporate the coastal area to the limit of the New Zealand Territorial Waters.

Of the 268 ecological districts which make up New Zealand[55], eight comprise most of Wanganui Conservancy, with very small parts of five others (Fig 5). Some of the eight have portions which extend into adjoining conservancies. The largest "shared" area is the Taumarunui District which has about half its area in Waikato and Tongariro/Taupo Conservancies. Discussions with adjacent conservancies will ensure that policies applied to the shared ecological districts are compatible. The following text discusses important natural, historic and recreation values and issues and identifies management objectives, district by district.

A summary of these is shown in Figure 6 (over).

	FOXTON (SAND COUNTRY)	MANAWATU PLAINS	RANGITIKEI	MOAWHANGO (TUSSOCKLANDS)
Land forms	Dune landforms (dunes, sandflats, swamps, dune lakes), estuaries	Series of uplifted marine terraces. (NB: some maps show very small contact areas with the coast. These are not considered here.)	Rolling hill country. Limestone, sandstones with lahar and tephra overlays, especially in north.	Rolling to steep hill country, infilled basins. Sandstone/limestone plateaux. Underlying greywacke exposed in places.
Land Area	105,000ha	312,300 (+ 3,590 + 11,000) ha	407,800 (+ 25,000) ha	139,500 ha
Landscapes and landscape changes	Largely cleared for pastoral farming, exotic forests, some horticulture; well roaded, small coastal settlements.	Extensively cleared for pastoral farming; horticulture; well roaded, many large and small towns. Contains largest population of the districts.	Extensively cleared for pastoral farming, horticulture, some exotic forestry; quite well roaded, numerous small towns. Erosion scars common on steeper slopes.	Extensive pre-human and human induced fires; reversion to native tussockland and scrub; recent further development for pastoral farming. Not well roaded, a few small settlements.
River/stream morphology	Large meandering rivers, tidal influence almost throughout the District, estuaries.	Broad river terraces super-imposed on marine terrace surfaces; greywacke shingle beds (in east), mudstone in west.	Deep gorges in sedimentary beds, broad terraces; greywacke shingle riverbeds (in east), andesite lahar boulders and mudstone in west.	Gorges in greywacke, broad terraces on sedimentary surfaces; greywacke, limestone and local andesite riverbeds.
Coastal morphology	Sand dunes throughout, except for estuaries and, from Wanganui westwards, mudstone or limestone sea cliffs to 50 m with mostly sand beaches.			
Natural vegetation	Native forest almost entirely removed; local areas of scrub on dunes and wetlands.	Native forest as small remnants; local secondary scrub.	Scattered native forest remnants, mostly logged (river terrace stands especially notable with rich variety of divaricating shrubs)	Native forest, in extensive tracts and remnants; montane and lowland scrub; the most extensive tussock grasslands of North Island; the only North Island location for about 18 species of native herbs and 2 species endemic to the district. (See Section 9.4.5 and Ref. 88)
	Remnants of coastal podocarp broadleaved forest; tall kanuka.	Podocarp broadleaved forests (notable totara - matai); tall kanuka forest.	Podocarp broadleaved forests (notable matai - kahikatea on terraces); tall kanuka forest.	Beech forest (mountain, locally red, black, silver beeches); mixed podocarp and podocarp-broadleaved forests; local kaikawaka forest.
	Freshwater swamps and dune lakes; some estuarine wetlands, once-extensive flax swamps now poorly represented.	Occasional lakes on terrace surfaces and valley floors.	Periodically flooded river terraces. Valley lakes in southern half.	Frost bogs, swamps, flushed areas, several small lakes (wetlands very significant botanically).
Indigenous vascular plants	Total species number unknown	305 species	415 species	750 species

	MATEMATEAONGA	EGMONT	NORTH TARANAKI	TAUMARUNUI
Land forms	Very steep dissected hill country, mostly mudsandstone.	Andesite volcanoes (Mount Taranaki/Egmont, Pouakai, Kaitake, Sugar Loaf Islands) and lahar ring plain. Steep to flat terrain. Marine terraces with tephra and lahar overlays.	Steep dissected hill country (mud/sandstones, limestone). Inland plateaux (eg. Mount Damper, Waitaanga). Marine terraces.	Deeply dissected hill country with small river terraces and plateaux. Ridge-top sandstone overlying siltstone/mudstone. Tephra cover discontinuous on steeplands; alluvial material on terraces.
Land Area	544,000 ha	270,300 ha	257,500 ha	241,500 ha
Landscapes and landscape changes	Farming largely in less steep parts of valleys; some exotic forestry; not well roaded, few villages. Erosion scars widespread on cleared or previously cleared land.	Extensively cleared for pastoral farming; local horticulture, exotic forestry; extensively roaded; many small and large towns.	Coastal areas mostly cleared for pastoral farming, some horticulture; local exotic forestry; roading mostly on coast and valley floors; towns mostly small, coastal. Erosion scars common on cleared hill country.	Extensively cleared for pastoral farming with resultant erosion scars; some exotic forestry.
River/stream morphology	Deeply incised; some water-falls; few river flats; mudsandstone beds.	Steep in upper parts, flatter on plains; relatively short straight river courses; andesite boulder and shingle beds.	Deeply incised; many water-falls; some flats on narrow valley floors; mud/sandstone beds.	Incised; river terraces usual (some of pumice); mud/sandstone beds of andesite boulders and shingle.
Coastal morphology		Mudstone seacliffs to 50m. Overlain by tephra and lahar material; local low terraces and dunes; boulders or sand beaches; few tidal rivers or estuaries.	Seacliffs to 200 m; local dunes at stream mouths; estuaries and tidal stream mouths; beaches mostly sand; coastal stacks.	...
Natural vegetation	Native forest still common, much unlogged, some secondary; scrub/flax on cliffs; much induced scrub and farmland; southern limits for some species (eg. *Pseudopanax laetus*, *Gaultheria paniculata*, *G. oppositifolia*, *Olearia townsonii*, totorowhiti.)	Most native forest confined to Egmont National Park, otherwise small isolated remnants; little coastal forest, but some native shrubland vegetation. Southern limits for some species (eg. puriri, karo).	Native forests still common, much unlogged, some secondary, scrub/flax on cliffs; local induced farmland, scrub; coastal forest relatively rich in species, including some at or near southern limits (eg mangeao, nikau, pohutukawa, houpara).	Native forests mainly as isolated remnants.
	Podocarp broadleaved forest (mainly rimu and tawa) predominates with black beech on ridges.	Podocarp broadleaved forests with local kaikawaka forest.	Podocarp-broadleaved beech (mostly hard beech) forests.	Podocarp-broadleaved forest (mainly tawa); some beech (black, silver, red, and hard beeches) and some podocarp forests.
	Few wetlands; several slump-formed valley lakes with narrow wetland edges.	Wetlands mostly drained; some remnant swamp forest; lakes with harakeke, very little estuarine vegetation.	Few wetlands; remnant plateaux bogs; swamp forest; some estuarine wetlands.	Few wetlands; a number of gullies have narrow wetlands dominated by raupo.
Indigenous vascular plants	385 species	880 species	445 species	Total species number unknown

FIGURE 6 FEATURES OF ECOLOGICAL DISTRICTS IN WANGANUI CONSERVANCY

	FOXTON (SAND COUNTRY)	MANAWATU PLAINS	RANGITIKEI	MOAWHANGO (TUSSOCKLANDS)
Threatened notable native plants	10 threatened, 3 local plants species (see Appendix 6), also pingao.	5 threatened, 2 local plant species (see Appendix 6); also *Bulbophyllum tuberculatum*.	15 threatened, 3 local plants species (see Appendix 5), also *Kirtlandia clavata*; *K. lindsayi*.	21 threatened, 2 local plants species (see Appendix 6), also *Mazus radicans*, *Beomea huttonii*, *Myosotis pygmaea* ssp *pygmaea*.
Threatened/ notable native animals	NZ dabchick, Australasian bittern, banded dotterel, Arctic wading birds, royal spoonbill, fernbird, wrybill.	NZ dabchick, fernbird, brown mudfish, gold-striped gecko, *Powelliphanta traversi* land snail, mole cricket, tadpole shrimp.	Brown kiwi (local).	Fernbird (local), blue duck, kakariki, kaka, brown kiwi (local), NZ falcon; Small - scaled skink, *Powelliphanta marchanti* land snail.
Threats to native vegetation by; (a) Animals.	Possums, rabbits, uncontrolled domestic livestock; local sambar deer.	Possums, rabbits, uncontrolled domestic livestock, local sambar deer.	Possums, uncontrolled domestic livestock, local goats.	Possums, deer, rabbits, hares, wild horses, uncontrolled domestic livestock, local goats.
(b) Weeds	Coastal weeds including pampas, boxthorn, marram, boneseed, sharp rush, spartina.	Forest remnants invaded by old man's beard, banana passion fruit, cotoneasters, Jerusalem cherry, ivy; local evergreen buckthorn, Darwin's barberry, cathedral bells. Wetlands with hornwort, *Egeria*.	Forest remnants locally invaded by ivy, sycamore, rowan, cherry laurel, wandering willie; old man's beard widespread.	Open country seriously threatened by *Pinus contorta*, feather, *Hieracium*.
Historic features	Pre European archaeological sites probably common, generally not readily seen in sand country; middens common, some probably ancient. Some visible features of early European settlement (eg shipping, flax milling).	Some pre European archaeological sites, including some which are reasonably well-preserved and visible (mostly on private land). Sites marking 1860's land wars from Wanganui westwards. Many documented features of early European settlement, some visible.	Few recorded archaeological sites. Some remaining features of early European settlement (eg. power generation, brick manufacture).	Few recorded archaeological sites.
Recreation / tourism	Coastal recreation - fishing, whitebaiting, boating, beach walking, swimming, horse riding. Baches. Off-road vehicle use. Sambar deer and gamebird hunting. Pine forests - picnicking, walking. Bird watching at estuaries and dune lakes.	Lower Rangitikei River and Manawatu River - important for canoeing, fishing. Scenic reserves picnicking, bush walks and camping. Hunting - fallow and sambar deer. Duck hunting.	Rangitikei River - nationally significant recreational water way. Fishing, canoeing, rafting and jetboating. Commercial ventures: white-water rafting, bungy jumping. Whangaehu River; canoeing; Hautapu River; canoeing and fishing. Scenic reserves - picnicking and bush walks. River based camping grounds. Hunting - red, fallow and sambar deer. Access for west side of Ruahine FP.	Upper reaches of Rangitikei River important for fishing and white water canoeing. Inland Patea Heritage Trail (Taihape - Napier Road).

	MATEMATEAONGA	EGMONT	NORTH TARANAKI	TAUMARUNUI
Threatened notable native plants	2 local plant species (see Appendix 6)	16 threatened, 3 local plant species (see Appendix 6); also pingao, *Hebe elliptica* var *elliptica*, hutu, *Myosotis pygmaea* spp. *pygmaea*.	6 threatened, 2 local plants species (see Appendix 6); also pingao, NZ spinach (*Tetragonia tetragonioides*).	3 threatened, 1 local plant species (see Appendix 6); also grass tree (*Dracophyllum traversii*).
Threatened/ notable native animals	Kokako, brown kiwi, fernbird (rare), NZ falcon, Waitotara *Powelliphanta* (now extinct ?), striped skink; *Peripatoides suteri*; long-tailed bat, short-tailed bat.	Breeding colonies of seabirds and fur seals (Sugar Loaf Islands), fernbird, brown kiwi, Australasian bittern, *Powelliphanta* (endemic species in ENP), giant amphipod, gold striped gecko, striped skink, *Peripatoides suteri*, brown mudfish, short-jawed kokopu. Translocated blue ducks.	Kokako, brown kiwi, fernbird, NZ falcon; petrel breeding sites; short-jawed kokopu giant kokopu; short-tailed bat; Hector's dolphin.	Brown kiwi; blue duck, kaka, fernbird; reports of kokako.
Threats to native vegetation by; (a) Animals.	Goats, possums, pigs; uncontrolled domestic live stock; local deer.	Goats, possums, hares in Egmont National Park; domestic livestock, possums elsewhere.	Goats, possums, pigs, uncontrolled domestic live stock; local deer.	Goats, possums, pigs, uncontrolled domestic live stock; local deer.
(b) Weeds	Pasture species invade disturbed areas; local purple buddleia; Japanese walnut, Himalayan honeysuckle.	Coastal weeds include box-thorn, marram, pampas, Chilean rhubarb (local), pasture species; some old man's beard elsewhere; Chilean rhubarb along rivers.	Coastal weeds include boxthorn, marram, pampas; pampas a threat inland as well.	Purple buddleia, Himalayan honeysuckle, barberry, Japanese walnut, old man's beard.
Historic features	Few known archaeological sites except along major rivers. Evidence of past, failed attempts at pastoral farming. A few sites of past industries (flour mill, brick manufacture). (District needs more systematic archaeological research).	Abundent pre European archaeological sites on coastal fringe and some inland; many are well preserved and visible (most are on private land, some in historic reserves). Some features of early European settlement and 1860's land wars still remain.	Pre-European archaeological sites mostly on the coast, and especially close to larger rivers. A few sites relate to 1860's land wars; some of past industries (eg. lime kiln, coal and timber extraction, railways construction).	Few recorded archaeological sites except for beside major rivers. Steeper country with evidence of past, failed attempts at pastoral farming. (District needs more systematic archaeological research.)
Recreation / tourism	Contains most of Whanganui NP. Whanganui River - nationally significant; canoeing, and jetboating. Guided canoe trips. Manganui o te Ao River; fishing, rafting. Matemateaonga Walkway and Mangapurua Track; tramping. Pig and goat hunting (esp. Mangapurua and Waitotara Forest), some Fallow deer. Dis-used roads, old stock routes. Stratford - Taumarunui Heritage Trail (S.H. No43). Wanganui River Road scenic drive. Lake Rotorangi; boating and fishing.	Egmont NP; Well-developed track/hut network, roadend facilities, tourist lodges, bush walks, picnicking, skiing, tramping, (Around the Mountain Track), mountaineering, rock climbing and summit climbs. Walkways. Scenic and historic reserves. Coastal Recreation, swimming, beach walks, picnicking, surfing. Boating and diving around Sugar Loaf Islands. Trout fishing in the ring plain's rivers and streams.	Coastal recreation dominant: fishing, boating, picnicking. Baches. Whitecliffs Walkway. Mokau River whitebaiting and canoeing. Scenic drives - SH 3 and SH 40. Moki and Rerekapa Tracks; other tramping routes. Goat and pig hunting. Dis-used roads, old stock routes. Extensive areas of "backcountry".	Upper reaches of Whanganui River - canoeing, jetboating. Scenic reserves - picnicking and bush walks. Hunting. Northern parts of Whanganui NP.

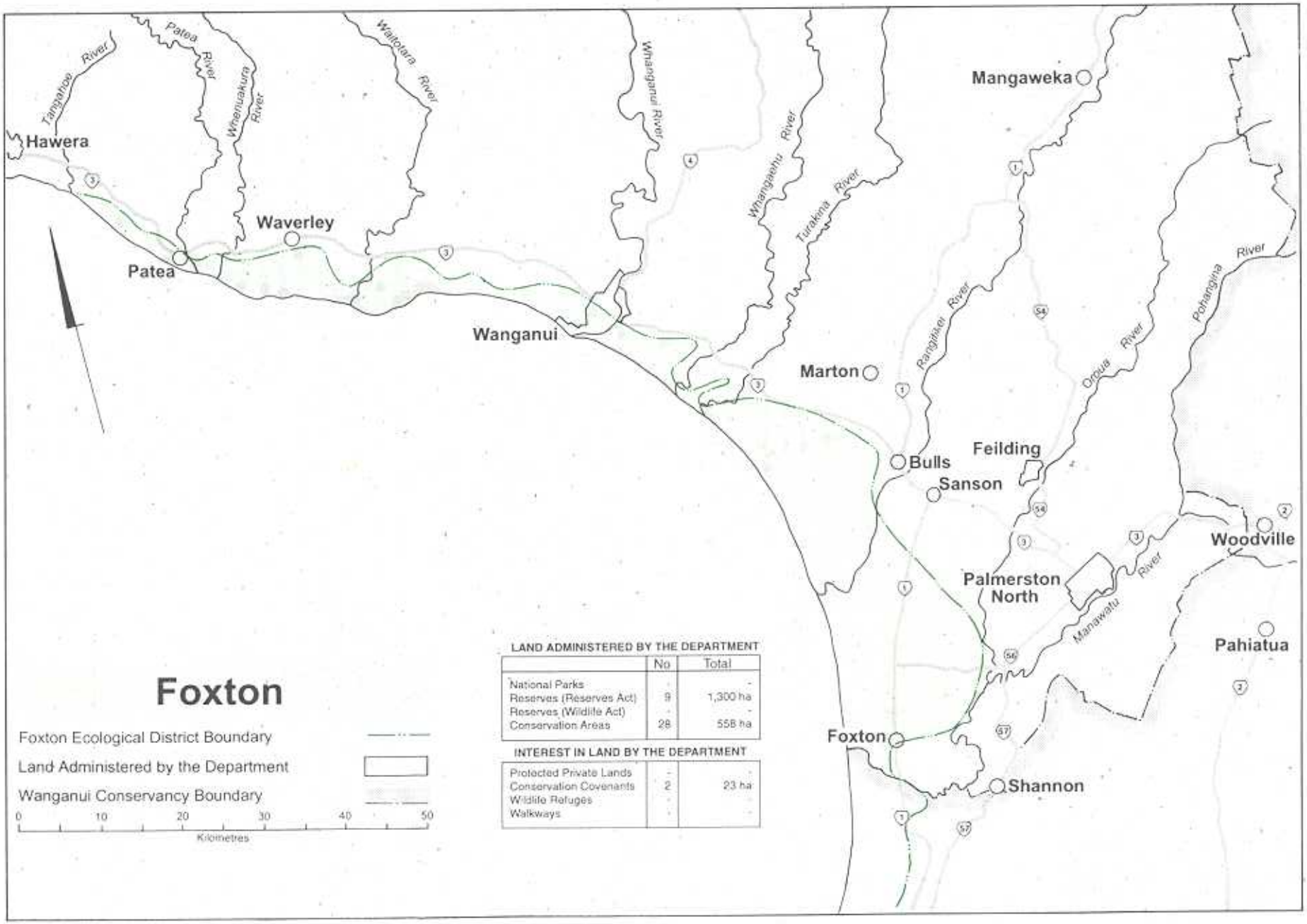


FIGURE 7: FOXTON ECOLOGICAL DISTRICT

7. Foxton Ecological District - The Sand Country

7.1 INTRODUCTION

Foxton Ecological District is sand country - its landforms are the result of sand movement, both past and continuing, under the influence of prevailing westerly winds from the coast. Today, artificial restrictions on sand movement are preventing the natural processes of dune and wetland formation. The result is that the remaining areas with native vegetation have high value.

Foxton district comprises 105,500 ha, of which about 76,800 ha lie in the Conservancy. The district is shown on Fig.7, along with a description of land administered by the Department.

Foxton district has had a long history of major modification and now contains mostly farmland, exotic pine plantations and urban areas. Few natural areas remain. The achievement of conservation objectives in this district can therefore not be divorced from the day-to-day management of private land.

7.2 VISION

The active sand dune country and adjoining marine environment is valued by all users for its distinctive natural landforms (sand-derived drylands and wetlands), native plant and animal communities, landscapes, historic resources and remote-experience opportunities. Representative areas of land and marine environment are formally protected. Threats to remaining natural areas in the sand country have been removed or managed in such a way that natural character has increased. The area of natural dune lands has increased as some coastal lands are retired from farming and other land uses.

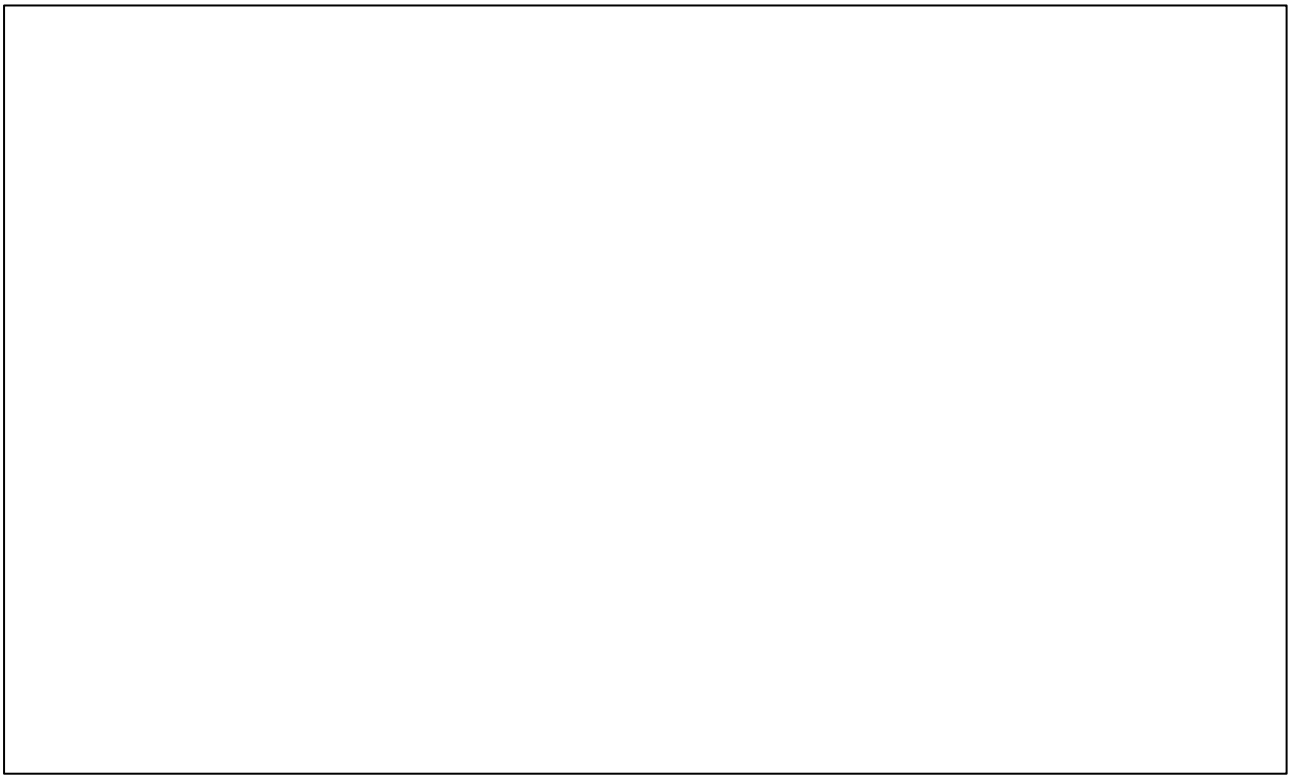
7.3 PHYSICAL DESCRIPTION

7.3.1 Topography

The sand country has been built through the combined action of water and wind. Sand was, and continues to be brought to the coast by rivers from the greywacke ranges, the Volcanic Plateau and the soft sediments of the inland Wanganui country. After being sorted by the sea and carried to the shore, sand is blown inland. Wind moulds the sand into dunes, parallel to the shore near the coast but aligned with the prevailing wind further inland. Several phases of dune building have occurred in the past, and they seem to be related to periods when more sand was available, as happened when forests were cleared by early Polynesian fires and again by European land development. One other result of moving sand is the presence of ventifacts (rocks sculptured by wind-blown sand) at several locations on the coast.

Cross Reference
See Sec 7.7.4

West of Wanganui the landscape character of the Foxton district changes. Most of the dunes overlie an elevated marine terrace and the coast usually comprises tall eroding sea cliffs of mudstone, sandstone, or soft shelly limestone. Geologically, the area is well known because it contains places from which names were given to rocks of late Pliocene and Pleistocene age (5 million to 10,000 years old), mainly through fossils in the sedimentary rocks. The geological time divisions of the Wanganui Series rocks contain the Haweran, Castlecliffian, Nukumaruan, Mangaparian and Waipipian Stages, each named from places in the Foxton district.



Sand country north of Foxton shows a mosaic of dunes, damp dune hollows and dune lakes.

7.3.2 Climate

The climate is temperate, with warm summers and mild winters. Temperatures range between an average yearly minimum of -4°C and an average yearly maximum of 28.7°C. The district has an annual rainfall of 850-900 mm, which is lower and less variable across the district than in the rest of the Conservancy. Wind is a feature; westerly winds predominate, often reaching gale force.

7.3.3 Vegetation Patterns

Before the arrival of humans, much of the district was forested. The main exceptions were young dunes with shrubs and sand-binding grasses and sedges, swamps and lake edges with mosaics of scrub, harakeke (NZ flax) and various reeds, and estuaries fringed with rushes and mats of succulent herbs.

Much of the forest had been burnt by the time Europeans arrived. Subsequent clearing for timber and for farming and forestry reduced the amount of predominantly indigenous vegetation to less than 5% of the whole district.

Today, native forest occurs as only sparse remnants, most common and varied to the south of the Manawatu River, in Wellington Conservancy. The large swamps have

been drained, remaining dune lakes are isolated in a sea of grazed pasture or pines, and many estuarine edges have been claimed for roading, industrial uses or converted to pasture. Dry coastal dunes remain as the largest near-natural areas in the district, although they are all modified to a greater or lesser degree by weeds, grazing, housing and other influences.

7.3.4 Water

Meandering streams and rivers cut through the sand country, and are usually tidal in their lower reaches. Most, including the Manawatu River, the smaller Turakina River, and even streams as small as the Kai-iwi have well-developed estuarine zones. Whanganui and Patea Rivers have been extensively channelled and retain little natural estuarine vegetation. Although dry land predominates, swamps and dune lakes are important features. Such wetlands are either areas of water trapped by natural movement of sand, or lie in broad basins where the wind has removed sand down to the water table.

7.3.5 Marine

Compared with the terrestrial environment, there is only limited information available on the marine environment which adjoins the Foxton district.

The seabed slopes south towards Cook Strait and in the west is made up of boulders and coarser sediments, i.e. gravels, sands and shellbanks. Numerous banks and ridges are found on the seabed, particularly off Patea, and are mainly made up of black ironsand.

South of Wanganui the seabed has graded sediments ranging from muddy sands to mud. The mud in this area is likely to originate from the nearby Whanganui, Rangitikei and Manawatu Rivers. No offshore, intertidal or subtidal reefs are known to exist between the Manawatu and Whanganui Rivers. Northwest of the Whanganui River there are a limited number of inshore reefs, with the largest reef located off Waiinu Beach and several offshore reefs. Andesitic boulders occur on the foreshore in isolated areas.

Hydrography

This is a high energy marine environment with shore wave heights commonly exceeding 3m. The maximum tidal range is 2.4m.

The seabed and coastal profile is influenced in part by storm and tidal surges. The dynamic coastal system has the potential for large quantities of sand to be shifted on and offshore, as well as along shore by coastal processes.

Direct exposure to weather patterns from the west results in wave surges in the more shallow parts. There is a general southeasterly littoral drift that tends to deflect the numerous stream and river mouths to the south, behind spits.

At the outer seaward boundary, the D'Urville current moves over the deeper region into Cook Strait. Closer to shore there is a low salinity current flowing west, originating from the lower North Island rivers.

7.4 HISTORY

This district has had a long history of use by Maori and Europeans. Aotea people, led by Turi, settled along the South Taranaki coast. Other people who had already occupied coastal pockets were known as Kahui Maunga and Kahui Rere. From the south and east, the Kurahaupo people settled near rivers, swamps and lakes between Foxton and Wanganui. The sand country provided a valuable resource base for occupation and use by Maori. Many of the settlements along the coast were occupied during the fishing season only. The permanent settlements were located near major water bodies which offered easy access to food resources and had good natural defence features.

Dune lakes were prized for eels and disputes over use rights were frequent. Wetlands were also an important resource for harakeke (flax) weaving material , raupo and kakaho (toetoe seed stalks) for wall linings. The open dunes were the habitat of pingao which was woven into kete and tukutuku panels.

The coast had long been used as a route between Wellington and Taranaki. Maori occupation of the sand country between the Turakina and Rangitikei Rivers was noted by early Europeans, but even then the moving dunes were covering or destroying sites.[108] The most common recorded are middens and food storage pits.[60]

Foxton and Wanganui were among New Zealand's early European settlements. Harvesting and farming of harakeke was an important early industry which had impacts on many wetlands. Coastal shipping,with major ports at Foxton, Wanganui and Patea, grew in importance as the settlements grew. Many buildings and structures still remain from last century. Development of pastoral farming and, more recently, forestry, has often had a detrimental effect on within the district.

7.5 VALUES AND THREATS

7.5.1 Background

The history of human occupation and activities in the Foxton district provides a base from which the importance of the remaining natural areas can be judged. Some fragments which survived many of the changes wrought by human activities are now protected in reserves. Others remain in private ownership. Each remnant contains clues to the original character of the district. Even a small pocket of bush or patch of harakeke on a lake edge or swamp can give us a hint of the kinds of wilderness described by early travellers and settlers.

Conservation management cannot fix natural areas in time capsules. The small sizes of today's remnants in the sand country make them vulnerable to edge effects such as salt wind damage, drought, invasion by weeds, and over-use by people. Possums and other introduced animal threats are widespread. Management can buffer the reserves from some of these influences, but changes are still inevitable.

7.5.2 Protected Natural Areas Programme

The present reserves in the sand country do not protect the full range of biological diversity which remains. Dune lakes, swamps and young dunes are particularly poorly

represented.

In 1989-90, Wanganui Conservancy undertook a survey of the Foxton Ecological District and published a Protected Natural Areas Programme (PNA) report[91]. This survey identified 60 unprotected sites which contain native plant and animal communities which are not found, or are poorly represented on protected lands. The Department and some other agencies are committed to helping landowners protect these 60 sites, termed Recommended Areas for Protection (RAPs). Of these, 29 lie in Wanganui Conservancy, the remainder are in Wellington Conservancy.

Cross Reference
See Sec 20.1

7.5.3 Ecosystem Diversity

(a) Forest

Forest was once the dominant cover of all but the youngest dunes. So little now remains that every patch is valuable for conserving this aspect of the sand country's original identity. Most of the larger remnants in private ownership were recommended for protection in the PNA report. Kanuka may have been the dominant tree at the time of European settlement, but much of it became firewood for the settlers. Over time, through natural succession, kanuka forest would have eventually given way to totara, matai and broad-leaved trees. The best example is on privately-owned dunes near Levin (Wellington Conservancy), but another in private ownership to the west of Lake Alice is in reasonably good condition. Both are recommended areas for protection.

Forest on dry land is coastal broad-leaved in character, with ngaio, karaka, titoki and mahoe as common species. Wetter sites have mixed podocarp/broad-leaved swamp forest with kahikatea, ti kouka (cabbage tree) and pukatea as typical trees.

Of the older forest fragments in the sand country, Round Bush Scenic Reserve and Himatangi Bush Scientific Reserve, both near Foxton, are the best examples with a protected status.[104]

Many remnants of forest are grazed by domestic livestock, which eventually reduce each forest patch to a stand of the hardiest canopy trees. Absent are the understorey shrubs, ferns, and young trees to replace dying canopy trees. Possum browsing compounds the problem, by removing flowers, fruit, palatable foliage and bark. Sambar deer are widespread. Fencing is usually the first priority to protect a forest remnant, though this can result in areas of rank pasture which are very slow to recolonise in native shrubs and trees.

Some weeds also thrive in fenced-off forest patches which have been opened up by past grazing. Wandering willie can form a smothering ground cover; Jerusalem cherry and elderberry may fill the understorey, and old man's beard and Japanese honeysuckle are able to smother the canopy trees.

(b) Dunes

The most common native plants on young dunes are the sand-binding grass, spinifex, and golden sedge, pingao. As dunes age, these plants are replaced by native shrubs, including sand coprosma, tauhinu and, very locally, sand pimelea. Whitiau Scientific Reserve has good examples of intact dry dune vegetation,[69] but the PNA report recommended additional sites to protect a wider range of plant communities on dry

dunes and in wet dune hollows.

Weeds such as pampas, boxthorn, gorse, holly-leaved senecio and introduced pasture plants have ruined the natural character of many areas. Damage by rabbits is usually easy to see, but rabbits and possums may be having greater impacts on naturalness than is commonly suspected. Domestic stock often have access to dunes, even dunes which have not been "developed" for farming. Dunes are under a multitude of other threats, including off-road vehicles, rubbish dumping, and urban sprawl (beach houses, roads and utility services).

Forestry and farming have resulted in the greatest losses of native vegetation from dunes. There has in the past been little recognition of the inherent dynamic state of dunes or of their distinctive visual character. The natural character of the sand country has been greatly reduced by plantings of marram and tree lupins in an attempt to prevent essentially natural processes. Of course, where sand erosion is the result of over-grazing or other human activities, artificial stabilisation may be needed, but the use of native species may be more effective long-term, and is certainly more in keeping with preserving the natural character of dunes.

Spinifex - a native sand-binding grass.

(c) Wetlands

In swamps, tussocks of toetoe, harakeke and *Carex secta* are usually mixed with raupo, as at Pukepuke Lagoon, near Tangimoana [65] and Ihupuku Swamp Wildlife Management Reserve near Waverley,[86] though pure or mixed stands of raupo and various sedges and rushes occur in Waimahora Swamp at Santoft [67] and elsewhere.

Dense native scrub occurs around some swamps and lake fringes, where *Coprosma* species (*C. propinqua*, *C. rigida* and, locally, *C. tenuicaulis*), shrub daisies (*Olearia virgata*, *O. solandri*) and manuka are the most common shrubs. Wetland scrub is poorly represented in reserves, though a good example is covenanted at Lake Koputara and several are recommended for protection, such as Plains Farm Shrubland.[86] Shrublands in damp sites usually contain variable amounts of toetoe, harakeke (NZ flax) and ti kouka. Damp sand hollows between coastal dunes at Whitiau Scientific Reserve have good examples.

A very distinctive kind of wetland occurs on broad, low fertility sand flats where shallow water lies for several months each year. These ephemeral wetlands have distinctive mat-forming, often succulent, native plants. Probably the best examples remaining are in Whitiau Scenic Reserve[69] and Hawken's Lagoon Conservation Area, at Waitotara[73] and in an area recommended for protection at Tangimoana[91]. Those which once occurred widely, e.g. at Himatangi Beach[39] and Turakina Beach (Koitiata)[37] are now disappearing under pampas, tall fescue, holly-leaved senecio, clovers and other weeds.

A range of wetland types provides habitat for a variety of waterbirds : dense reeds for secretive species such as fernbird, crakes and bittern, shallow open water for wading birds, dabbling ducks and black swan, and deeper water for diving birds, including scaup, coot and dabchick. Damp mud and sand is used by short-legged waders such as dotterels.

New Zealand shoveler ducks are in large numbers seasonally on some lakes such as

Hawken's Lagoon.

Wetlands are also important for native fish. Several streams and rivers are known to be inanga spawning sites, though these are often threatened by stock damage and drainage. In addition to inanga, there are bullies, giant kokopu, brown mudfish and other galaxiids. Several dune lakes contain both short and long-finned eels.

As well as being greatly depleted, the district's wetlands are all modified from their original condition. Grazing by stock and sambar deer is common around wetland margins, and shallow or ephemeral wetlands are often entirely grazed.

The insidious effects of nutrient input in wetlands may be hard to observe in the short term. Many weeds and a few native species such as raupo actually benefit from extra nutrients, for example, from agricultural run-off (animal wastes and artificial fertilisers). Raupo is controlled in some wetlands to maintain areas of open water and wading bird habitat. What is lost is a suite of species which need either low fertility sites or which cannot compete with the accelerated growth of weeds. Ephemeral wetland vegetation is especially threatened by nutrient inputs, and shallow swamps dominated by *Baumea* sedges or jointed wire-rush are now very rare.

(d) Estuaries

Vegetation of the intertidal parts of estuaries is typically composed of succulent herbs such as glasswort and sea primrose, and beds of jointed wire-rush and sea rush. By far the largest and most diverse area is in the Manawatu River Estuary. This contains the Conservancy's largest amount of salt-marsh ribbonwood, an important component of fernbird habitat.

Much of the Rangitikei River estuary is quite sandy, and the saltmarsh differs in that it has the district's largest colonies of an estuarine tussock, *Carex litorosa* and the mat-forming daisy, *Leptinella (Cotula) dioica*.

The district's estuaries are important habitats for wading birds, including migrants from Arctic breeding grounds (most commonly the bar-tailed godwit, lesser knot and golden plover) and from breeding grounds elsewhere in New Zealand, especially the South Island (wrybill, South Island pied oystercatcher, royal spoonbill, banded dotterel). The largest numbers and variety of waders are at the Manawatu River Estuary, including some which rarely reach New Zealand or which arrive in very small numbers. They include sandpipers, whimbrels, tattlers, and eastern curlew.

The estuaries have black flounder, kahawai, mullet, brown trout and the occasional quinnat salmon.

The introduced grass *Spartina*, threatens much of the wading bird habitat, and has been subject to control in the Manawatu Estuary, with some success. Many hectares remain, and smaller areas are also in the Whenuakura and Patea estuaries.

(e) Sea-cliffs

Although parts of the sea cliffs west of Wanganui are sheer and almost devoid of vegetation, most have damp ledges and some are steep slopes. These provide habitats for native plants, many not known from the dunes to the south.[85,91] Harakeke and, less commonly, whaririki or coastal flax, toetoe, various sedges, rushes, and succulent herbs are locally common. Sheltered gullies have typical broad-leaved trees and shrubs of semi-coastal sites.

(f) Marine

The exposed nature of the coast causes most marine species to be opportunistic, using a hard surface when it is available. No large concentrations of seaweed are known inshore.

The environment north of Wanganui is habitat for marine communities associated with boulders, sands and gravels. A large reef known as the North and South Trap is located 6km offshore from Patea . Algae live in the intertidal zone on the upper surface of boulders. Also present are crayfish, paua, paddlecrabs, and kina. Snapper, trevally, mackerel and barracouta are fished commercially.

Surf clams have been identified as a commercial resource. Near shore fisheries include snapper, trevally, tarakihi, kahawai and mackerel, with mackerel also being taken in the deeper waters. There is currently no formal protection over the seabed adjacent to this ecological district, although an area close to the Waitotara River mouth has been identified as possibly having merit as a marine reserve. To date, no detailed investigation or consultation has been carried out for this area. (Refer to Appendix 8, No. 1 Waiinu Beach and No. 7 Waitotara River Estuary.)

Land use activities which increase the silt loading of rivers threaten natural values of the coastal marine area. Sediment in the Whanganui,Turakina, Manawatu and other estuaries has reduced the variety and abundance of fish, birds and other life. Nutrients carried by rivers into estuaries can also be a problem contributing to excessive growth of undesirable species such as *Spartina*.

There are direct discharges of wastes into the estuary at Foxton and into the estuary and sea at Wanganui. The problems that discharges create for natural ecosystems and human communities have been recognised and are being addressed by regional and district councils.

Recreational opportunities at estuaries and beaches are reduced if water quality is poor.

Landfills near the coast at Wanganui and at Foxton continue to be used, although closure is now programmed. The effects of surface and groundwater run-off from landfills into the coastal marine area have not been examined and could pose problems for marine ecosystems.

Offshore oil exploration and production can also threaten natural values in the marine environment. The threats include the discharge of drill cuttings and muds which can smother the seabed. Accidental discharges of oil during drilling or production phases have well known catastrophic effects on marine ecosystems.

Areas containing important natural values in the coastal environment of the district, including estuaries, are identified in Appendix 8.

7.5.4 Landscape

Of the many landforms of national importance in the Wanganui Conservancy,[48] dunes are under the greatest threat from development and changing land use practices. Dune stabilisation stops the dynamic processes which formed the dunes, and the landforms become "frozen in time". Dunes are usually preserved when the land is used for forestry or farming, but the landscapes are altered. Forestry conceals dune landscapes, whereas farming can preserve much of the visual impact of extensive dunes aligned with the prevailing wind. If woodlots are grown on the dunes and the

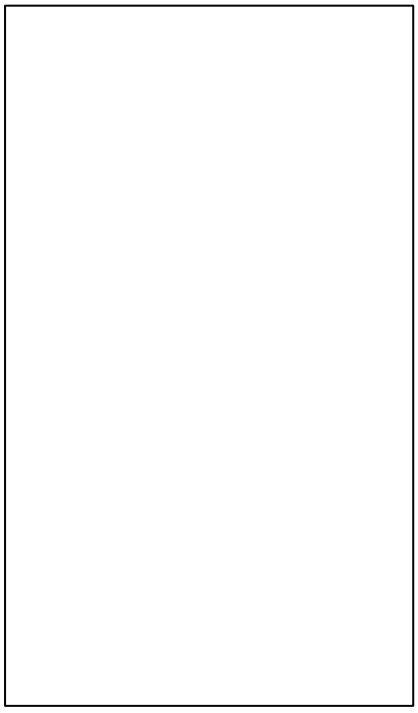
Dramatic coastal landscapes result from natural erosion processes (mudstone cliffs at Waverley Beach).

intervening flats are farmed, the visual impacts of the landforms are magnified. On the other hand, shelterbelts across the prevailing winds will break dune landscapes into unnatural blocks.

The coastal cliffs are natural features of special landscape significance. They reflect the very dynamic climate and marine environment of the South Taranaki Bight. Few other coastlines in New Zealand have so vast and continuous a stretch of high cliffs of homogenous character. They are threatened by accelerated erosion and by quarrying. Local sections of this coast have high visual diversity. One example is the indented and sea-sculptured coastline at Waverley Beach, where secluded beaches are contained within deeply indented cliffs.

7.5.5 Plants at Risk

Foxton district has 13 species featuring in the national list of threatened, rare and local plants (Appendix 6). Of the various habitats described above, it is the dry dunes and damp dune flats which have the greatest number of species in this list.



Flowers of one of New Zealand's most endangered indigenous plants, Sebaea ovata.

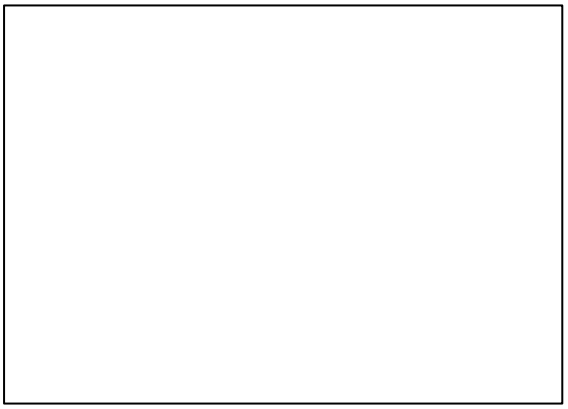
The species considered most threatened are *Sebaea ovata*, a relative of gentians, an unnamed *Pimelea* species which is not known anywhere else in New Zealand, and the swamp greenhood orchid. The main colony of the *Sebaea ovata* is in Whitiau Scientific Reserve.[69] The same reserve also has healthy populations of sand iris, pingao, sand pimelea, dwarf mazus and a tiny tufted sedge, *Isolepis basilaris.* These five species occur elsewhere in the sand country but, apart from pingao, mostly in low numbers. The same kind of damp sand flats between the Rangitikei and Manawatu Rivers have pockets of other threatened species, most notably the unnamed *Pimelea* and a creeping sedge, *Eleocharis neo-zelandica.* Two sites with these plants are identified as RAPs.[91] Pingao is widespread and sometimes common, but is threatened by unsustainable harvesting for cultural uses as well as the general threats to dune plants. Rabbit browsing prevents pingao regeneration.

Because so many swamps and lakes have been lost or modified, it is not surprising that plants which need such habitats have often become uncommon in the district. Two feature in the national list of species at risk. Ihupuku Swamp has swamp greenhood[86]. A semi-climbing swamp nettle is known only from a RAP west of Lake Alice and Tunnel Hill wetlands.

West of Wanganui the sea cliffs have isolated pockets of a tiny daisy, *Leptinella dispersa* subsp. *rupestris* (each little colony seems to be only male plants or only female), and two succulent herbs, *Crassula manaia* (endemic to the coast from near Cape Egmont to Waverley) and an unnamed *Limosella* just north of Patea.[85]

7.5.6 Wildlife at Risk

The national list of threatened, rare and local animals[7] includes 22 species which live in the district permanently or which are regular visitors (Appendix 6). These include New Zealand dabchick, and royal spoonbill. Several others, including black stilt, are rare visitors.



Banded dotterels nest on the coast, but in fewer places now than in the past.

Swamps and lakes of the sand country contain the greatest range of species at risk. Foxton district is one of the three major areas with New Zealand dabchick, and there are scattered occurrences of . Breeding of banded dotterel used to occur at many coastal sites but it is now known only near the Turakina and Whanganui River mouths.

Few records of lizards exist for this district. These are for the common skink and common gecko, though the gold-striped gecko (status of regionally threatened) has been found just north and south of the district.

The district's invertebrates have not been comprehensively studied, though some work has been done on beetles, moths and other insects in sand dunes. The katipo spider is common near the coast. A small moth, *Ericodesma aerodana,* was found in 1991 in dunes near Wanganui. Because its caterpillars feed only on the threatened shrub, sand pimelea, it is probably a species at risk. Only one other sighting 111 years earlier had been recorded in the North Island.

7.5.7 Historic Resources

The Department has limited information about historic places on land it administers in this district.

A pa is sited partially on land administered by the Department at Pukepuke Lagoon. Features associated with shipping include the wreck of the 'Fusilier', and the site of the old Foxton Port. A significance assessment has not been carried out on these features and nor are they actively managed by the Department. Threats to their historic values are unknown.

Other historic places exist on land administered by the Department in this district and information needs to be collected about these.

7.5.8 Recreation

The sand country is very accessible for recreation. Long, empty stretches of sandy beach backed by dunes or cliffs, with little sign of habitation and a limited number of public access points, contribute to a feeling of 'remoteness' and 'naturalness'. Many people like to feel removed from obvious trappings of civilisation and they enjoy wind and sun, primitive landforms and native plants and animals in natural surroundings. The challenge is to manage this environment for people to have these experiences, without further degrading its natural character.

Recreation in the district is largely oriented towards the coast, walking, horse riding, picnicking and swimming. Water sports include sailing, windsurfing, jetskiing and surfing. Diving is limited mainly to the North and South Traps, off Waitotara. Surfcasting, longlining, whitebaiting, netting and shellfish gathering are popular. The coast is exposed to the prevailing westerly winds and recreational use is limited when

conditions are rough.

Cross Reference
See Sec. 37.3

The use of off-road vehicles, such as trail bikes and beach buggies, although popular, threatens the vulnerable sand dune and wetland ecosystems. Vehicles damage sensitive dune vegetation, accelerate erosion and expose areas to weed invasion. In many areas use of such vehicles also detracts from the quiet recreational enjoyment of other users and destroys wildlife values.

The Manawatu, Turakina, Whanganui and Waitotara estuaries are popular places to study coastal birds.

Hunting for sambar deer, upland game and waterfowl occurs in the coastal (mostly exotic) forests, dunelands and around small dune lakes. Pukepuke Lagoon has a number of stands which are balloted to hunters at the start of each game season. Raupo is controlled as a means of maintaining open water habitat.

7.5.9 Commercial (Non-Recreation)Activity

There are four grazing licences and one golf course in this district covering 120.35 ha. All are in habitats which have been substantially modified from the original native vegetation, and are now retained for current or future recreational uses.

See Sec. 34.6

Any future development of the offshore Kupe South oil-field has the potential to impact on the shoreline, with a pipeline likely to come ashore at the northern boundary of the district.

7.5.10 Public Awareness

As the Department manages only a few places in the district, the future of natural areas, landscapes, biodiversity and historic sites is very much in the hands of the public. Landowners and territorial authorities have the prime roles.

See Sec. 42.1

The Department's major role in this district is to raise public awareness and provide advice through research, public awareness programmes, and statutory advocacy. Specific projects requiring a public awareness component include the Protected Natural Areas Programme, working with Tangata Whenua and other groups to manage sources of plant materials (especially pingao) for cultural uses, revegetation of damaged natural areas using native species, minimising impacts on dunes and other sensitive areas, maintenance of water quality, and protection of wildlife and their habitats.

7.5.11 Land Management

A number of areas administered by the Department within this district are administered under the Conservation Act 1987 as Stewardship Areas. Many of these, such as Hawken's Lagoon, Pukepuke Lagoon and Waimahora Swamp contain important natural values, but their status as stewardship areas provides inadequate protection. Since wetland ecosystems are poorly represented in protected areas, it is important that the status of such areas is enhanced to improve their public profile.

See Sec. 20.6

The Department , in conjunction with local authorities, administers the Harbour Boards Dry Land Endowment Revesting Act 1991 which affects land at Patea and Wanganui. Parts of this land which have important natural or historic values may require subdivision in order to protect such values, leaving the balance of the property available for disposal.

7.6 CHECKLIST OF KEY ISSUES

- Lack of representativeness in existing reserves.
- Loss of remaining swamps, lakes, wetlands and damp dune basins.
- Conflicts between farming/forestry developments and the need to protect representative natural areas.
- Lack of recognition that dunes are naturally dynamic places.
- Enhanced protective status for important stewardship areas.
- Protection of natural values associated with land which will become a reserve or conservation area through the Harbour Boards Dry Land Endowment Revesting Act procedure.
- Protection of coastal and marine values.
- Consultation with Tangata Whenua on matters of cultural importance and conservation management.
- Protection of significant geological sites (including areas of ventifacts), natural landforms and landscapes.
- The continued existence of threatened plants of dunes.
- The continued existence of threatened animals of wetlands.
- Loss of freshwater fish habitats, especially for spawning.
- Taking of eels from land administered by the Department.
- High demands for pingao for cultural uses.
- Impacts of animal and weed pests on natural areas.
- Uncontrolled domestic livestock.
- Impacts of sambar deer in natural areas.
- Damage caused by off-road vehicles in sand country and wetlands.
- Provision of recreational facilities, opportunities and access.
- Maintenance of water quality, both coastal and freshwater.
- Impact of urban developments (including houses, roads and utility services) on natural areas and native species.
- Impacts of refuse disposal sites on natural values.
- Lack of public awareness of coastal values and the protection of natural areas.

7.7 MANAGEMENT OBJECTIVES

7.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the sand country, especially native vegetation of dunes, wetlands, lakes and

forest remnants, as identified in PNAP and other natural resource inventories, primarily through:

- working with land owners to achieve legal and physical protection of the 25 Priority One and four Priority Two areas recommended for protection by the Foxton PNAP
- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness of and support for protection of areas identified through the PNAP.

(ii) To protect the natural, historic and recreation values of former harbour board land in Patea and Wanganui.

Land Classification

Cross Reference
See Sec. 20.3

(iii) To review the land status of stewardship areas with high natural, historic or recreational values such as Pukepuke Lagoon and Hawken's Lagoon and if merited, either:

- confer additional specific protection or preservation requirements under section 18 of the Conservation Act 1987, or
- place reserve, sanctuary or refuge status under the Reserves and Wildlife Acts via section 8 of the Conservation Act 1987.

7.7.2 Marine

See Sec. 21

(i) To advocate the protection of coastal and marine values through the statutory consent process, where these values are likely to be affected by such activities as:

- development in Port Wanganui
- disposal of harbour dredgings.

(ii) To advocate the protection of areas with important natural values in the coastal environment of the district, as identified in Appendix 8, and any further areas identified in the future.

(iii) To protect as marine reserves, for the purpose of scientific study, representative examples of marine ecosystems adjacent to this district. Where unique features are under threat, priority will be given to their protection.

7.7.3 Kaupapa Atawhai

(i) To work with Tangata Whenua in the district to achieve protection of dune lakes.

(ii) To encourage Tangata Whenua to participate in consultation processes that acknowledge the Treaty relationship with the Crown through:

- acknowledging Tangata Whenua management plans as they relate to land, waterways, coastal landscapes and estuarine environments
- sharing information and working with staff on matters relating to the conservation and management of traditional fisheries and food gathering places

- the creation of opportunities to work together in workshops and hui to protect and enhance the preservation of taonga, including traditional materials and food sources.

7.7.4 Landscape

(i) To protect significant geological sites, natural landforms and landscapes on land administered by the Department and advocate the protection of such sites on land not administered by the Department through:

- regional and district plans
- landscape education and awareness
- community involvement.

7.7.5 Native Species Protection

(i) To maintain threatened plants of the dunes through;

- seeking protection of the most important habitat of an unnamed *Pimelea* and *Eleocharis neozelandica* in Himatangi and Tangimoana dunes, and other threatened species
- species intervention i.e. propagation off-site, population transfers and enhancement, where habitats are critically threatened
- maintaining animal control in areas administered by the Department
- advocating land use controls in other important threatened plant habitats not currently administered by the Department.

(ii) To seek protection of important freshwater fish and water bird habitats in sand country streams, lakes, swamps and estuaries through:

- the use of historical and new survey information to prioritise areas of freshwater fish and water bird habitat for protection and management
- raising public awareness of the importance of these habitats
- statutory advocacy
- consultation with Tangata Whenua.

Cross Reference See Sec 22.3

(iii) Where necessary and practicable, control animal threats and predators of native species in accordance with national or local species recovery plans.

(iv) To ensure that the taking of eels is sustainable through:

- advocating the closure of important wetland habitats
- restricting commercial eel fishing on land administered by the Department. Commercial eel fishing is inappropriate in the following areas and is unlikely to be permitted:
  - Pukepuke Lagoon Conservation Area
  - Waimahora Conservation Area
  - Lake Koitiata Wildlife Management Reserve
  - Hawken's Lagoon Conservation Area.

7.7.6 Pests

(i) To control and, where possible, eradicate invasive weeds in natural areas in the Foxton district through:

- maintaining weed control in Whitiau Scientific Reserve, Hawken's Lagoon Conservation Area, Manawatu Estuary and other key protected areas which the Department administers, especially for spartina, pampas, boxthorn, holly-leaved senecio, gorse and other invasive weeds
- advocating weed control to territorial authorities and landholders of weeds which are known to be threats to the naturalness of the sand country (including weeds such as boneseed and pyp grass which are sparse now, but which are potentially serious)
- research into the impact of weeds in the dunes, wetlands and estuaries and on control methods.

(ii) To exclude domestic livestock from natural dune areas through:

- a programme for the fencing of Whitiau reserves and other key protected areas and the maintenance of these fences
- the use of the provisions of the Fencing Act 1978, the Impounding Act 1955 and or the stock trespass provisions of the Conservation Act 1987 or the Reserves Act 1977
- research into alternative fencing and management options for terrain that is difficult to fence using traditional methods, eg dunes and cliffs
- liaison with adjoining landowners.

(iii) To gain a better understanding of the role and impacts of rabbits, particularly in dune lands.

(iv) Control possums in Round Bush Scenic Reserve and other coastal forest remnants through:

- initial reduction of possum population using trapping and poisoning
- servicing permanent bait stations around reserve boundaries by staff or adjoining landowners.

Sambar Deer

(v) To assess the impact of sambar deer on natural values within this district for future management decisions on the level of control required for this species through:

- contributing to or undertaking research into the impact of sambar deer on important natural areas such as Round Bush Scenic Reserve
- consulting with other land owners/managers and recreational hunting groups when planning future management of this species.

(vi) Prepare a wild animal control plan for sambar deer in the Conservancy.

7.7.7 Revegetation

(i) To improve the naturalness of modified ecosystems through:

- the promotion of better and wider use of native plants, particularly pingao and spinifex in dunes
- researching improved means for establishing native plants on dunes and in the pasture fringes of protected remnants of native forest, shrublands and wetlands.

(ii) To maintain and enhance populations of pingao as components of the natural dune ecosystems, and for sustainable cultural harvesting through:

- promoting the sustainable use of pingao for cultural use
- research on harvesting methods and enhancement of pingao in the wild
- encouragement of marae and Hapu-based propagation of pingao.

7.7.8 Recreation

Cross Reference
See Sec. 37.3

(i) To maintain and improve legal public access to the coast in a manner which does not detract from the coast's remote and natural character through:

- providing and informing the public about access to coastal areas administered by the Department. In sensitive areas access will be limited to walking access only.
- advocating to regional and district councils that they maintain and enhance access to and along the coast.

(ii) To prevent environmental damage by off-road vehicles in vulnerable natural areas, and to reduce the impact on other users, through:

See Sec. 44.1

- seeking bylaws or regulations to prohibit or limit the use of off-road vehicles on land administered by the Department
- advocating to regional and district councils that planning controls be placed on off-road vehicle use
- encouraging regional and district councils to actively seek alternative areas for off-road vehicles
- creating greater public awareness of the damage caused by off-road vehicle use.

(iii) To provide for the continued use of the Pukepuke Lagoon Conservation Area as a game hunting area through:

- continued use of the ballot system for allocating hunting opportunities
- managing raupo to maintain an open water habitat.

7.7.9 Commercial (Non-Recreation) Activity

See Sec. 34.6

(i) To assess the preferred management of grazed areas which have recreational potential.

(ii) To liaise with the developers of the Kupe South Oilfield to minimise any adverse environmental effects arising from development of the field.

7.7.10 Urban Development Impacts

Cross Reference
See Sec 44.1, 44.2

(i) To advocate the progressive closure of remaining landfills which impact on land administered by the Department or which pose a threat to aquatic ecosystems through:

- relevant district and regional plans
- resource consent applications.

(ii) To advocate measures to ensure that leachate does not continue to enter waterways from closed landfill sites.

(iii) To advocate protection of natural areas and habitats in urban development proposals.

7.7.11 Freshwater

(i) Promote improved water quality, including reduced nutrient loadings, in rivers and estuaries within the district.

(ii) To promote the protection of remaining lakes and wetlands in the district through:

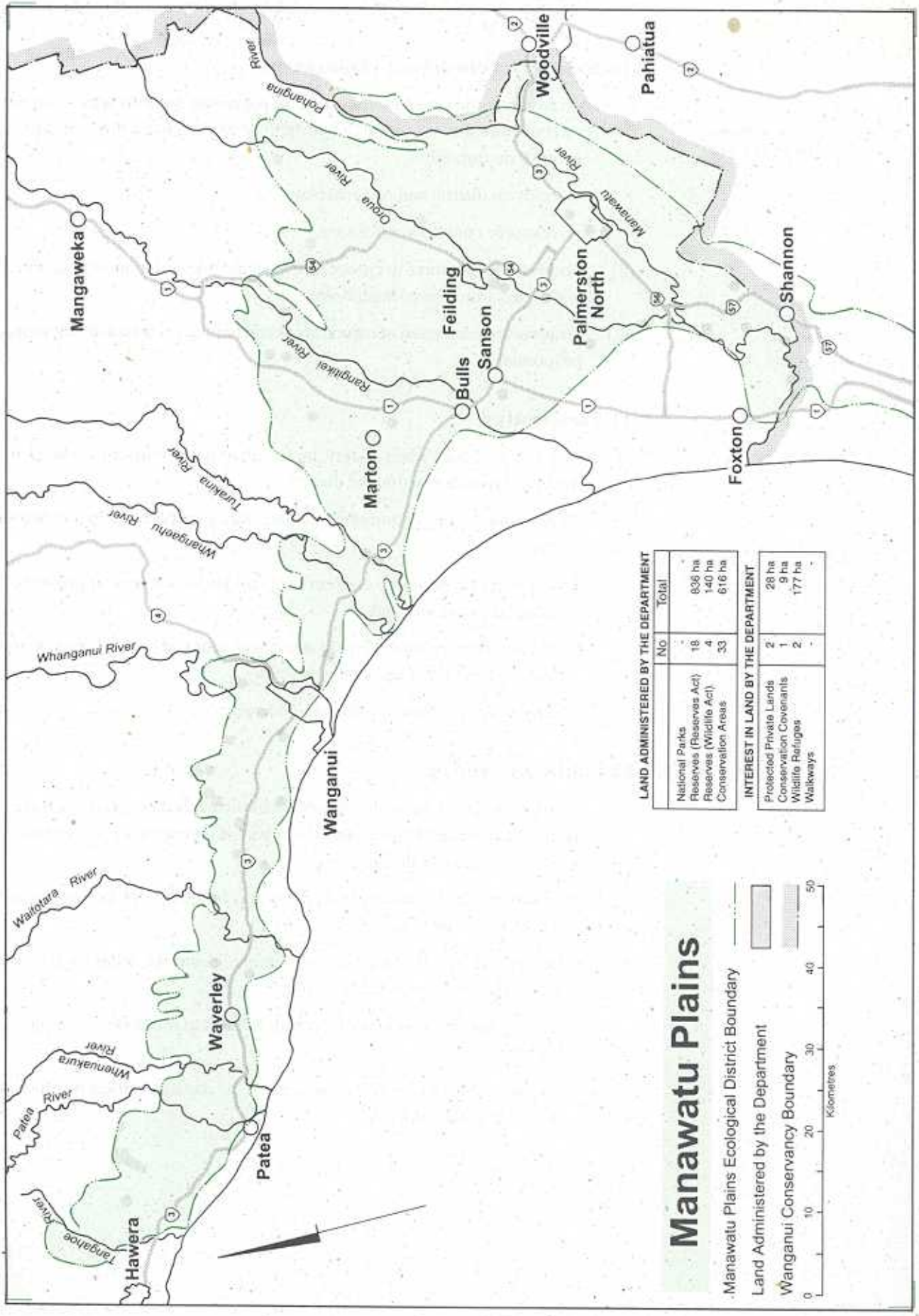
- opposing any resource consent applications which seek approval to drain lakes and wetlands
- encouraging regional councils to manage regional or catchment water tables which affect lakes and wetlands
- advocating appropriate riparian management.

7.7.12 Public Awareness

(i) To inform users of the sand country about the natural ecosystems, their dynamic nature and fragility, and about ways to preserve these systems or use them sustainably through:

- involvement of volunteer and community based groups to monitor and protect the coastal environment
- provide interpretation at high use recreation sites identified in the Conservancy Interpretation Strategy
- greater public awareness of the high fire risk in this district during summer
- to promote greater public awareness of the damage caused by off-road vehicles to natural areas.

FIGURE 8: MANAWATU PLAINS ECOLOGICAL DISTRICT



8 Manawatu Plains Ecological District - Terrace Country

8.1 INTRODUCTION

Manawatu Plains Ecological District covers 312,300 ha, of which 287,800 ha are in Wanganui Conservancy. The remainder is in Wellington Conservancy and lies south of the Manawatu River. The small parts of the Manawatu Gorge Ecological Districts which fall within Wanganui Conservancy are, for the purposes of this CMS, considered as being part of the adjoining Manawatu Plains district. The district is shown on Figure 8, along with a description of the land administered by the Department.

The main features which define the Manawatu Plains Ecological District are flat-surfaced flood plains and terraces. These are of both marine and riverine origin.

The district's original forests and wetlands have been largely displaced by farming and urban developments. The terrace country has the highest population of the ecological districts that make up Wanganui Conservancy (approximately 130,000 people at the 1991 census). The district's largest urban centre is Palmerston North. Other urban centres include Wanganui, Feilding, Marton, Bulls, Waverley and Patea.

8.2 VISION

The significance of the remaining small remnant indigenous forests and wetlands to the health and character of the landscape is accepted by residents and visitors. All significant remnants are formally protected and threats from weeds, possums and grazing are under control. Riparian areas are managed to retain or restore natural cover and help reduce pollution to rivers and streams. Areas of indigenous forest and wetland are created to replace some areas lost in the past.

8.3 PHYSICAL DESCRIPTION

8.3.1 Topography

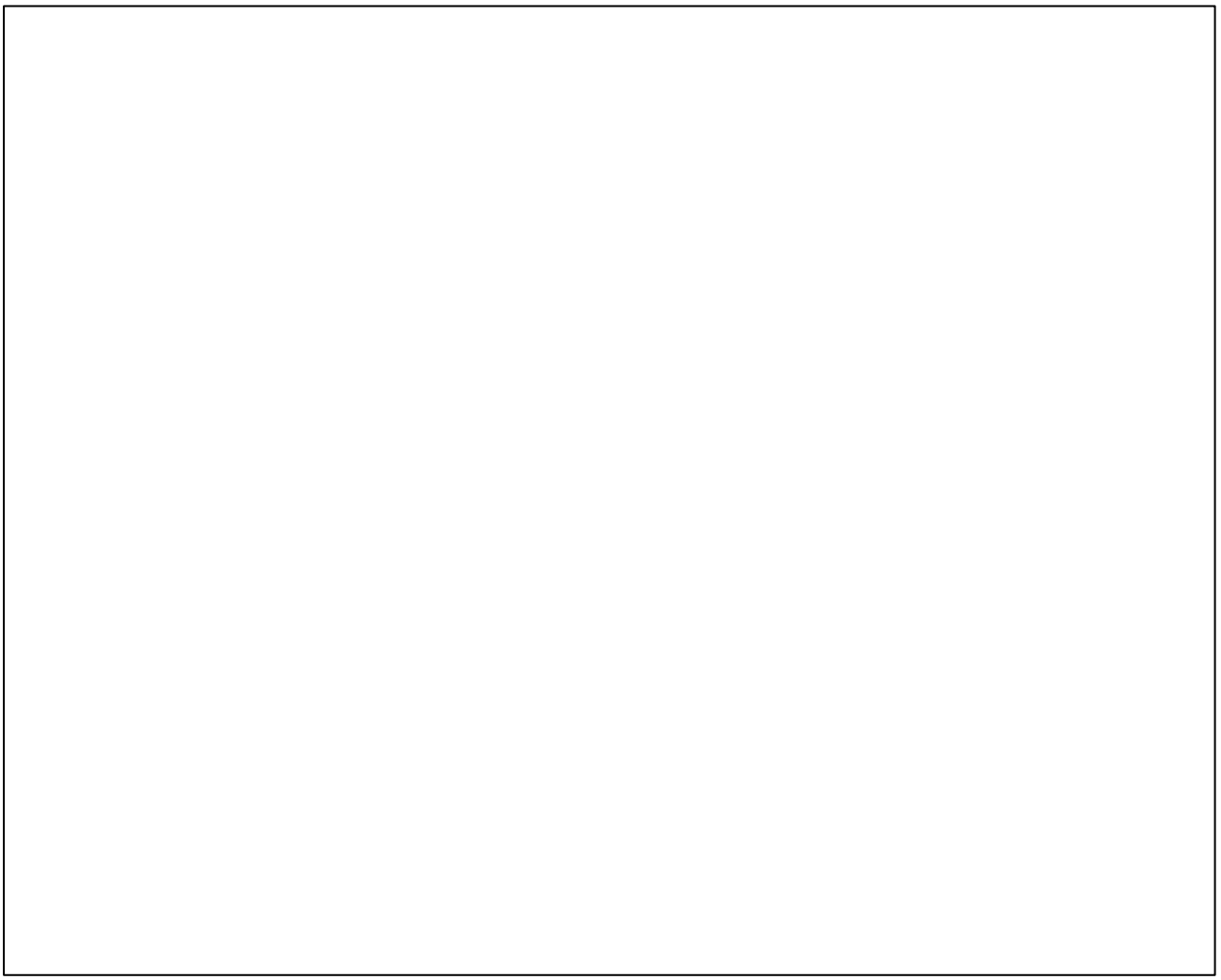
Marine terraces rise along the inland side of the adjoining sand country (Foxton district) as a series of stairs with short sloping scarps and broad flats. Terraces formed during meandering of the district's larger rivers tend to have steeper scarps and narrower flats.

The land is of low elevation and relief, especially in the east. The larger rivers, such as the Manawatu, Rangitikei, Turakina, Whangaehu, Whanganui, and Waitotara, meander on broad alluvial plains. However, rivers west of Wanganui are more deeply entrenched because of the greater elevation of the marine terraces.

Soils vary from east to west. For example, volcanic ash soils predominate in the western, higher rainfall areas. These are deep friable loams and are well drained.

Loess-based soils occur on higher terraces and hill country in low rainfall areas. Shallow stony soils occur on low terraces, and alluvial soils, which range from well-drained to poorly-drained, and peaty soils intermixed with alluvium, predominate in low-lying areas. Soils in this district have high natural fertility.

The Manawatu Gorge is distinct, being a river valley cut through hard greywacke almost to sea level.



The Manawatu Plains and River. In the middle ground is Moutoa flax swamp.

8.3.2 Climate

West to north-west winds prevail with relatively frequent gales. Rainfall is between 800 mm and 1200 mm/yr, with the west experiencing the wetter climates. Summers are warm and winters are mild.

8.3.3 Water

This district includes lower parts of the Rangitikei River and the Manawatu River including its lower tributaries, the Oroua and the Pohangina. A string of dune lakes and swamps marks the boundary between the terrace country and the sand country.

8.3.4 Vegetation

Forests originally dominated the terrace country, with extensive wetlands in the lower Manawatu. Polynesian fires had converted considerable areas of forest to scrub, fern and native grasslands on drier terraces such as those in the Marton area, but tall forest remained at the time of European settlement, especially in wetter areas. Land for Palmerston North had to be cleared of its podocarp forest and swamp vegetation. Harvesting of flax from natural wetlands was a major early industry in the lower Manawatu and Rangitikei areas.

8.4 HISTORY

The density of Maori settlement in the district is shown by the high frequency of recorded . Settlement was concentrated on the deforested marine terraces between Hawera and Waitotara. (See Figure 23)

From these localities, Maori had access to the sea to fish, and to the forest to gather leaves, berries, roots and birds. Inland lakes, swamps and rivers supplied eels, harakeke (flax) and waterfowl.

The importance of root crops such as kumara cultivated on the cleared land or river terraces is shown by the abundant and widespread food storage pits.[109]

Cross Reference
See Fig. 4

A number of redoubts and gunfighter pa from the time of the Taranaki Land Wars exist between Hawera and Wanganui. This area has an exceptionally strong significance to the Taranaki tribes of Nga Ruahine, Ngati Ruanui and Nga Rauru. It was in this area that Von Tempsky met his death and Titokowaru rose to prominence.

To the south in Rangitikei and Manawatu, the Kurahaupo people settled and were later joined by the Tainui people.

There were many known settlements along the Rangitikei, Manawatu and Oroua Rivers in the mid-nineteenth century. These probably date from the middle to late period of pre-European settlement or to the period of early European contact.[60]

The first organised European settlement was at Paiaka, 15km up the Manawatu River. It was intended to be the major town of the region, but the New Zealand Company had trouble gaining land title. The 1855 earthquake provided the final stimulus for the settlers to move to the area which is now Foxton.[9]

Once established, the Europeans set about altering the landscape. From the late 1860s, the dense podocarp forests of the district were felled and sawmills sprang up to convert them to timber. Stumps were removed and the land was grassed. Vast flax swamps that supplied flax mills in Foxton, Shannon and Linton were gradually drained and converted to pasture. New towns became established away from the coast. The advent of refrigeration saw the Manawatu prosper through the export of meat and dairy products.[9] Today's few bush and swamp remnants testify to the thoroughness of European land clearance.

8.5 VALUES AND THREATS

8.5.1 Background

The total area of native vegetation remaining in the Manawatu Plains district is probably the smallest of any district in the Conservancy. Today's remnants of native vegetation are mostly small and tend to occur on terrace scarps, being the steep pieces of land which were too difficult to farm intensively. Native forest and shrublands remain on steep land in the Manawatu Gorge.

8.5.2 Protected Natural Areas Programme

Between 1993 and 1995, Wanganui Conservancy undertook a survey of the Manawatu Plains Ecological District and published a Protected Natural Areas Programme (PNAP) Report[92]. This survey identified 33 unprotected sites which contain native plant and animal communities which are not found, or are poorly represented on protected lands. The Department and some other agencies are committed to helping landowners protect these sites, termed recommended areas for protection (RAPs). Of the 33 sites, 16 are within the Wanganui Conservancy.

Many of the RAPs are bush areas, reflecting the very small percentage (0.51%) of land in the district within existing protected areas.

8.5.3 Ecosystem Diversity

(a) Forest

Forest was once the most extensive vegetation cover of the district. River flood plains had podocarp forests dominated by kahikatea in wet sites. Kitchener Park at Feilding and Gordon Park[74] at Wanganui are tiny protected remnants of this once extensive forest type. Drier sites tended to be matai-dominant, and totara was the main podocarp of well-drained terraces. Again largely depending on soil moisture, lowland broad-leaved trees such as tawa, titoki, hinau, rewarewa, black maire and pukatea grew with the podocarps. Swamp maire was known only in the Palmerston North area. Wharangi is known in a few sites near Waitotara and Patea.

Kahikatea was once a locally dominant tree of the plains. Fruit of remaining trees are important food for birds.

Even where forest remnants remain, they have often been selectively logged for prime timber trees. Greystoke Scenic Reserve near Marton has been reduced to a tawa-titoki forest, with only a couple of podocarps surviving.[81]

The small remaining patches of native forest are generally of insufficient size to maintain wildlife populations of anything but the more common species (e.g. grey warbler, fantail, tui, silvereye).

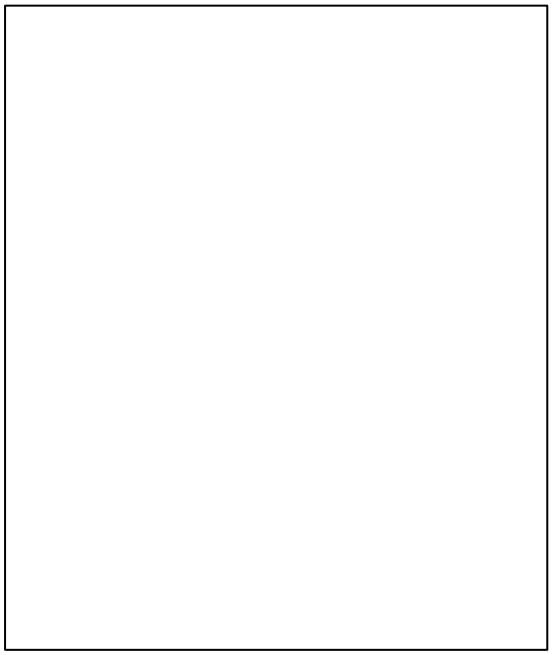
There are possums in all forest reserves, with control ongoing in many to maintain natural values. Where fencing is inadequate or absent, domestic stock grazing can have severe localised impacts. Sambar deer are present in natural areas throughout the lower Turakina, Whangaehu and Rangitikei Valleys.

Woody forest weeds and vines are often a conspicuous element in the forest understorey, forest edge and clearings, where their impact can be locally severe. Vines of major concern are old man's beard, and banana passionfruit which can smother canopy trees. Shade tolerant shrubs, especially Jerusalem cherry and elderberry, threaten understorey composition in many reserves. Evergreen buckthorn, Darwin's barberry, moth plant and cathedral bells are starting to appear in the district and are potentially very serious weeds of forest remnants. Wandering willie is widespread, especially in urban or peri-urban forest areas. It can completely suppress native ground cover and regenerating seedlings. As has been found from several attempts at eradication in Kitchener Park, Feilding, wandering willie is a very persistent weed, once established. Prevention is the best answer, with early attacks on new colonies.

(b) Wetlands

There were very large areas of swamp on the flood plain of the Manawatu River. The most natural remaining example is Makerua Swamp Wildlife Management Reserve near Tokomaru[66], but even here water levels are artificially maintained behind stopbanks.

Ox-bow lakes and swamps were once a feature of low terraces, the products of changes in river courses. The few that remain are important waterbird habitats. Raupo, harakeke, cabbage trees, and *Carex* sedges are the prominent native plants of these wetlands.



The pukeko makes use of natural and artificial wetlands.

Lakes and swamps also existed on low terrace country where the adjoining dune country met the terraces. These wetlands tended to be of lower natural fertility than wetlands on the river flood plains, but surviving examples are mostly enriched by nutrients from farm run-off. Beds of the rush-like sedges kapungawha, bamboo spike sedge and species of *Baumea* were typical, with harakeke and thickets of shrubs including small-leaved species of *Coprosma* and *Olearia*. Today, raupo and exotic weeds have benefitted from nutrient input.

Many of the wetlands are swampy areas in grazed pasture, and some are seasonally dry, but they are none-the-less important for retaining native wildlife in the district. Farm ponds provide habitats for native waterbirds as well as game species.

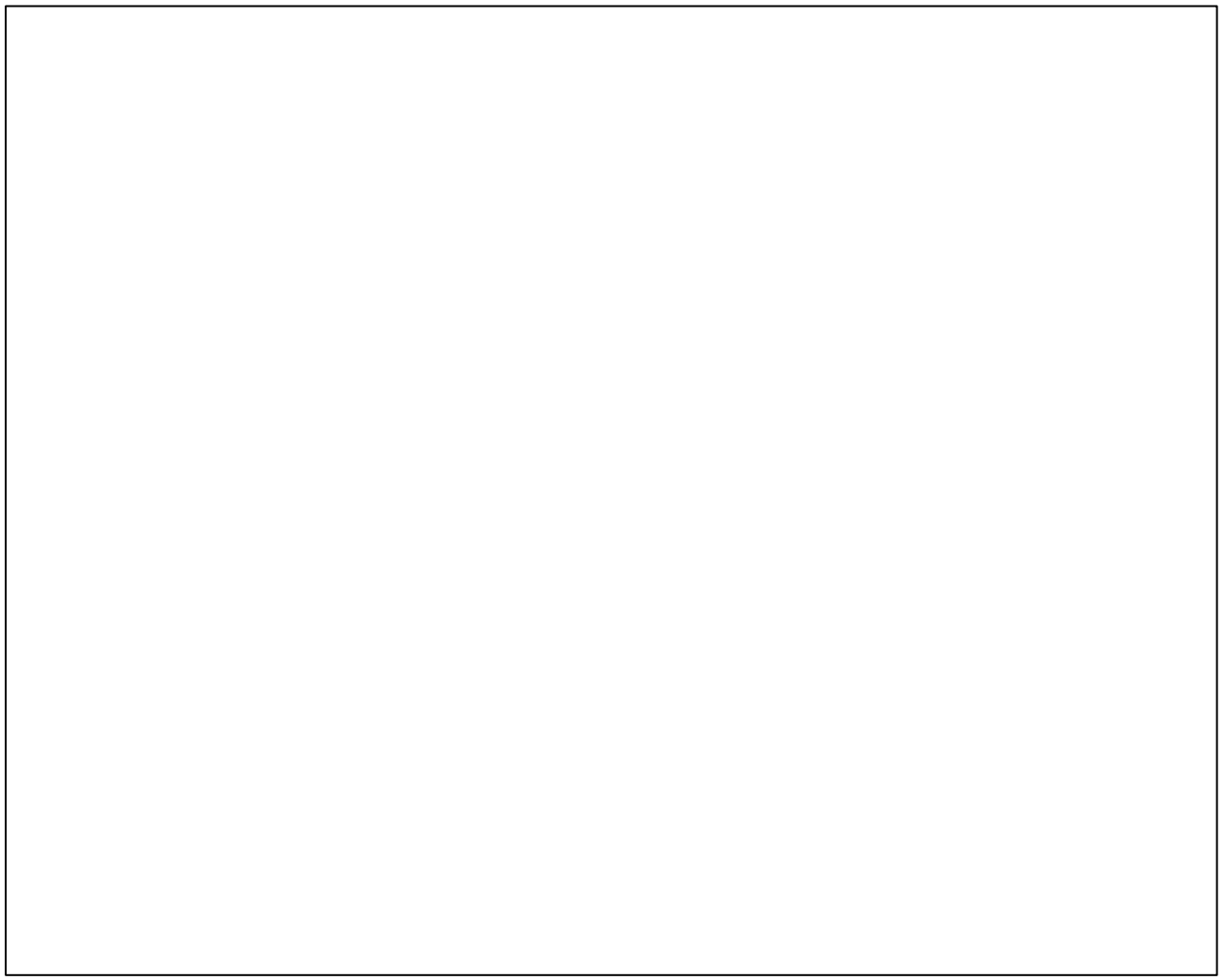
Eighteen species of freshwater fish have been found in the rivers, streams and swamps of the district, of which fourteen species are native. They include the threatened brown mudfish, found in 1994 in a swamp near Tokomaru.

Wetlands are much modified from their original condition. Grazing by domestic stock is common around margins though shallow wetlands can be entirely grazed. Willows, pasture grasses and weeds commonly invade margins, and aquatic weeds such as hornwort, parrot's feather and *Egeria* are present in some locations.

8.5.4 Water

The Rangitikei River in its lower reaches maintains some of the high natural values which characterise its upper and middle protected reaches. There are few discharges to the river here and it remains well used for recreational activities.

The Manawatu River is more severely affected from a range of sources, including community sewerage schemes, dairy sheds, piggery and industrial wastes which are discharged into the river. The Oroua River at Feilding also receives significant discharges and is affected by abstractions for domestic use, town and rural water supplies, irrigation and industrial use.



The Tararua and Ruahine Ranges are separated by the Manawatu River Gorge.

8.5.5 Landscape

Geologically, the district is transitional between the young sand country and the older, more dissected inland hill country. Once dominated by native forest, the landscape today comprises many urban areas scattered across land which is intensively farmed. The landscape is both divided and linked by a dense pattern of roads, hedges and fences. Such structures are mostly in straight lines which ignore the sweeping natural curves of the river valleys, the meandering surface streams and terrace scarps, and other natural landforms. The original forest has been reduced to small patches, often squared off to conform to the boundaries of properties or paddocks.

A significant natural landscape element which does remain, however, is secondary forest along the steep faces of many river terraces. These narrow ribbons of forest are often broken into short strips by property boundaries or farming practices. Kanuka, cabbage tree and totara are the most common trees, with divaricating shrub understoreys. Fragmented ribbons of forest can be seen from State Highway No.1 between Rata and Marton, the main roads from Marton to Turakina and Halcombe to Feilding and many other places. There is considerable scope to improve naturalness in the district's landscapes by restoring corridors of forest along terrace scarps and even linking them with some of the isolated forest patches. This landscape restoration can be extended to the planting of riparian native forests. The landscape emphasis should be to follow natural contours rather than straight lines across the land.

The Manawatu Gorge has a landscape unlike any other part of the district with its steep greywacke ranges rising 300 metres on both sides of the Manawatu River.

8.5.6 Plants at Risk

Cross Reference
See Appendix 6

The Manawatu Plains district has eight species in the national list of threatened and local plants. Wetlands and forests are both important for those species.

Native swamp nettle is known from Makerua Swamp and the east end of the Manawatu Gorge. At Ihupuku Swamp Wildlife Management Reserve, on the boundary with Foxton District, is a small population of the swamp greenhood orchid. Loss of suitable wetland habitat has led to the isolated occurrence of both of these species. Another wetland plant, the grass , was known in Palmerston North City in 1929 and near Marton in 1919. The small herb, dwarf mazus, occurs on the edges of a number of wetlands and also under tall forest on river flats.

Other threatened forest dwelling plants include *Teucridium parvifolium*, a small shrub at risk from browsing animals and habitat loss. Another is the mistletoe *Ileostylus micranthus* which is parasitic on a range of shrub and tree hosts in the Kiwitea Valley. Giant maidenhair fern grows in several forest remnants around Palmerston North, and has a strong population in the Manawatu Gorge.

8.5.7 Wildlife at Risk

Kaka have been recorded a number of times in urban areas (near Feilding and in Wanganui City). These are usually single birds, probably taking advantage of seasonal, usually winter, food sources in gardens. Wetlands, lakes and rivers also provide habitat for some native species including the black-fronted dotterel and the threatened dabchick.

Recent surveys for bats have realised a number of new records of long tailed bats in this district.

Although no detailed survey of the lizard fauna has been made, incidental sightings include common, brown, speckled and ornate skinks, and the Pacific, common, forest, and green geckos.

Threatened native fish species include short-jawed and giant kokopu and brown mudfish.

Little information is available on the invertebrate fauna of this area, although two species of some interest are a rare worm known only from the Tiritea area and the mole cricket known from a number of localities, particularly around Wanganui.

Large native land snails (*Powelliphanta traversi*) occur in the district, but just south of the Conservancy boundary.

8.5.8 Historic Places

Cross Reference
See Figure 23

There are few historic places on land administered by the Department within this district.

The original Manawatu Gorge Road passes through several pieces of reserve land. A pa is sited on the edge of the Otoki Gorge Scenic Reserve.

None of these places receive active management or have been assessed for significance. Threats to their historic values are unknown.

8.5.9 Recreation

See Appendix 10

As there are few natural areas left in the district, the range of outdoor recreation opportunities is limited. Much of the district falls within the 'Urban' and 'Rural' ROS (Recreation Opportunity Spectrum) categories. Urban population centres create considerable demand for recreation opportunities within the district. Many areas important for recreation are managed by local authorities.

See Sec 37.1

Remnant areas of native vegetation and other forested areas close to towns and cities are popular for activities such as picnicking and short walks. Facilities need to be provided to cater for this use (e.g. tracks, toilets and rubbish collection) while sensitive areas are protected from high impact activities such as off-road vehicle use. High use sites can provide a good opportunity for interpretation of natural values.

Advocating protection and revegetation of riparian margins, together with improved water quality and public access, will assist in enhancing water-based recreation such as canoeing and fishing and allow for the creation of riverside walking tracks.

The Manawatu Gorge Scenic Reserve is a significant, large natural area close to Palmerston North. The Department has developed a high quality track through the gorge which provides an important walking opportunity. The Department will advocate the provision by local authorities and other organisations of more easily-accessible recreation opportunities close to Palmerston North

8.5.10 Public Awareness

The Department will focus public awareness efforts on working with education providers at the district's schools, university and other centres of education.

Public awareness will centre on the very few natural areas remaining in the district. There have already been several notable examples of local communities reconstructing and restoring forest or wetland remnants and such efforts will be supported. Displays and other presentations will focus public attention on the need to improve in-stream water quality and protect, enhance and recreate wetland and forest remnants, and also gather support for protection of natural and historic values in surrounding districts.

Liaison with associates in this district will be used to gain improvements in natural resource management.

8.5.11 Commercial (Non-Recreation) Activity

There are at present nine grazing licences and one easement in this district covering 109.37 ha. With the exception of a drainage easement in the Makerua Swamp Wildlife Management Reserve and a proposed boundary alignment in the Manawatu Gorge Scenic Reserve, all are stewardship areas held primarily for recreation purposes.

Although economic activity in this district is high, there is little potential threat from likely future commercial developments to the small areas of land administered by the Department.

8.6 CHECKLIST OF KEY ISSUES

- Future of grazed stewardship areas.
- Maintenance and enhancement of water quality and aquatic habitats.
- Tangata Whenua concerns about cultural materials, historic sites and inappropriate land uses.
- Impact of possums on forest remnants.
- Impact of a range of woody weeds and vines in forest remnants.
- Provision of recreation opportunities near urban areas.
- Impact on indigenous fisheries from pollution in the Manawatu River and reduced flows in the Oroua River.
- Provision of public awareness at major population centres .
- The poor knowledge of the extent of threatened fish species such as brown mudfish, giant and short-jawed kokopu.

8.7 MANAGEMENT OBJECTIVES

8.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the Manawatu Plains, especially wetlands and remnant native bush, as identified in the PNAP report and other natural resource inventories, primarily through:

- working with landowners to achieve legal and physical protection (e.g. fencing) of the areas recommended for protection by the Manawatu Plains PNAP
- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness and support for protection of areas identified through the PNAP.

8.7.2 Kaupapa Atawhai

(i) To process any request from Tangata Whenua to take traditional material such as harakeke from land administered by the Department.

(ii) To provide Tangata Whenua with adequate information that enables:

- historic sites and Wahi Tapu to be identified and protected
- Tangata Whenua to respond to applications for resource consents which diminish their traditional cultural values
- cultural concerns about rivers and other water features to be dealt with adequately.

8.7.3 Native Species Protection

(i) To determine the extent of populations of short-jawed and giant kokopu and brown mudfish and prioritise areas for further investigation.

(ii) Where necessary and practicable, control animal threats of native species in accordance with national or local species recovery plans.

8.7.4 Threats

Animals

(i) Control possums in the Manawatu Gorge Scenic Reserve and other lowland forest remnants through:

- initial reduction of the possum population using trapping and poisoning
- servicing permanent bait stations around reserve boundaries by staff or adjoining landowners.

Weeds

(ii) Control and, where possible, eradicate invasive weeds (especially woody forest weeds and vines) in natural areas through:

- maintaining weed control, especially of elderberry, wandering willie, banana passionfruit, old man's beard and willows, in key protected areas which the Department administers
- advocating to territorial authorities and landowners that weeds which are sparse now, but which are known to be threats of lowland forests and wetlands should be eradicated or controlled
- researching the impacts of woody weeds under forest
- informing the public of the threat posed by invasive weeds.

8.7.5 Recreation

(i) Maintain a high quality walking track in the Manawatu Gorge Scenic Reserve.

(ii) Provide and maintain roadend visitor facilities, including short walks, in other suitable areas administered by the Department and advocate the

provision of roadend visitor facilities, including short walks, in areas managed by local authorities.

(iii) Advocate the creation and gazettal of walkways under the New Zealand Walkways Act 1990 close to urban centres, especially Wanganui and Palmerston North.

(iv) Advocate the provision of public access to rivers and important streams in the district and the creation of riverside walking tracks.

8.7.6 Commercial (Non-Recreation) Activity

(i) To assess the preferred management of grazed areas which have recreational potential.

8.7.7 Freshwater

(i) Maintain and enhance the indigenous freshwater fishery by:

- seeking as a priority, the restoration of the natural values of those parts of the Manawatu River which are degraded
- promoting riparian management as an important tool to improve water quality and aquatic habitats in the Manawatu and Rangitikei catchments
- promoting restoration of water quality and flows in the Oroua River.

(ii) Seek to protect significant areas of wetland, oxbow and other lakes through:

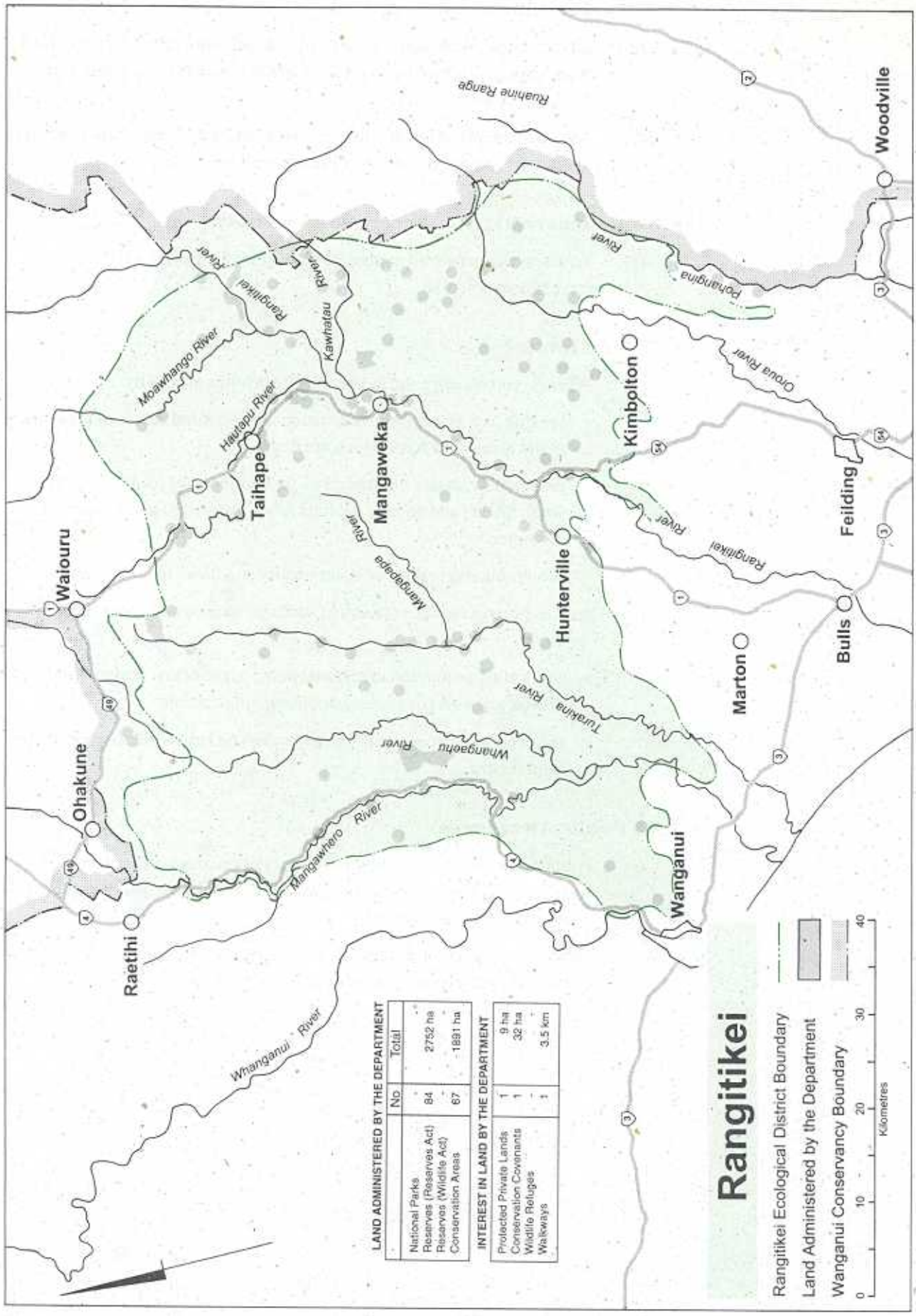
- advocating protection in regional policy statements, regional and district plans and on resource consent applications
- direct action where signficant areas exist on land administered by the Department.

8.7.8 Public Awareness

(i) Public awareness programmes will target population centres with particular emphasis on education providers at schools, polytechnics and other educational institutions.

(ii) Provide interpretation at high use recreation sites identified in the Conservancy Interpretation Strategy.

FIGURE 9: RANGITIKEI ECOLOGICAL DISTRICT



9 Rangitikei Ecological District

9.1 INTRODUCTION

Rangitikei District comprises steep to rolling hill country underlain by soft to moderately hard sedimentary rocks. Volcanic materials overlie these, especially in the north. River valleys are prominent landscape features, with dramatic cliffs and series of river terraces. The district covers 407,800 ha, of which 397,500 ha lie in Wanganui Conservancy and the remainder (mostly in the south-east) are in Hawkes Bay Conservancy.

For the purpose of this document, the district is taken to include parts of Wanganui Conservancy which lie on the western fringe of the Ruahine Ecological District in the east, and the southern edge of Tongariro Ecological District in the north, as identified in Figure 5. These additions bring the area of Rangitikei District covered by Wanganui Conservancy to about 435,900 ha. (See Figure 9)

Much of the district's original forest has been cleared. The region's urban areas lie mostly along State Highway No.1 which bisects the region, north to south and includes Hunterville, Mangaweka and Taihape.

Marked climatic gradients across the district affect the distribution of native species and weeds, and have consequences for land uses.

9.2 VISION

The remnant indigenous forests are protected from further degredation and are accepted and valued as an integral part of the landscape by residents and visitors. Plant and animal threats are controlled and fencing is in place to protect the remnant forests. The special native plants of the district have thrived. The terrace landscapes are recognised, protected and interpreted. The Rangitikei River valley is recognised as a nationally significant landscape and of spiritual and cultural significance to the Tangata Whenua. There will be considerable recreational activity occurring on and along the river. Riparian management has protected the banks of streams, rivers and lakes and has enhanced water quality in these water bodies.

9.3 PHYSICAL DESCRIPTION

9.3.1 Topography

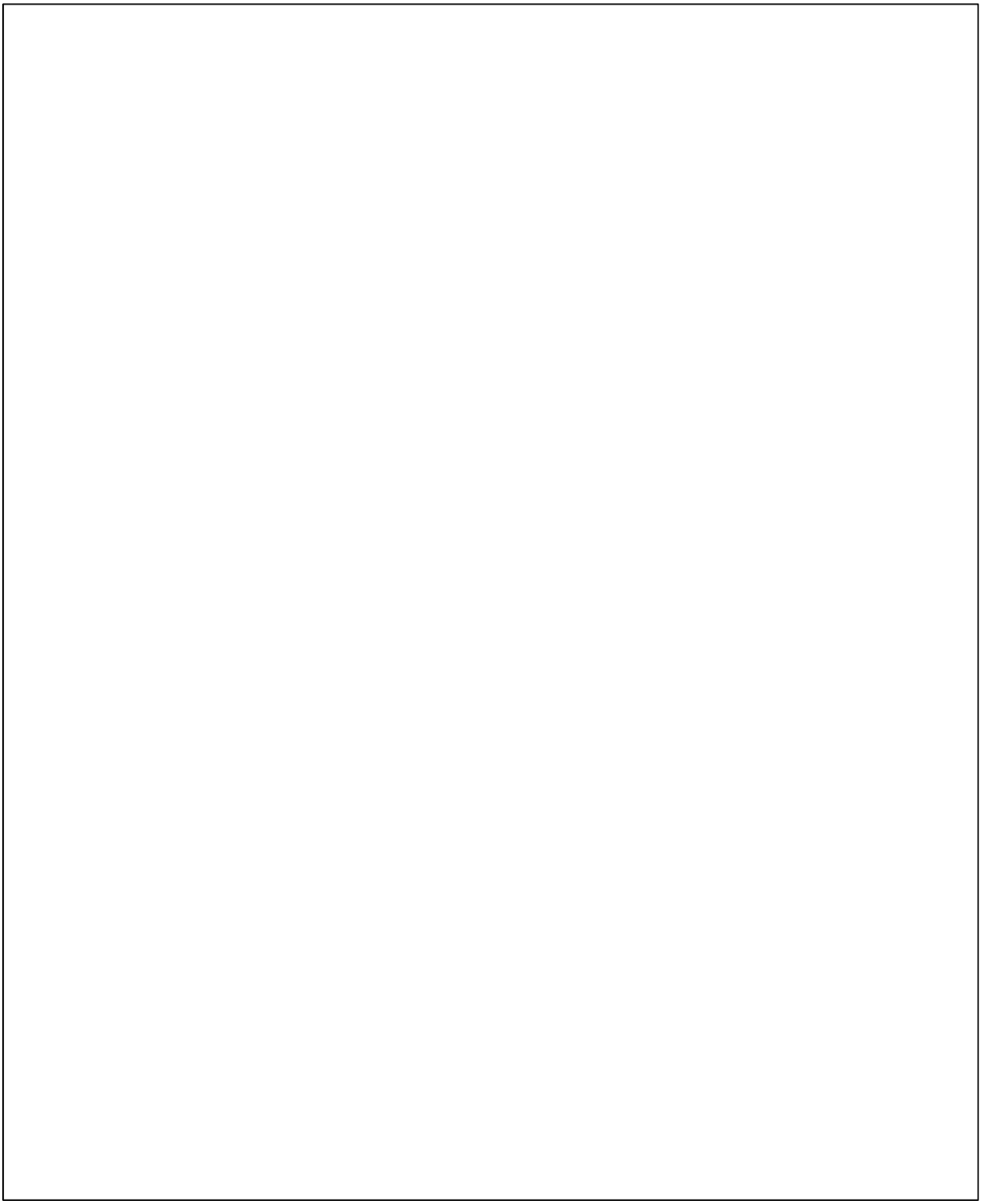
The topography has been shaped by water erosion of uplifted marine sedimentary rocks. The base materials are mainly mudstones, sandstones, or limestones and, especially in the north, a veneer of volcanic ash and local lahar materials (volcanic boulders in a clay-like matrix). Peat accumulates in wet areas

along the southern edge of the Volcanic Plateau between Waiouru and Raetihi.

Some of the land bears the scars of past major slump erosion. Clearing of the original forest has led to widespread surface erosion.

The drainage pattern is strongly north-south, except for a westerly flow in the upper reaches of rivers that rise in the Ruahine Ranges. A series of river terraces, with cliffs and deep gorges, are features of all the major rivers.

The Rangitikei River has cut terraces and a deep gorge as seen from above State Highway No.1 looking east to the Ruahine Ranges.



Greywacke gravels form the beds of rivers that arise in the Ruahine Ranges. Volcanic boulders, eroded from lahars, line the upper Hautapu, Whangaehu, Turakina and Mangawhero Rivers, but the lower reaches have mudstone channels. There are spherical concretions in mudstone cliffs in some places and they sometimes accumulate on terraces after softer material erodes away.

9.3.2 Climate

Winters are cool in the north, milder in the south and summers are warm. West and north-west winds prevail and gales are relatively frequent. There are strong climatic gradients from north to south and east to west, and these have marked effects on the distribution of native vegetation. Rainfall is between 900-1500 mm per year. It is lowest in the rainshadow of Mount Ruapehu (an area centred on the Hautapu and Moawhango Rivers) and in the southern parts of the district. Rainfall is higher towards the east and west, near the Ruahine Ranges and the Matemateaonga District, respectively. Valleys in the north get heavy frosts, which can occur throughout the year. Snow is common in the north and east, but lies for only short periods.

9.3.3 Water

The largest river is the Rangitikei with its major tributaries, the Moawhango, Hautapu, and Kawhatau. The Oroua and Pohangina Rivers flow west then south to join the Manawatu River. The Whangaehu (and its major tributary, the Mangawhero) and Turakina Rivers flow directly to the sea. Part of the lower Whanganui River is on the western edge of the district.

The Rangitikei River is protected in its middle and upper reaches, down as far as Mangaweka, by a Water Conservation Order. The waters of the Hautapu River are also protected, but by a regional rule. The Whangaehu River is unusual in that the water is very acidic from its origin in the Mt Ruapehu crater lake. There are proposals to develop the Whangaehu River for hydro-electric power generation. Most of the Moawhango River is diverted from the district into the Tongariro Power Scheme, as are several tributaries of the Whangaehu River.

Cross Reference
See Sec 34.9

There are a few lakes and wetlands, mostly in the north and south. The northern wetlands lie on the gently sloping southern edge of the Ruapehu ring plain, while the southern ones mostly occupy water courses which have been dammed by land slumps.

9.3.4 Vegetation

The original podocarp-hardwood forest has been extensively cleared for farming. Scattered remnants of the original forest remain, mostly on steeplands unsuitable for farming or horticulture. Some of these remnants contain the greatest variety of shrubs and trees in the Conservancy, including a number of locally and nationally threatened species.

9.4 HISTORY

Known Maori sites are concentrated within and around the Turakina and Whangaehu River valleys. Many settlements are known to have existed along the Rangitikei River in the nineteenth century, and kainga probably existed on other major waterways.[59]

The district was heavily forested in earlier times and known for its concentrations of birdlife, particularly along the Mangawhero and Hautapu Rivers. It was not unusual for hunters to travel long distances to favoured snaring places.

The Rangitikei River and associated overland tracks were used as routes to Hawkes Bay, Taupo, the Bay of Plenty and further north.[59]

Much of the early European migration and settlement at Moawhango was directly from the Hawkes Bay.

The towns of Hunterville and Taihape were developed in the 1880s and 1890s and bush clearance for farming began. Settlement from Hunterville north followed the development of the North Island Main Trunk Railway line which reached Taihape in 1904 and was completed in 1908. A network of roads linked outlying areas with the railway and facilitated agricultural development of the district.

9.5 CONSERVATION VALUES AND THREATS

9.5.1 Background

The natural values of the district have been very poorly documented to date. This is unusual considering that the district is bisected by State Highway No.1 and the North Island Main Trunk Railway, and much of it, particularly the southern half, was cleared of forest and settled in the early period of European settlement. Missionary/explorers such as Richard Taylor and William Colenso were early visitors, and generations of biologists have passed through on their way to other places.

This district is one of the largest ecological districts in the North Island, with a wide range of habitats generated by differences in climate, parent rock materials, soils and topography. In many ways, much of the district resembles part of the Hawkes Bay region. They were separated by the rise of the Ruahine Ranges over the last few million years.

Although most of the land is now farmed, there is still an opportunity to assess the original character of the district, from the mosaic of remnants of forest, native shrublands and wetlands. Fortunately, a fair number of these remnants, especially forests , are in reserves. However, until 1994, there had never been a complete biological inventory of these reserves. This meant that no-one knew whether the reserves actually contained examples of all the original character of the district.

9.5.2 Protected Natural Areas Programme

Between 1993 and 1995, Wanganui Conservancy surveyed the Rangitikei Ecological Region and published a Protected Natural Areas Programme (PNAP) Report [48]. This survey identified 54 unprotected sites which contain native plant and animal **communities not found, or poorly represented on protected land.** The Department

and some other agencies are committed to helping landowners protect these sites, termed Recommended Areas for Protection (RAPs). All are within the Wanganui Conservancy.

Most existing reserves within the Rangitikei Ecological Region are small, and they protect only 1.25% of the land area. Wetlands in particular are under-represented within existing reserves in this district.

9.5.3 Ecosystem Diversity

(a) Forests

Podocarp/broad-leaved forests once covered almost the whole district. Many small patches still remain, widely scattered, but mostly on steep slopes or wet terraces. Several exceed 100 ha, of which the largest is Titirangi Scenic Reserve comprising 301 ha. Beech forest was widely distributed but probably always in small stands, many along rivers which flow from the Ruahine Ranges.

As indicated above, there are marked differences in forest type in different parts of the district. These differences can be correlated with environmental gradients, especially temperature and rainfall. Rimu and miro thrive in high rainfall conditions and are uncommon except on the northern and western fringes of the district. The broad-leaved trees, tawa, rewarewa, titoki and hinau are common in the southern half of the district, but are absent north of Taihape, probably because of frost. Black maire, white maire, pokaka, ribbonwood, and lacebarks are the prominent broad-leaved trees of cold valleys, with the major trees being the podocarps kahikatea and matai.

This giant totara in Ngaurukehu Scientific Reserve is 3.1 metres in diameter.

Forests of the district's valleys are notable for thickets of small-leaved twiggy (divaricating) shrubs. Many divaricating shrubs tolerate the dry conditions on gravel terraces in the south, but the greatest variety of species is found on cold damp terraces of the Hautapu and Moawhango Rivers and the upper Turakina and Rangitikei Valleys. More than 30 species of divaricating shrubs occur in Paengaroa Scenic Reserve at Mataroa, the greatest range of these plants for any part of New Zealand. 38,75b

Forest remnants in the district have a biological importance in excess of their size, and increasing public appreciation of their natural value is essential. Their small size increases the potential for pest invasion. Landowners and local authorities will be encouraged to make efforts to assist the Department by promoting the value of this natural heritage.

Because the remaining forest areas are small, common bird species such as grey warbler, tui, fantail, morepork, shining cuckoo and kereru are often the only ones

encountered. Pied tit, whitehead and rifleman are mostly in the largest forest remnants. Brown kiwi are known in a few places.

An interesting inhabitant of the district is the feral sulphur-crested cockatoo. However, concerns have been expressed about the damage that cockatoo flocks are doing to native forest trees. Feral pea fowl are also widespread.

Four species of lizard have been recorded: the green, forest and common geckos, and brown skink.

Possums are the most serious animal pest throughout the district, where their selective browsing reduces forest diversity. Domestic livestock are also a major disturbance around unfenced forest margins and through the whole of some accessible forest patches. Goats are a localised but serious pest in the north of the district in the Raketapauma Conservation Area and in some reserves in the Turakina Valley. Both sambar and red deer are present in very low numbers.

Cross Reference See Sec 32.1

Weeds are a conspicuous and locally devastating component of the district's forests. The vine, old man's beard can be seen at its full destructive potential here where it totally smothers forest remnants in the Taihape/Mangaweka area, causing death of trees and loss of forest structure. A large ongoing programme is successfully controlling this weed in all but the most serious infested reserves, but an enormous seed source is present on land not administered by the Department.

Also of concern, albeit in a more localised sense, is the impact of ivy at Paengaroa Scenic Reserve. Again a control programme is in place. Other weeds of concern, both here and elsewhere, are shade tolerant exotic shrubs and trees including cotoneaster, elderberry, sycamore, rowan and cherry laurel. Most of these produce attractive fruits which are readily dispersed by birds. All are capable of excluding native species, thereby reducing native understorey diversity.

(b) Wetlands

High rainfall and near-flat terrain in the north of the district resulted in many swamps, but most have been drained for farming. Residual swamps mostly have dense **harakeke and the tussock-sedge** *Carex secta* around their fringes and beside streams. Some swamps have dense native scrub, in which a shrub daisy, *Olearia virgata*, is often dominant. In places, wet peaty areas retain swards of wire-rush, wiry sedges (*Baumea* spp. and four-square), and tangle-fern, with some sphagnum moss. Most of these areas are open to stock grazing and weeds such as gorse are invasive.

The only other concentration of wetlands in the district is near the southern boundary, mostly on the fringes of slump-dammed lakes. Raupo and tall *Carex* sedges are the common species of these swamps, but local areas are dominated by bamboo spike sedge, kapungawha, and other reeds. A privately owned lake near Upokongaro has a floating vegetation "mat" with 3 m manuka over an understorey of sphagnum moss. *Clematis quadribracteolata* is an unusual native vine of wetlands which has its southern-most North Island location near the districts southern boundary.

The divaricating shrubs *Olearia virgata* and *Coprosma tenuicaulis* form a dense tall scrub around some lakes and on the wet floors of small valleys. Young kahikatea is usually present and may eventually lead to swamp forest.

Agricultural run-off causes summer algal blooms in these slump lakes and is likely to result in changes in the fringing swamp vegetation. Willows and gorse are two of the many weeds which are beginning to change these wetlands.

The common waterbirds include pukeko, mallard, grey duck, paradise shelduck, black swan, shags and white-faced heron.

Ten species of galaxiids, bullies and eels have been recorded, including a single record of dwarf galaxias.

(c) Shrublands

The shrub communities of wetlands were discussed above. The only other areas in the district in which shrubs are the canopy plants are the cliffs of the river gorges. *Hebe* sp. (unnamed, *Veronica squalida*), koromiko, tutu, are commonly mixed with whaariki, the flax-like sedge tuhara, cliff toetoe, cliff kiokio and other ferns. Where ledges or easier slopes permit, kowhai, ngaio, and the shrub daisy akeraho are not uncommon. The last two are commonly thought of as coastal trees, but they are scattered through at least the southern half of the Rangitikei district.

Native shrublands induced by past clearing of forest occur widely in the district. Manuka is usually the dominant species and, in time, will give way to secondary forest if undisturbed.

Woody weeds are invading both the cliff communities and induced shrublands. Old man's beard is the major problem in many areas, but purple buddleia, broom, barberry, cotoneasters and wattles are a few of the many others which are becoming common. White bryony is confined to one reserve, but may be a problem weed in the future.

9.5.4 Landscape

The district is transitional between the Ruahine Ranges and the Manawatu Plains. Its scenic appeal lies in its small scale diversity which can be easily seen because roads tend to follow river terraces into the many semi-enclosed river valleys.

The many pockets of native forest, especially those of river terraces add much to the district's character.

Present day farming practices are closely patterned on the landform of the terraces. More use of indigenous trees would complement the natural enclosures of papa cliffs and higher hill scarps. A landscape vision for the district is one that exploits the picture postcard views of river terraces and high papa cliffs of the Rangitikei River Valley.

9.5.5 Plants at Risk

Cross Reference
See Appendix 6

Rangitikei District has 18 species, mostly in forests, featuring in the list of threatened and local plants.

The species considered most at risk is the tree daisy *Olearia hectorii.* Several plants are protected in the nationally important Paengaroa Scenic Reserve[38] and Ngaurukehu Scientific Reserve,[36] but the majority of shrubs occur in private and Railways-owned land adjoining the reserve and in the Turakina Valley. Regeneration of this species is very poor at all sites. Also at Paengaroa Scenic Reserve are windgrass and a climbing

daisy (*Brachyglottis sciadophila*), along with a suite of threatened divaricating shrubs and small trees including *Melicytus flexuosus*, *Pittosporum obcordatum, Coprosma obconica, Coprosma wallii* and *Teucridium parvifolium*. Some of these also occur in a few other locations in the district where they are less secure. Loss of river terrace forest habitat has probably been the main reason for a national decline of these plants. Weeds continue to threaten them even in legally protected areas.

The wood rose occurs in a few sites mostly in the Taihape/Mangaweka area. Plants near Mangaweka represent the most southern population in the country. Possums are seriously impacting on unprotected plants. Collectors, too, have had an impact on this plant in the past.

The Rangitikei District and the adjoining portion of Tongariro District in the Wanganui Conservancy have five species of threatened mistletoe. In the north the red flowering *Peraxilla colensoi* occurs on silver beech in one location and *P. tetrapetala* was found in 1996 near Rangiwahia. *Tupeia antarctica* is known from scattered locations mid-district, while *Ileostylus micranthus* occurs near the southern edge. All three species are vulnerable to possum browsing. However, *Ileostylus* is afforded some protection by growing on introduced hawthorn trees at one site near Wanganui. Dwarf mistletoe, *Korthalsella salicornioides*, was found in Mangaweka Scenic Reserve in 1996.

9.5.6 Wildlife at Risk

In 1993, brown kiwi were found in Mangaweka Scenic Reserve, one of very few locations for kiwi in the district in recent years.

Because wetlands are mostly small and isolated from each other, there are only a few records of notable wetland birds. These include bittern and spotless crake.

Little information is available on invertebrates of the district. A survey of isopods in 1994 in a reserve near Taihape revealed the greatest variety of species of anywhere in New Zealand. This suggests that other interesting invertebrates await discovery.

9.5.7 Historic Places

The Department has formed and interpreted a short walk between the disused Mangaweka power station and dam. An historic gateway and monument to an early pioneer and conservationist, R. C. Bruce at Silverhope on State Highway No.1, is kept clear from encroaching vegetation.

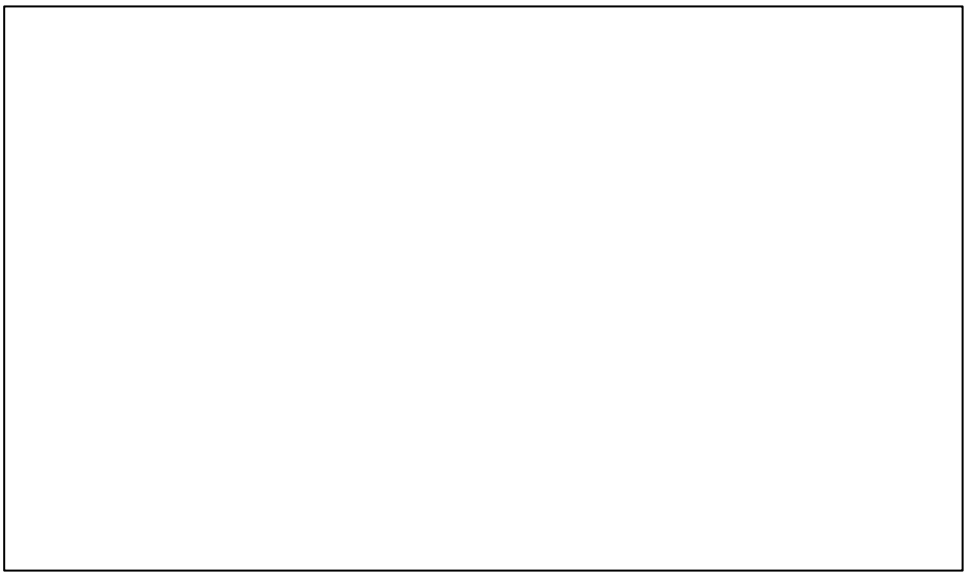
None of the places currently receiving active management have been assessed for significance or have conservation plans. Other historic places may later be recorded within the district with a higher significance and their management may take precedence.

9.5.8 Recreation

The district's rivers are major settings for recreation.

The Rangitikei River provides important opportunities for canoeing, white water rafting, jetboating and trout fishing. The variety of scenery (contrasting with the dominant bush landscape on the Whanganui) and diverse sections of river, from easy to hard, provide for a range of experience. The importance of the river for recreation

has been recognised through the granting of a National Water Conservation Order. Use of the river could increase as more people become aware of its attractions, leading to pressure for improved access and provision of visitor facilities (e.g. toilets and camping areas).



White water rafting is popular on the Rangitikei River.

Other important rivers include the Hautapu (trout fishing) and the Whangaehu which provides a unique grade 3 white water resource for kayakers close to Wanganui.

Remnant areas of native forest, some of which are reserves, add to the scenic attraction of the Rangitikei landscape and provide popular stopping places for travellers on State Highway No.1. Such areas provide good opportunities for short walks and interpreting natural values, but problems (e.g. litter and toilet wastes) will need to be addressed. The reserves on the highway are high profile sites, so attention needs to be given to maintaining them in good order and providing high quality signs and facilities.

The Rangitikei Country Trail, part of the Haunui Heritage Trail, follows State Highway No.1 through the district, highlighting sites of interest to visitors.

Bungy jump facilities have been established on the Mokai and Omatane bridges across the Rangitikei River. Together with commercial jetboating and rafting trips, these have the potential to attract more visitors to the district.

The Ruahine Ranges lie outside the Conservancy along the eastern boundary of the district. The Conservancy's Mangaweka and Palmerston North Field Centres play a servicing role for visitors to Ruahine Forest Park. A need has been identified to improve public access to the western fringes of the forest park and provide more facilities for day visitors at roadends. The Conservancy will liaise with Hawkes Bay Conservancy on this issue.

9.5.9 Commercial (Non-Recreation) Activity

One of the largest grazing leases in the Conservancy is the Taukoro Conservation Area. Although only some 36ha is in grass, 300ha remains in bush under a perpetually renewable lease issued under the Land Act 1948. The remaining 23 occupations (96ha) are small grassed areas primarily in reserves and fenced off from the adjoining bush. There is one beehive site and one easement.

9.5.10 Public Awareness

The district is well-known for its active recreation opportunities, as described above. Such uses provide opportunity for promotion of natural and historic values in the district.

State Highway No.1 bisects the district and brings large numbers of people into contact with natural, historic and recreation areas. Interpretation will focus on this potential audience. The Mangaweka Field Centre office, located just off State Highway No.1 in the former Mangaweka Post Office is well suited to provide a public awareness focus for the district.

The district was the focus for the start of a national public awareness campaignon old man's beard, and the Department will continue to seek public support for controlling the weed. The public will be informed of the dangers that other weeds, such as ivy, pose to reserves and other natural areas in the district. Community projects will be encouraged to tackle this problem.

9.6 CHECKLIST OF KEY ISSUES

- Lack of legal and physical protection of forest remnants across climatic gradients of the district.
- The need for riparian protection of wetlands and rivers.
- Increased protection and management of threatened plant habitat.
- Impact of sulphur-crested cockatoos on native vegetation.
- Viability of North Island brown kiwi.
- Control of a range of woody weeds and vines (especially old man's beard) in forest remnants, and public awareness of this work.
- Control of possums in forest remnants.
- Control of existing goat populations and prevention of new infestations.
- The effect of hydro-electric power development.
- Maintaining high aquatic ecosystem and scenic values in rivers.
- The need for interpretation of natural and historic values at key sites.

9.7 MANAGEMENT OBJECTIVES

9.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the district, including the forest remnants as identified in the PNAP survey, and other resource inventories, primarily through:

- working with landowners to achieve legal and physical protection of the areas recommended for protection by the Rangitikei PNAP survey

- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness and support for protection of areas identified through the PNAP survey.

9.7.2 Kaupapa Atawhai

(i) To consult with Tangata Whenua so that:

- cultural and spiritual concerns about rivers and other water features are dealt with adequately
- traditional needs concerning cultural materials are given consideration
- practices involving customary use are considered by the Department
- Hapu and Iwi plans can be integrated into wider conservation management in the Conservancy wherever possible
- they are aware of recreational opportunities which they could develop from natural resources they own, where development of those resources would be of direct interest to the Department and is consistent with the Wanganui Conservancy Recreation Strategy[23].

9.7.3 Native Species Protection

(i) To protect Paengaroa Scenic Reserve and other key forest remnants with a concentration of threatened plants through:

- control of invasive woody weeds and vines
- control of possums where susceptible threatened plants are present
- regular monitoring to determine changes in status of plants and the nature of threats
- promotion of the ways the community can become involved in pest control programmes.

(ii) To determine whether sulphur-crested cockatoos are having a significant effect on native species and to initiate management of the species if warranted.

(iii) To investigate the extent and viability of North Island brown kiwi through surveying the extent of known populations and establishing their status.

(iv) To control where necessary and practicable, animal threats and predators of native species in accordance with national or local species recovery plans.

9.7.4 Landscape

(i) To promote landscape protection measures for the Rangitikei and Turakina valleys.

(ii) Advocate the protection of native forest remnants, geological and other features that contribute to the scenic character of the landscape.

9.7.5 Threats

Weeds

(i) To control, and where possible, eradicate invasive weeds (especially woody forest weeds and vines) of natural areas through:

- maintaining weed control, especially of old man's beard, ivy, cotoneaster, elderberry, and Chilean flame creeper, in key protected areas which the Department administers
- advocating weed control to local authorities and landowners for weeds which are known to be threats of lowland forest (including weeds such as Darwin's barberry and horsetail which are localised, but potentially serious) and assisting community projects
- research into the impact of woody weeds and vines under forest
- encouraging community participation in weed programmes.

Animals

(ii) To control and maintain at low density, possums in the small protected lowland forest remnants in the Hunterville, Mangaweka and Taihape areas through:

- initial knockdown of the possum population using trapping and poisoning
- maintenance of a low possum population by adjoining landowners through servicing of permanent bait stations around reserve boundaries.

(iii) To control goats at low densities in Raketapauma Conservation Area through sustained hunting effort.

(iv) To prevent the establishment of new goat populations on land administered by the Department through:

- elimination of new infestations
- liaison with adjoining landowners and Manawatu Wanganui Regional Council.

9.7.6 Recreation

(i) To monitor visitor use and impacts on the Rangitikei Riverand, if required, provide visitor facilities.

(ii) To advocate improved public access to rivers within the district.

(iii) To provide and maintain facilities for day visitors in suitable roadend locations, including high profile sites on State Highway No.1.

(iv) To liaise with Hawkes Bay Conservancy to improve public access to the western fringes of Ruahine Forest Park and provide more facilities at roadends for day visitors.

9.7.7 Commercial (Non-Recreation)Activity

(i) To seek the agreement of the lessee to retire the bush area in the Taukoro Conservation Area lease.

9.7.8 Freshwater

(i) To give priority to promoting riparian protection and sound land management in the Rangitikei, Turakina and Mangawhero River systems in order to maintain and improve water quality and aquatic habitats.

(ii) To advocate the maintenance of natural and recreation values of aquatic resources in the Rangitikei, Hautapu, upper Oroua, Pohangina and Whangaehu Rivers.

Cross Reference
See Sec. 34.9

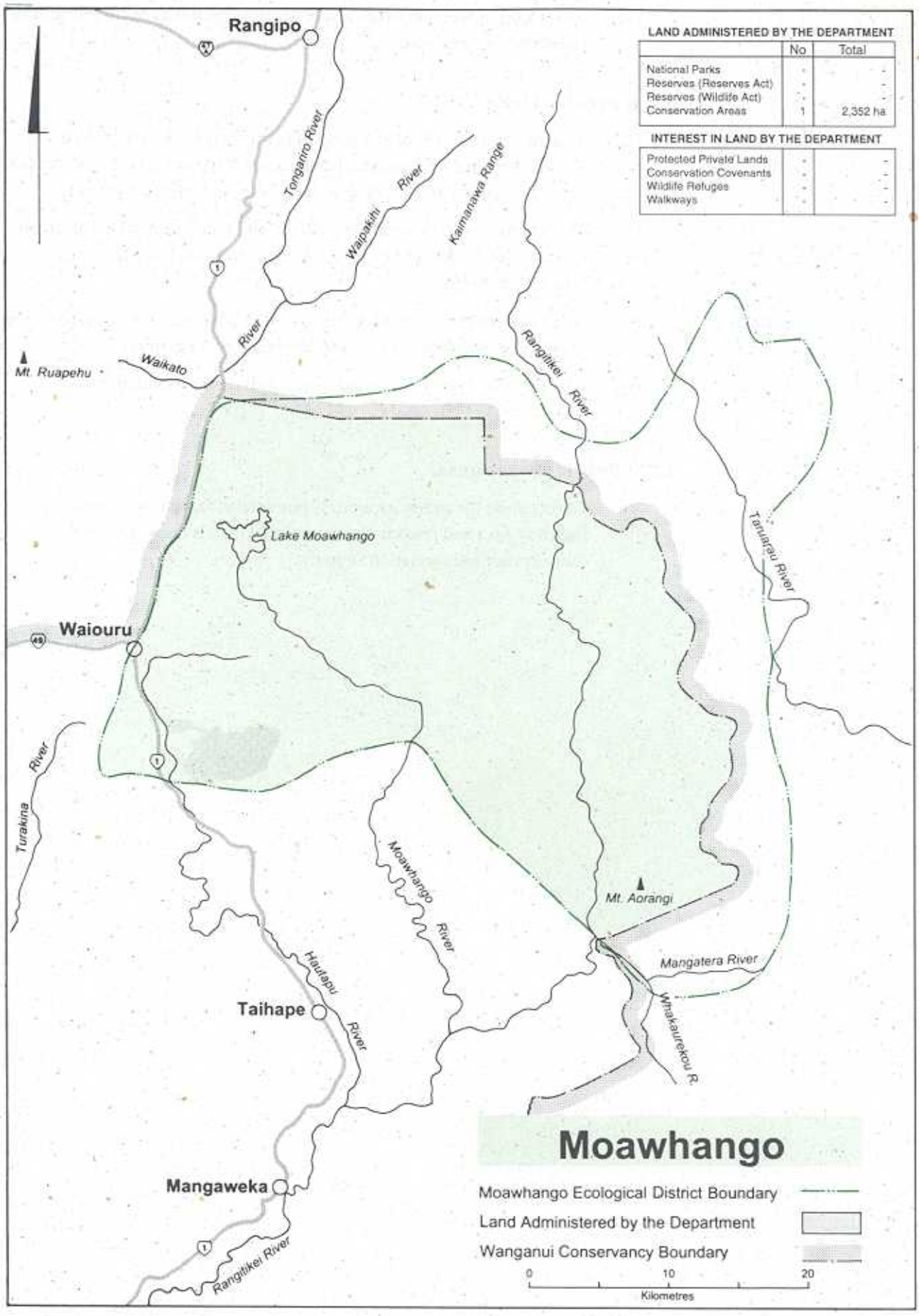
(iii) To emphasise the recreational values of the Whangaehu River in the event of any proposal to dam it for hydro electric power generation.

(iv) To identify and protect significant wetlands on the Mt Ruapehu ringplain.

9.7.9 Public Awareness

(i) To recognise the public awareness potential of travellers on State Highway No.1 and provide interpretation which is consistent with the Conservancy Interpretation Strategy.

FIGURE 10: MOAWHANGO ECOLOGICAL DISTRICT



10 Moawhango Ecological District - Tussock Country

10.1 INTRODUCTION

The Moawhango district is encircled by the Tongariro volcanoes in the west, by the North Island axial ranges in the north and east, and by the slump topography of the Rangitikei district in the south. Moawhango is a highly distinctive montane-subalpine area of the central North Island, with undulating and plateau topography. It has the North Island's most extensive remaining red tussock grasslands, along with mixed shrublands, forests, wetlands and subalpine herbfields.

People usually associate sweeping tussock landscapes with inland parts of the eastern South Island, but are unaware that tussocklands were also a major landscape feature when the early European explorers traversed the central North Island. Less than 10% of these tussocklands remain today. Moawhango district has the largest areas, and these are dominated by tall red tussock.

Moawhango Ecological District comprises 139,500 ha, of which about 96,300 ha lie in Wanganui Conservancy. The district is shown in Fig. 10, along with a description of land administered by the Department.

10.2 VISION

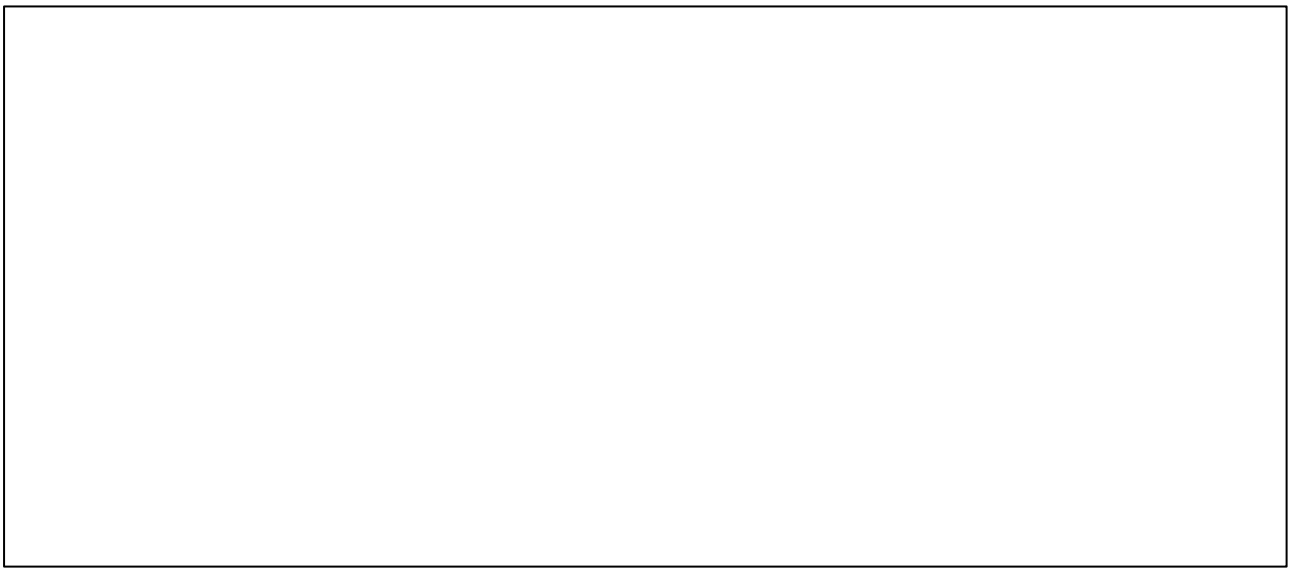
The tussocklands and their associated native forests, shrublands and wetlands gain widespread recognition and respect for their special character and intrinsic values. The tussocklands' natural character has improved. Contorta pine, heather, mouse-eared hawkweed and introduced animals are controlled and land development carefully managed so natural values and sweeping landscapes are conserved and not modified further.

10.3 PHYSICAL DESCRIPTION

10.3.1 Topography

A sequence of geological events, some widely separated in time, and unparalleled elsewhere in New Zealand, produced the present landforms of the district. Greywacke is the old hard sandstone which forms the adjoining Kaimanawa, Kaweka and Ruahine Ranges. In this district it was uplifted, eroded, then partly submerged in an ancient sea which covered the present southern half of the North Island. A shoreline across the district marks the northern limit of the shallow seas in which soft marine sediments (limestones, sandstones, mudstones) accumulated. Subsequent uplift of the land allowed erosion of the softer sediments, exposing the greywacke, mainly in the north. Greywacke surfaces which were not submerged in this sequence of events may be the oldest landforms in the North Island.

Recent volcanic events to the west and north of the district covered it with layers of tephra (aerially deposited volcanic material of all sizes from ash to coarse blocks). In the north there is also pumice from the Taupo eruption of about 180 AD. Pumice occurs as a layer in the tephra profile or is redeposited as a result of water transport, in the floors of valleys and basins.



A view eastwards from above the Desert Road takes in broad valleys and low ranges covered in native tussocks and forest remnants.

10.3.2 Climate

The district experiences a cool-temperate rain-shadow climate with moderate seasonal variations. Winds are predominantly from the west, although winds from the north-east are also important. A rain-shadow effect results from the surrounding mountains, especially the central volcanoes. The rainfall ranges from around 2000 mm per year in the mountains, to around 1000mm per year in the lower lying areas. The lowest recorded rainfall is 890mm at Moawhango village east of Hihitahi. Average summer temperatures are between 12-14ºC and the winter average is 4ºC. Frosts can occur in any month. Snow is common but seldom lies for more than a few days except for high south-facing parts of the New Zealand Defence Force training lands east of Waiouru.

10.3.3 Water

The upper Moawhango River flows across the district into Lake Moawhango which was created as an artificial lake for power generation as part of the Tongariro Power Development scheme. Water is also diverted into the lake from the Whangaehu catchment. Lake water is sent northwards via a tunnel to the Tongariro River in the Lake Taupo catchment.

The Rangitikei River runs through the district in the east and the headwaters of the Hautapu River run through the south of the district.

The Ohutu Stream, which flows off and has a high waterfall near its confluence with the Whakaurekou River, is notable for the total absence of fish.[14]

10.3.4 Vegetation Patterns

Much of the district has native vegetation, predominantly tussock grassland resulting from widespread Polynesian and European burning of the original forests. Today

there is a mosaic of forest remnants, surrounded by the largest area of tussock grasslands in the North Island. Because of cold air inversion and poor drainage, there are a few sites which have been without trees for millennia. These sites support unusual habitats for a biogeographically special flora (see below).

Cross Reference
See Appendix 6

The district contains the Conservancy's highest concentration of threatened and notable plant species.

10.4 HISTORY

The Hawkes Bay tribes, Ngati Whiti, Ngati Tama, Hinemanu and Te Upokoiri penetrated and occupied this country in earlier times. The Tuwharetoa people later intermarried with them. Tamatea Pokai Whenua visited the area with his son Kahungunu and left the three kaitiaki there: the lizard on , and the freshwater koura (crayfish) and the patiki (flounder) in the surrounding streams.

An ancient Maori route around the headwaters of the Rangitikei River and its main tributaries, the Moawhango and Hautapu Rivers, was used for access between Hawkes Bay and inland Patea.[3] Prehistoric Maori settlement was concentrated at Te Awarua Pa situated above the Rangitikei River and at Matuku on the Moawhango River (both in the Rangitikei district). These kainga were visited by the early missionary explorers Richard Taylor from Wanganui in 1845 and William Colenso from Hawkes Bay in 1847.[95] With increased European presence, these kainga were abandoned, and the present site of Moawhango village established in 1868.

In November 1867, Captain Azim Birch travelled the central North Island in search of land suitable for large scale sheep farming. He arranged a lease with the Maori owners of the 46,580 hectare Oruamatua-Kaimanawa Block located between the Rangitikei and Moawhango Rivers. Captain Birch and his brother William brought their first sheep, some 4,000 merinos, through the Kuripapango Track from Hawkes Bay in January 1868, and initiated the first European farming in the upper Rangitikei district.[3]

The Motukawa Block, on the western side of the Moawhango River was farmed in 1870 by a partnership of Henare Kepa and Robert Thompson.[3]

Wild horses were first recorded in the Kaimanawa mountains in 1876. These are likely to have been descendants of horses which came into the area with travellers, explorers, settlers, the military and Maori traders. In the 1870s Sir Donald McLean released sure footed horses known as the "Comet" breed on the Kaingaroa Plains and in later years this bloodline was reported in the wild population. Other horses contributed to the bloodline over the years. Horses from the mounted rifle cavalry units were released from Waiouru in 1941, and there have been escapes and releases from the sheep runs over the years.

Kaimanawa wild horses have inhabited the Moawhango since the 1870s.

During the late 1970s the horse herd was hunted to near extinction, leading to protection of the remnant herd in 1981, through the Wildlife Act 1953. Subsequently the herd grew in size to approximately 2000 horses. A plan to reduce the impact of horses on important ecological values has been prepared[26]. The protection provided to the horses was lifted in 1996. The current population shows highest genetic similarity to thoroughbred and thoroughbred cross types of breeds.

10.5 VALUES AND THREATS

10.5.1 Background

Much of the district's natural character is the result of past human disturbance, especially the extensive tussock grasslands. Setting aside reserves is only part of the future conservation needs for the region. On-going management will be essential, and this may include the continuation of grazing in some places. Control of animal threats and weeds and, possibly, the selective use of fire are other aspects of conservation management.

Cross Reference
See Sec 30.3(xi)

10.5.2 Protected Natural Areas Programme

The entire district contains only four areas administered by the Department with formal protection, and only one of these, Hihitahi Sanctuary, is in Wanganui Conservancy. The four areas total 7344 ha, representing about 5% of the district's land area. Of these four, the northwest corner of Ruahine Forest Park is in Hawkes Bay Conservancy, and two smaller areas are administered by Tongariro/Taupo Conservancy.

The New Zealand Defence Force administers 30% of the district, and most of the remainder is in Maori ownership or owned privately.

Because the areas administered by the Department do not adequately represent the full range of diversity in the district, a Protected Natural Areas Programme (PNAP) study was commissioned by the Department in 1992-93.[95]

See Sec. 20.1

The PNAP report identified nine Recommended Areas for Protection (RAPs) which represent most of the variety of natural areas remaining. These total some 16,000 ha which, if formally protected, would result in a little over 16% of the district having a protected status. Six of the RAPs lie in Wanganui Conservancy and three are in Hawkes Bay Conservancy.

10.5.3 Ecosystem Diversity

(a) Forest

The present pattern of patches of native forest is the result of fragmentation of the original forest cover by fires. Some fires occurred before a human presence in the area, but the extensive conversion of forest to tussock grassland coincided with Polynesian settlement, and was extended by European farming methods.

There are three broad forest types remaining, namely kaikawaka (or native cedar) forest, beech forest and podocarp/broad-leaved forest. The patchy distribution patterns of forest tree species are important in constructing models of past and future vegetation of the district. Areas of forest on land administered by the New Zealand Defence Force and the block are among the most important for such studies.

Kaikawaka is well-represented in Hihitahi Sanctuary and the block, with smaller fragments on other, mostly elevated, plateau surfaces.

Beeches, especially mountain beech, form the most extensive forests and are generally regenerating. Beech is spreading outwards from forest margins and into some

kaikawaka and podocarp/broad-leaved forest.

The dominant species of podocarp on a given site depends on many factors, including the history of site disturbance. Pink pine, Hall's totara and mountain toatoa are common at high altitudes, often mixed with kaikawaka or beeches. The north-west part of Ruahine Forest Park and adjoining Maori land towards contain good examples. Places with more fertile soils and a milder climate have kahikatea, rimu, totara and matai. has extensive and intact examples on its lower slopes.

Forest areas provide habitat for a number of common forest bird species such as tomtit, fantail, grey warbler, whitehead and bellbird along with uncommon species such as falcon, kaka, and kiwi.

High numbers of deer and possums in the past have significantly altered the composition of the forests of Hihitahi Forest Sanctuary. The higher altitude component of this forest has been under considerable stress with up to 50% of the dominant emergents, kaikawaka and totara, dead or dying with little regeneration. Recent evidence suggests that significant possum damage to kaikawaka is occurring and may have been a factor in the past. Beneath the emergents, a fragmented canopy occurs over a dense understorey of horopito and other unpalatable plants.

The extensive beech forests of the district are themselves probably little affected by introduced animals, though palatable components of the understorey will have been removed and sometimes replaced by less palatable species. A red-flowered mistletoe, which was probably widespread in the past, has been reduced to a few sites because of possum browsing.

(b) Shrublands

Areas of tussock grassland, which are protected from periodic fire, eventually revert to forest through stages of regenerating shrubs. Most tussock grasslands would give way to native shrublands within 30-65 years, in the absence of fire. Monoao, a native heath, is the prominent colonising shrub in the northern half of the district, to be replaced by a related shrub, inaka, in the southern half. Other native heaths and small-leaved species of *Hebe*, *Coprosma, Pittosporum* and other shrubs are common, and manuka is locally dominant on slopes where cold air can flow away, such as parts of the New Zealand Defence Force training lands east of Waiouru.

Wet sites occasionally have bog pine or, at lower altitudes, the shrub daisy, *Olearia virgata*. The latter is prominent in the small parts of Kutaroa and Otahupitara **Swamps (RAP 9)** (called "Irirangi Swamp" in the Moawhango PNAP report) which have escaped fire for several decades.

Among the unusual shrubs of cliff habitats are the grey-leaved *Hebe colensoi* which is endemic to this district and inland Hawke's Bay. A sprawling shrub with grey furry leaves, *Pimelea aridula* is confined to four widely separated sites in the North Island, one being a small part of the New Zealand Defence Force Military Training Area.

Small passerine birds such as silvereye, fantail and introduced finches inhabit shrublands. Fernbirds are very local, and other species such as bellbird use shrublands seasonally.

(c) Tussock grasslands

Above all else, it is the tussock grasslands which define the character of Moawhango

Ecological district. Tall red tussock is the most prominent species on previously burnt sites with moderate to good drainage and deep soils. Shorter stature silver tussock thrives on high fertility sites, and hard tussock is most common on cold arid sites, such as pumice or gravel in valley floors. Cushions of bristle tussock colonise sandy areas. Tussock-forming sedges occur in wetter sites, especially *Schoenus pauciflorus* which grows with red tussock on wetland edges, and the large *Carex secta* grows with harakeke in some of the lower altitude wetlands.

To keep tussocks over much of the district, periodic fires will be required. Heather, *Pinus contorta*, and mouse-eared hawkweed are potentially serious invaders of tussock grasslands. Recurrent fires and browsing mammals aid the establishment and spread of such weeds. If decisions are made to maintain tussock landscapes, there will be an ongoing need for weed control.

Common skink and common gecko seem to be widespread in stony places in tussock grasslands. New Zealand pipits and harriers are common and falcons are often seen. Falcons nest on cliffs in the region's river gorges and a mixed colony of black and little shags is known on cliffs of the upper Moawhango River. Introduced passerines are common, and include finches, hedgesparrow and skylark. Banded dotterels breed in several remote open areas. A nesting colony of black-backed gulls is on .

Grazing by farm stock and feral horses has been a major factor in modifying the grasslands since the 1880s, though intermittent burning has also affected them. Tussock grasslands have been modified from tall tussock to short tussock, particularly on sheltered basin floors and warm plateaux favoured by stock. Several species may have largely disappeared including the palatable and once widespread blue wheat grass which disappeared early from tussock grasslands with the arrival of stock.

(d) Wetlands

Broad valley floors, ridge crests and elevated plateaux are often places where water lies. The water may be ephemeral, as in the , or permanent, in which case peat accumulates. The accumulation of tephra or pumice has often accentuated the effects of flat terrain and produced some large wetlands. Among the notable ones still in a relatively natural state are the Moawhango headwaters above gorge, the eastern Ngamatea Swamp, the Kutaroa and Otahupitara Swamps[70] southwest of Waiouru and, on the Mangaohane Plateau, the Reporoa Bog and Makirikiri Tarns, all of which are recommended areas for protection[95] (RAPs).

Wetlands such as these are some of the oldest non-forested places in the district, and they are botanically very important for having a number of open country native plants which are unknown elsewhere in the North Island.[27,95] These species give support to the views expressed above about the presence of ancient land surfaces.

The Makirikiri Tarns are part of the botanically rich wetlands of the Moawhango Plateau.

Cross Reference
See Sec 10.5.6

Paradise shelduck, pied stilt, black shag and little shag are typical wetland species of this district. More localised are banded dotterel, blue duck, and fernbird. Information on native fish in this area is scarce.

Of all habitats in the district, wetlands are probably the most vulnerable to damage

from domestic stock and wild animals. As a source of water and, sometimes, highly nutritious plants, wetlands are often a focus for animals resulting in both severe grazing and pugging. Wetlands are lost through drainage for pasture improvement.

10.5.4 Water

The Moawhango River above Lake Moawhango is unmodified and has high natural values, although the movement of fish from the lower river is prevented by the Moawhango dam. The Rangitikei River is protected by a National Water Conservation Order (1993) above the Mangarere Bridge. The Hautapu River is protected by a Local Water Conservation Order (1990) above its confluence with the Oraukura Stream.

The flow of the Moawhango River above the dam is diverted to the Tongariro River as part of the Tongariro Power Development Scheme. This has resulted in very low river flows below the dam, substantially reducing the river's aquatic habitat, fisheries, and wild and scenic values.

10.5.5 Landscape

Tussock grasslands are part of the cultural identity of many New Zealanders, to whom they are parts of primeval New Zealand. The district's tussock grasslands are largely the result of repeated fires. If protected from fire, native shrubs and eventually forest will take their place. Ploughing and re-sowing of pasture plants has been a major cause of the recent decline in the extent of tussocklands in the district. About 87% of North Island's tussock grasslands lie in the Moawhango district[95]. Beyond the district, many tussock grasslands were lost to exotic forestry, and this is now a potentially serious threat to landscapes in the Moawhango district. The spread of wilding pines is one extension of this threat. Heather, which has already obliterated most of the low altitude tussock landscapes in Tongariro National Park, is a relatively new arrival in the western parts of the Moawhango district.

It is no accident that some of the best remaining tussock grasslands are where stock numbers are low or absent, for example the New Zealand Defence Force Military Training Area at Waiouru and the block on the Mangaohane Plateau.

Protection of tussocklands, the most distinctive landscape feature of the Moawhango district, will not be easy to achieve. Formal protection of such areas has its part, but the tussock landscape as a whole can only survive with a commitment of landowners to a sustainable management regime, which will need to include the deliberate use of fire.

In stressing the values of tussock landscapes, it should be remembered that the district's other landscapes include some of the Conservancy's most dramatic landforms. These include the rugged greywacke gorges, sandstone and limestone plateaux, scarps and river cliffs, and broad tussock basins traversed by meandering rivers. The scattered native forest remnants of the district are of great visual importance as they give a scale to the landforms, and they punctuate not only the tussock grasslands but also the areas converted to pasture.

The low incidence of artificial structures in the district adds to the sweeping, uncluttered nature of the district's landscapes. The existing buildings, fences, and roads are mostly unobtrusive, although a clutter of small buildings, visible from State Highway No.1 between Waiouru and Hihitahi, the Moawhango dam, and high voltage transmission lines are exceptions. Future developments need to be sympathetic to landscape quality.

10.5.6 Plants at Risk

Cross Reference
See Appendix 6

Moawhango district has 18 species featuring in the national list of threatened, rare and local plants. Of the various habitats described above, it is the wetlands, including ephemeral wetlands, which have the highest concentrations of species in this list.

A wetland herb, *Logania depressa*, is considered nationally extinct as it has not been seen since William Colenso found it in 1847. The district's plants which are ranked as the most threatened nationally are also wetland species. They are a bidibid, , and a grass . The bidibid has its only New Zealand location in the Makirikiri basin on the Mangaohane Plateau. It seems to be most threatened by the spread of the introduced *Hieracium*. *Amphibromus* occurs in one tarn on land administered by the New Zealand Defence Force where it is subject to feral horse damage. Likewise, a tussock grass, *Deschampsia caespitosa*, recorded from three locations in the district, may have been eliminated by horse and stock grazing. Basins in the Moawhango River headwaters are an important site for a number of small herbs. They include two threatened species of forget-me-nots (*Myosotis*) and a small buttercup *Ranunculus recens*. Another buttercup, *Ranunculus ternatifolius*, is recorded from the Reporoa Bog on the Mangaohane Plateau, one of only two North Island sites for the species. This plateau is also the highest altitude site for the tree *Pittosporum turneri*, a central North Island endemic species.

The Kutaroa and Otahupitara wetlands, southwest of Waiouru have a number of uncommon wetland plants, including what is probably the largest New Zealand population of an un-named *Prasophyllum* orchid.[70]

The mistletoe *Peraxilla tetrapetala* is known from a small area of mountain beech forest on land administered by the New Zealand Defence Force. It is likely this species has been severely depleted by possum browsing.

10.5.7 Wildlife at Risk

Kiwi, blue duck, falcon, banded dotterel, fernbird, harrier and kaka are threatened bird species that occur in the district. Kiwi have been recorded in the Hihitahi Sanctuary, and there are unconfirmed reports from the north-west Ruahine Range, just south of the Conservancy boundary.

Blue duck have been recorded in the Otokoro Stream and adjoining parts of the Moawhango River and also in the Mangatera Stream and tributaries. Basins of the Upper Moawhango River and Ngamatea East swamp are nesting habitats for banded dotterel. New Zealand falcon are seen widely and kaka have been reported from a number of localities. Fernbird are known from shrublands on Kutaroa swamp and near the .

Small-scaled skinks occur in rocky areas in farmlands of the Upper Rangitikei River.

One of the Conservancy's most threatened lizards is found in this district. Until recently, small-scaled skink were known from only 11 sites in the district and on Motutaiko Island on Lake Taupo. Recent surveys have increased our knowledge of the distribution and range of the species through to the Upper Mohaka catchment, east of Taupo.

In the Moawhango District, small-scaled skink occur predominantly on eroding river terraces

and exposed rock slides in developed pasture. A conservation strategy has been prepared for the protection of this species[46]. The key elements of this strategy include:

- the survey of potential areas of habitat identified by Whitaker (1993)
- the monitoring of selected populations
- the assessment of impacts resulting from grazing and predators.

Powelliphanta marchanti, a nationally rare large land snail, is known from the Mangaohane Plateau and the Rangitikei River headwaters.

10.5.8 Historic Places

No historic places are known on land administered by the Department within this district.

10.5.9 Recreation

Hihitahi Forest Sanctuary is used mainly for recreational hunting. It is one of the few areas in the Conservancy with red deer and is popular during the 'roar' hunting season. Tramping clubs also use the area for day trips. A track provides access into the sanctuary from State Highway No.1 and a basic hut offers shelter. Recreational hunters sometimes request permission to fly into the area by helicopter, especially during the 'roar'. Aerial access would encourage recreational hunting and is unlikely to have a significant impact on other users.

Cross Reference
See Sec. 37.4

The Military Training Area is a significant area of backcountry with potential for recreation. Use of the area, however, is restricted by the Defence Act 1990. The Department runs trips into the area as part of its summer nature programme to view the tussocklands and Kaimanawa wild horses. These trips assist, to some degree, in opening the area to the public and enhancing public understanding of the need to manage the horse population.

The Rangitikei portion of the Inland Patea Heritage Trail passes through the district. The trail, linking Taihape with Hastings, highlights places of scenic and historic significance on the touring route.

10.5.10 Commercial (Non-Recreation) Activity

There are no known commercial activities on land administered by the Department in this district.

10.5.11 Public Awareness

Because much of the district's native vegetation is in private or Maori ownership, public awareness will target protection of important sites. In particular, the PNAP survey of the district showed the desirability of protecting the Kutaroa and Otahupitara Swamp and the block in the north-west corner of the Ruahine Ranges.

Public support for programmes to combat infestations of heather and *Pinus contorta* will be important for the success of control efforts in the district.

Public awareness will aim to increase understanding of the damage the wild horses do to the fragile environment they live in, and to gain support for the herd management plan.

10.6 CHECKLIST OF KEY ISSUES

- Need for formal protection of land with high natural values.
- Continuing losses and degradation of tussock grasslands, wetlands and forest remnants.
- Need for protection and future management of the block.
- Improve consultation with Tangata Whenua
- Degradation of small-scaled skink habitat in farmlands.
- Impacts of military training activities and protection of tussocklands.
- Threats to the continued survival of many nationally threatened plants and biogeographically special plants.
- Conflicts between nature/landscape conservation and the protection of wild horses.
- Management of the wild horse herd, and public awareness of the issues involved.
- Weed invasion, especially heather, *Pinus contorta*, mouse-eared hawkweed.
- Promotion of the use of volunteers for weed control.
- Fire management to maintain ecosystem naturalness.
- The use of aerial access for recreational hunting in the Hihitahi Sanctuary.
- Retaining high natural values of waterbodies.
- Impacts of low flows in the Moawhango River.
- Management of possum and deer threat to ensure continuance of Kaikawaka and Hall's totara forest.

10.7 MANAGEMENT OBJECTIVES

10.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the tussocklands as identified in the PNAP report and other natural resource inventories, primarily through:

- working with landowners to achieve legal and physical protection of the six areas recommended for protection by the Moawhango PNAP
- working with the New Zealand Defence Force to protect four RAPs located within the military training area
- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness of and support for protection of areas identified through PNAP.

(ii) To promote protection of the natural values of the block by encouraging the multiple owners to protect this area to maintain its natural character.

(iii) To seek as a priority the protection of wetlands, particularly Kutaroa and Otahupitara Swamps, which are in their natural state.

10.7.2 Kaupapa Atawhai

(i) To work with Tangata Whenua so that they are informed about the natural and historic values that exist on their land by:

- exchange of information that relates to the special natural values of land such as the block and Kutaroa and Otahupitara Swamps
- raising the awareness of Maori land owners of the natural values of their land
- promoting the importance of co-operation which would enable resources to be used in a sustainable way
- encouraging the preservation and protection of nominated sites which have cultural significance
- encouraging hui which promote the cultural integrity of landscapes.

10.7.3 Landscape

(i) Promote retention of the district's extensive natural character and landscapes, particularly the tussockland and , by working with landowners and local authorities to ensure that land uses are sustainable and sensitive to the special character of the district.

10.7.4 Native Species Protection

(i) Implement the Conservation Strategy for small-scaled skink through:

- surveying potential areas of habitat of the species
- monitoring selected populations
- assessing the impacts of grazing and predators on the species.

(ii) Seek protection, in conjunction with the New Zealand Defence Force, of the unique assemblage of nationally threatened and biogeographically special plants in the Moawhango headwaters through:

- ongoing monitoring to determine changes in status and nature of threats
- control of invasive weed species, especially *Pinus contorta,* mouse eared hawkweed and heather, including seed sources in adjoining districts
- reducing the impact of wild horses at key sites.

(iii) Where necessary and practicable, control animal threats and predators of native species in accordance with national or local species recovery plans.

10.7.5 Threats

(i) To advocate the control of weeds, especially heather, mouse-eared hawkweed and *Pinus contorta*, in areas of high ecological value.

(ii) Encourage public involvement in weed control programmes.

(iii) To control the possum population in Hihitahi Sanctuary to a level that does not impact on the survival of remaining kaikawaka and Hall's totara.

(iv) Monitor the deer population density and impact in Hihitahi Sanctuary and introduce control measures if required to maintain regeneration and survival of key forest elements.

10.7.6 Wild Horses

(i) Manage the wild horse population in terms of the Kaimanawa Wild Horse Plan[26] to protect important landscape,ecological and botanical values through:

- the removal of horses from priority areas, such as the Ngawakaakauae sector identified in the plan
- support of a viable horse population in areas of low ecological value
- monitoring 'at risk' values to assist in determining future management
- public awareness of the issues involved.

(ii) Maintain a low risk to State Highway No.1 traffic by the continued reduction of horse numbers close to the highway.

10.7.7 Fire

(i) Consult with affected parties and develop protocols and methods for the use of fire as a management tool in tussock grasslands.

10.7.8 Recreation

(i) Subject to the preservation of natural and historic resources of the area, recreational opportunities will be enhanced through:

- managing recreational hunting and tramping opportunities in Hihitahi Sanctuary
- allowing aerial access for recreational hunters to designated landing sites (Zeke's Hut and Tar Paper Hut) in Hihitahi Sanctuary, including the issuing of commercial helicopter transport concessions
- liaising with the New Zealand Defence Force to encourage continued controlled public access to the land it administers, while recognising that the Defence Act 1990 restricts public access
- advocating protection of open spaces and other scenic values along the Inland Patea Heritage Trail, the Rangitikei River and elsewhere in the district.

10.7.9 Freshwater

(i) Promote the maintenance of the high natural values of the district's waterbodies.

(ii) Promote protection of the instream values of the Moawhango River through river flows which safeguard life supporting capacity of the river.

(iii) Advocate the ongoing protection of the Rangitikei River and its upper tributaries.

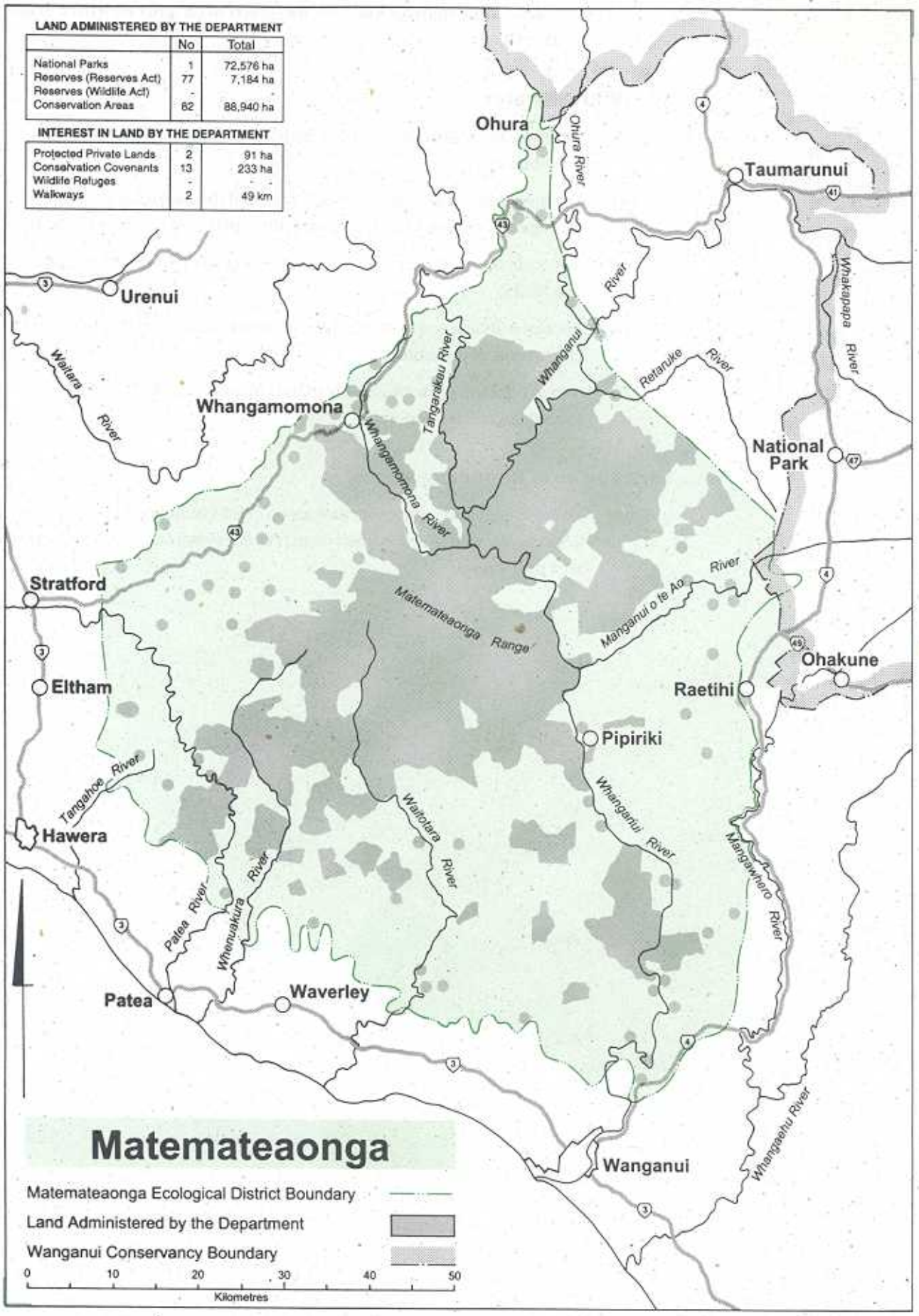
(iv) Priority will be given to maintaining natural vegetation cover in the catchments of this district.

(v) Achieve greater protection for wetlands identified as RAPs in the Moawhango PNAP report.

10.7.10 Cross Boundary Issues

(i) To liaise with adjacent conservancies on cross-boundary issues such as fire control, wild horse management, *Pinus contorta* control and natural area protection.

FIGURE 11: MATEMATEAONGA ECOLOGICAL DISTRICT



11 Matemateaonga Ecological District

11.1 INTRODUCTION

Matemateaonga district is the largest ecological district in the North Island. All but about 1,000 hectares of its 544,000 hectares lie in Wanganui Conservancy. The district is shown in Fig. 11, along with a description of land administered by the Department.

The recognisable character of the district is established by its steep, extremely hilly terrain, deeply incised rivers, and very extensive tracts of lowland forest. Considering the district's large area, it is remarkably uniform in both landform and native vegetation.

The district is sparsely settled with no large urban areas. Roading within the district is limited.

11.2 VISION

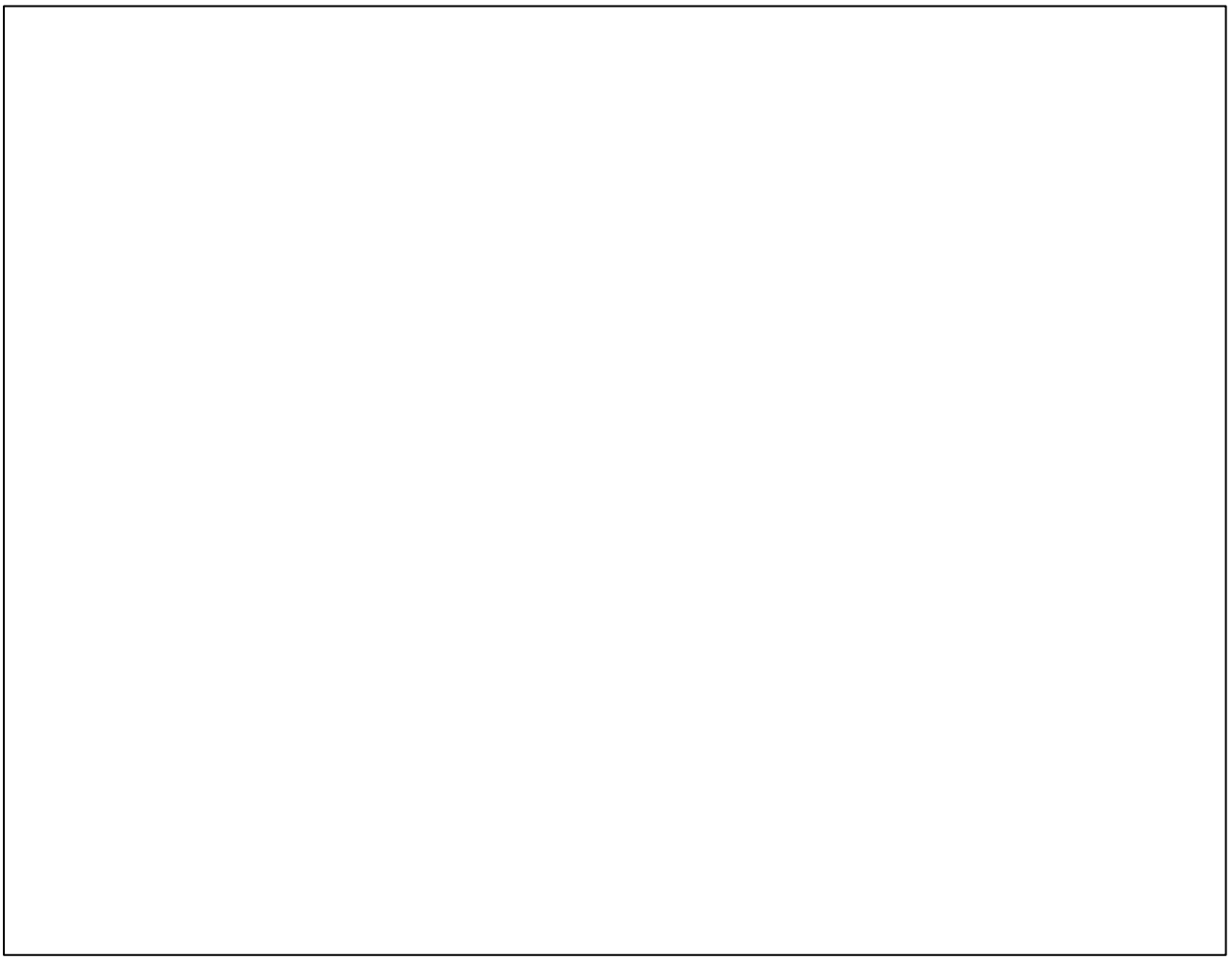
The rainforest in this district is recognised as nationally important, especially for species of native wildlife that need intact extensive lowland forests. The forest has recovered from the impacts of wild animals. Whanganui National Park has gained further recognition for its outstanding values. Land administered by the Department which adjoins the park and contains similar characteristics has gained additional protection in recognition of its nationally important values. Tangata Whenua are actively engaged in management for protection and interpretation of the park and other land administered by the Department. The Whanganui River and its catchment rivers will contain the full range of indigenous species. These rivers will have a minimum water quality and adequate flow suitable for contact recreation. Great efforts will be made by the community to avoid contamination from erosion and animal waste through land retirement, fencing and planting of river margins and careful use of fertilisers. The Whanganui Journey canoe trip will have enhanced appeal, nationally and internationally, and the national park is safeguarded against environmental damage from visitor use.

11.3 PHYSICAL DESCRIPTION

10.3.1 Topography

The district comprises steep dissected hill country, principally sandstone and mudstone with some limestone, showing active surface erosion and landslides. In the south, the land is almost entirely knife-edged ridges, steep valley sides and deeply

incised gorges. Remnants of old, elevated marine terraces occur in the north, giving some broader ridge tops; the Matemateaonga Range at 700 m is prominent. Valley sides are generally steep and the rivers are entrenched. The Whanganui is the major river. Throughout the district, alluvial terraces are narrow and adjoin only the larger streams and rivers. Most of the district drains to the south. Low fertility, steepland soils are dominant, with rolling land characterised by deep, well-drained volcanic ash soils.



The confluence of the Whanganui and Tangarakau Rivers in the forested heart of the Matemateaonga district.

11.3.2 Climate

The climate is generally moderate. In the north, the summers are warm and humid and the winters are cool, rainfall is 1,200-2,000 mm per year. South-west winds prevail. In the south the summers are warm and the winters are moderate, rainfall is 900-1,250 mm per year, where west to north-west winds prevail. The district's valleys are well sheltered from strong winds, but ridges, particularly in the south, experience frequent gales.

11.3.3 Water

The district is drained by a treelike pattern of streams, most of which coalesce to form rivers that flow south across the Manawatu Plains and Foxton districts. The district includes middle and lower sections of the Whanganui catchment, (Tangarakau, Heao, Whangamomona, Manganui o te Ao), the Waitotara River and the lower Patea, as well as other smaller rivers which run to the sea. The mudstone country is the major

influence on water quality and high sediment loads are common. One exception is the Manganui o te Ao which flows from the Volcanic Plateau over volcanic gravel and boulders. Its high water quality is also the result of forested riparian margins over the river's length.

Lakes are uncommon in the district, however some formed where valleys were blocked by landslides.

11.3.4 Vegetation Patterns

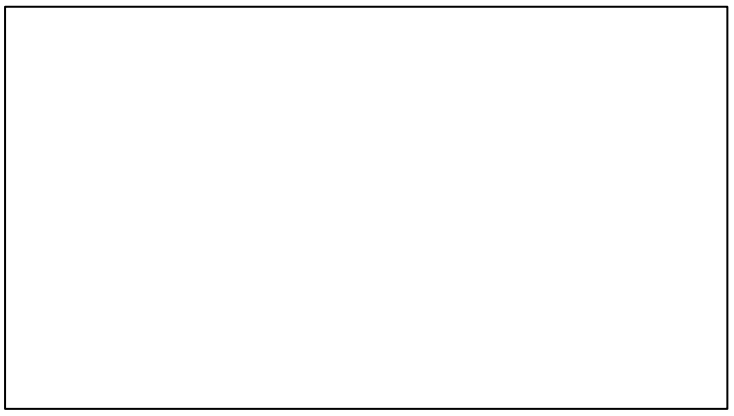
Native forest covered almost all of the district before European settlement. Natural non-forested sites were confined to near-vertical cliffs and to the very small areas of natural wetland on narrow valley floors. The lack of coastal or montane sites and rarity of wetlands has resulted in a comparatively small range of vegetation types and of native plants.

Successional stages of regeneration that follow past farming attempts are widespread. These range from fernlands through scrub to secondary forest. There are also large areas of abandoned farmland, particularly around the Whanganui and Whangamomona Rivers. Farming still occurs in less steep parts of the valleys and erosion scars are evident on cleared land. There are some established exotic forests and much marginal land for farming is currently being planted in pines.

11.4 HISTORY

Recorded Maori sites in this district are concentrated along the Whanganui River and Mangaehu Stream. The Whanganui River and its tributaries were used to facilitate trade and communication with the Waikato, Taranaki, Taupo and Bay of Plenty regions and many pa, kainga and traditional sites are to be found along their courses[107]. Whanganui hapu were renowned for their canoeing skills and maintained extensive networks of weirs and fishing traps along the river.

The arrival of European missionaries saw the conversion of many people to Christianity and the establishment of chapels at kainga on the river.



Canoes made in the traditional style are occasionally still used on the Whanganui River.

Disillusionment with Christianity and land sales led to the adoption from Taranaki of the Pai Marire religion and the Hau Hau movement. There was fighting on the river between the Hau Hau and Maori loyal to the Europeans in 1864, and military redoubts were established at Pipiriki[44].

Several flourmills were built to grind wheat grown in areas along the riverbanks between the 1840s and 1860s. Riverboats serviced settlements on the river from 1892 and tourism flourished until the 1920s. Many riverworks still remain[111].

The populations of kainga were depleted by European disease which contributed to the abandonment of most by the early twentieth century.

Several areas cleared for pastoral farming in the 1920s and 30s are now regenerating. Notable examples are the failed World War I returned soldier settlement in the Mangapurua Valley and abandoned farms in Aotuhia.

11.5 VALUES AND THREATS

11.5.1 Background

Of the Conservancy's ecological districts, Matemateaonga district has the greatest areas of native vegetation. Almost all of this is native forest, or stages of regeneration from farmland back to forest. Small areas of wetland occur, mostly on private land. A large proportion of the forest is protected in the Whanganui National Park and in numerous large and small reserves and conservation areas. The interfingered patterns of farmlands and native forests throughout the district mean long boundaries for the land administered by the Department. This, in turn, results in problems for the control of stock and feral goats, and high fencing costs.

(a) Whanganui National Park Additions

Cross Reference
See Sec 20.3.3(iii)

In 1994 the Conservancy completed an investigation of additions to Whanganui National Park under Section 8 of the National Parks Act 1980, and has sent a report to the New Zealand Conservation Authority. The investigation involved 16 areas of land around the margins of the present park, totalling 91,200 hectares. Nearly all the areas in the investigation have been recommended to the Authority for inclusion in the park because they have very significant ecological, wildlife and recreational values. If the additions are approved, this would more than double the size of the existing park to 165,000 hectares.

Section 8 of the National Parks Act 1980 provides the only method to include additional areas in a national park. Only areas which have outstanding values which meet the national parks criteria identified in the General Policy for National Parks[30] can be included. The process, as set out in the Act, involves a detailed investigation to determine whether the proposed additions meet the national parks criteria, extensive public participation, including consultation with Tangata Whenua, and a recommendation to the New Zealand Conservation Authority. Final approval for additions to a national park is given by the Minister of Conservation.

11.5.2 Protected Natural Areas Programme

See Sec 20.1

Matemateaonga district has had a lower priority for survey than other parts of Wanganui Conservancy because quite large parts of the district already have formal protection for conservation purposes[5]. The district's apparently uniform landform and vegetation mean that most unprotected natural areas are likely to be similar to existing protected areas.

The Department commissioned a desk-top inventory of the known information on natural areas in the district in 1988. This showed a generally good representation of the different kinds of natural area on land already administered by the Department.

See Figure 17

However, about 20 sites on private land were identified as needing survey. A protected Natural Areas Programme survey was undertaken in 1995 and the report published in

1996[93]. Five unprotected sites were identififed, mainly wetlands or riparian forest, and communities poorly represented in existing reserves. The Department and some other agencies are committed to helping landowners protect these sites termed recommended areas for protection (RAPs). All are within the Wanganui Conservancy.

11.5.3 Ecosystem Diversity

(a) Forest

The main forest types repeat across the entire district. These are podocarp/broad-leaved forests on hill slopes and black beech forest on narrow ridge crests. The dominant podocarp is rimu, though much has been extracted for timber, and by far the most prominent broad-leaved tree is tawa. Other common trees include hinau, rewarewa, pukatea, kamahi, and kahikatea. Whanganui National Park and many other protected areas have such forest as their main vegetation cover.

Other forest types are mostly different successional stages back to rimu and tawa, following past land clearing. Manuka and tree ferns are common in early stages, and mahoe, heketara, and kamahi often dominate later stages.

River terraces were always of limited extent, but a few small examples of their distinctive forests remain. Wetter sites have kahikatea and pukatea as common dominant species, and, very locally near the border with Egmont district, swamp maire and ribbonwood. Well-drained river terraces support matai and totara with broad-leaved trees such as titoki and black maire. Kanuka is the common secondary forest tree of riverine sites, and kowhai occurs in some catchments.

Hard beech is on some ridges towards the North Taranaki Ecological District, and red beech is known in the northeast, near the volcanic plateau.

The extensive forests provide habitat for most species of native forest birds in the North Island, including large populations of robin and brown kiwi. Rifleman, whitehead, kereru, pied tit, tui, bellbird, fantail, grey warbler, kingfisher and silvereye are widespread. Threatened species are discussed below.

Goats and possums are in high density throughout the district's forests except for the relatively few areas under a control programme. Their continued impacts have already been substantial. Goats have progressively reduced palatable species within browse range[8] and possums have targeted preferred tree species. The dominant tawa/kamahi forest is highly susceptible to possum browse and large areas of this forest type are showing obvious signs of ill-health and death. Already much of the northern rata has died and that which remains is in a poor state.

On unfenced forest/pasture margins, domestic stock are having a severe localised impact through browsing and trampling. Pigs are locally common throughout but tend to have most impact on pasture boundaries. Red deer in the north are infiltrating from central North Island forests but numbers are still low. Fallow deer are present in the south and south-west in localised pockets and are keenly sought by hunters.

Few forest weeds are of significance. However, willows, buddleia and Japanese walnut are persistent colonisers of river and stream banks adjoining forest.

(b) Shrublands

Most shrublands are dominated by manuka, and are stages in the regeneration of forest after previous land clearing. Cliffs in river gorges and elsewhere have a similar range of shrubs to those of such sites in the North Taranaki Ecological District. Wetland shrubs, especially small-leaved *Coprosma* species, are more typical of wetlands in other ecological districts of the Conservancy. However, *C. tenuicaulis* is at Rotokare Scenic Reserve, ramarama is in swamps at Rotokahu Scenic Reserve, and *C. rotundifolia* occasionally grows on swamp edges. Manuka is possibly the most widespread swamp shrub.

Cross Reference
See Figure 25

The regeneration of native shrublands following land clearance is hindered by pasture grasses in the short term and Himalayan honeysuckle in the medium term, at least in some localities. The ability of native species to overtop dense Himalayan honeysuckle shrublands warrants further investigation. This shrub and others have become established from garden escapes in valleys with a history of settlement such as the Mangapurua Valley in Whanganui National Park. Browsing by domestic stock and goats also slows down the establishment of shrublands.

(c) Wetlands

A few lakes occur near the district's western, southern and eastern borders. Most are the result of landslides across the narrow valleys and tend to be deep with steep edges. A narrow swamp fringe usually has *Carex* sedges ("cutty grasses") and raupo. Individual wetlands commonly have plants which occur rarely, if ever, in other wetlands of the district, perhaps because wetlands are so rare and, by chance, different species arrived at different sites. Jointed twig-rush and swamp millet are at Lake Rotokare[84], Purua grass and *Carex dipsacea* are at Lake Moumahaki[68], and *Isolepis sulcata* is at Rotokahu Scenic Reserve[24]. Lakes used for recreational boating are especially at risk to water-weeds, e.g. Lake Rotokare has *Lagarosiphon major.*

Although wetlands are rare in the district, most are little known and deserve further study.

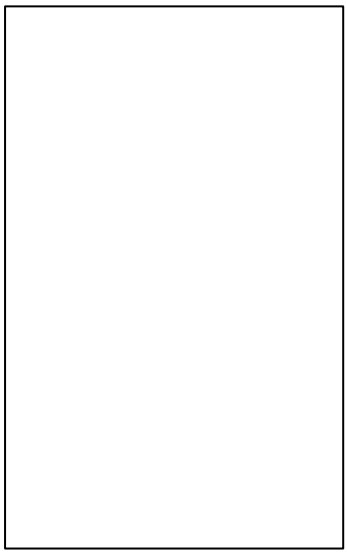
Wetland birds include common waterfowl and several isolated populations of fernbird, dabchick and spotless crake. The Moumahaki lakes contain most of the district's waterbird species.

11.5.4 Water

The Whanganui River and catchment have outstanding amenity and intrinsic values for a number of characteristics including habitat for indigenous fish, wild, scenic and natural values, habitat for blue duck, New Zealand's longest navigable waterway, New Zealand's most used river by canoeists, the major accessway to the Whanganui National Park, historical, cultural and spiritual significance. The Department will participate in activities aimed at conserving these values. The Whanganui River, which dissects Whanganui National Park, is not part of the park.

See Sec 44.2 and 14.5.4

The Royal Forest and Bird Protection Society has applied for a Water Conservation Order over the Whanganui River. The Department will seek protection of the outstanding characteristics of the Whanganui River through the Water Conservation Order. Evidence will be presented at any subsequent hearings, covering such matters as recreational values, the indigenous fishery, ecological/intrinsic values, natural values and water quality.



Clear waters of the Manganui o te Ao River join the silt laden Whanganui River (lower left).

The Manganui o te Ao River and its tributaries, the Mangaturuturu and Makatote Rivers along with the Waimarino and Orautoha Streams have outstanding characteristics which have been recognised in a Water Conservation Order on the river. The Makatote River and Waimarino Stream lie within Tongariro/Taupo Conservancy.

The major threat to the river system, as for others in the district, is pollution from sediment, fertilizer and animal waste run-off from the land. On the Patea River, management of the dam at Lake Rotorangi affects values in the lower river and lake levels. The dam also restricts the movement of migrating fish species upstream.

Where a reserve administered by the Department includes any part of the Whanganui River, the Department will, in carrying out its management functions, have regard to the spiritual, historical and cultural significance of the river to the Whanganui Iwi, as required by Section 40(2) of the Reserves Act 1977. This will in many instances require early consultation with Iwi.

11.5.5 Landscape

On the broad scale, the Matemateaonga district has remarkably uniform landscapes, despite their complexity at the local level. The uniformity results from the almost endless repeated patterns, river after river in narrow, often cliffed, gorges which are separated by steep valley sides rising to razor-back ridges. Where land has been cleared for farming, the harsh landforms - the "papa country" - are most apparent. Elsewhere, broad tracts of native forest soften the landform features. The poet Dennis Glover described such country as being crumpled like an unmade bed.

Many visitors see the district from the Whanganui River. They carry away strong memories of the damp fern-clad gorges that enclose dark, relatively quiet waters, or which open out a little to reveal steep hills clad in sombre forest. Road travellers most commonly see the district from one of the three main routes, the Whanganui River Road into the district's heart or, on the western and eastern edges of the district, respectively, the Stratford-Ohura road and the "Parapara" (Wanganui-Raetihi road). Each of these roads exposes the visitors to many impacts of land development. Impressions are more likely to be of endless angular hills, farmlands scarred by erosion, and roads and farm tracks that have been gouged into seemingly impassable slopes. Some visual contrast is provided by remnants of native forest that hang precariously on hillsides.

The landscape is currently undergoing another dynamic change as some farmlands are planted in pines.

11.5.6 Plants at Risk

Cross Reference
See Appendix 6

Matemateaonga district has two species featuring in the national list of threatened and local plants. The herbaceous daisy *Brachyglottis turneri* grows on cliffs above the Whanganui River in at least one location but may also be present in other suitable cliff habitat where it is safe from browsing animals. The mistletoe, *Ileostylus micranthus*, grows on hawthorn shrubs on the Matemateaonga-Rangitikei boundary near Upokongaro.

A third species, the wood rose *Dactylanthus taylorii*, occurs in adjoining districts and is expected to be in this district.

A seldom seen underground spider orchid, *Corybas cryptanthus* is known from one location near the western edge of the district where it grows under manuka. The plant is not visible for most of the year and may occur more widely.

11.5.7 Wildlife at Risk

Forest birds of particular note that have been recorded in the past include the kaka, brown kiwi, yellow-crowned parakeet, New Zealand falcon and robin. Recent records of kaka, yellow-crowned parakeet and robin suggest that these species are in decline and are now present in reduced numbers. The endangered kokako has been reported, but intensive survey has failed to confirm this. Fernbird are very local, being known near Whakahoro and in Ruatiti Scenic Reserve and on private land nearby. In each site, the fernbirds are in manuka on a swampy valley floor or river terrace.

Populations of kaka are decreasing in the inland forests of the district.

A major research project on brown kiwi at Aotuhia has been initiated by a Massey University student. The study will look primarily at the use of varying habitat types in the area used by kiwi, kiwi productivity and recruitment, and the role of predators in limiting kiwi populations here. Predation by mustelids and other predators has been identified as a significant limiting factor to kiwi populations in other areas.

No detailed analysis of the lizard fauna has been undertaken, but the national database shows that eight species probably exist. The most notable lizard is the threatened striped skink, inland of Stratford[105].

Numerous sightings have been made of long-tailed bats, predominantly along the Whanganui River trench. A roost site was identified in 1993 in the Waitotara Conservation Area . A significant new record of short-tailed bat was made in 1994 at the western end of the Matemateaonga walkway.

Little is known of the insect fauna of the area, although a collection was made at the John Coull Hut in Whanganui National Park and included moths, butterflies and beetles.

Information on the distribution of native land snails is poor. In the 1950s, two *Powelliphanta* (large land snail) shells were found in the Waitotara Valley. The next nearest populations are on Mt Taranaki/Egmont, in the Ruahine Ranges and southern Manawatu. A publicity campaign was launched in 1989 to seek further records of the Waitotara snail, without success.

Blue duck occur on some rivers in the district, most notably the Manganui o te Ao. This river has been regarded as a stronghold for blue duck, and is the location of a 14-year study of their ecology[110]. In 1994-95 there were regular sightings of rufous (Nankeen) night herons, both adults and young, in the mid-reaches of the Whanganui River. If breeding of this species is confirmed, this would be the only New Zealand colony.

Cross Reference
See Appendix 6

Studies of the freshwater fish resource are also ongoing. Twenty-four fish species have been recorded, and 18 of those are native species. Two threatened species have been recorded; short-jawed and giant kokopu. The Whanganui River system is also significant for its long-finned eels and lampreys.

11.5.8 Historic Places

The Whanganui River is of spiritual and historic importance to the Iwi who live along its bank. A number of pa and kainga sites lie in Whanganui National Park. There will be other historic places of which the Department is unaware on land that it administers in this district.

Riverboat tourism and failed farm settlements provide some of the Conservancy's more colourful European history. The era of the riverboats is recalled by features such as landings and ringbolts on the banks and training walls on the bed of the Whanganui River.

The Bridge to Nowhere - 1936.

The Mangapurua Valley contains a number of introduced plants, such as macrocarpa, pine and holly, dating from the days of settlement and farming. Today, these are sometimes the only indication of a former house site.

There are ten actively managed historic places. These include the Maraekowhai niu poles, Mangapurua Valley house sites, the Bridge to Nowhere and Colonial House. Management includes remedial and long term maintenance work on structures, vegetation management, and the provision of access and interpretation.

11.5.9 Recreation

The bulk of Whanganui National Park and adjoining conservation areas are contained within the boundaries of the district. Much of this land is rugged and undeveloped, with little road access. Canoeing, jetboating, tramping and hunting are the major recreational activities, mostly around the forest fringes, along the Whanganui River and the 'corridors' formed by the two major tramping tracks, the Matemateaonga Walkway and the Kaiwhakauka-Mangapurua Track.

In excess of 4000 people canoe the Whanganui River each summer. This number is increasing gradually, with a high proportion of overseas visitors. The Department provides three huts and a number of designated campsites. The facilities are managed collectively under the Whanganui Journey "Great Walk" Hut and Camp Pass system. Improved facilities and camping restrictions have been introduced to consolidate use and control visitor impacts.

Cross Reference
See Sec 38.3

Six huts and shelters are maintained on the Matemateaonga Walkway. There is a need to review the number and placement of facilities on the walkway in order to reduce ongoing maintenance costs and standardise walking distances between huts. A minimum walking distance of four hours between huts has been suggested. This will be done in consultation with user groups.

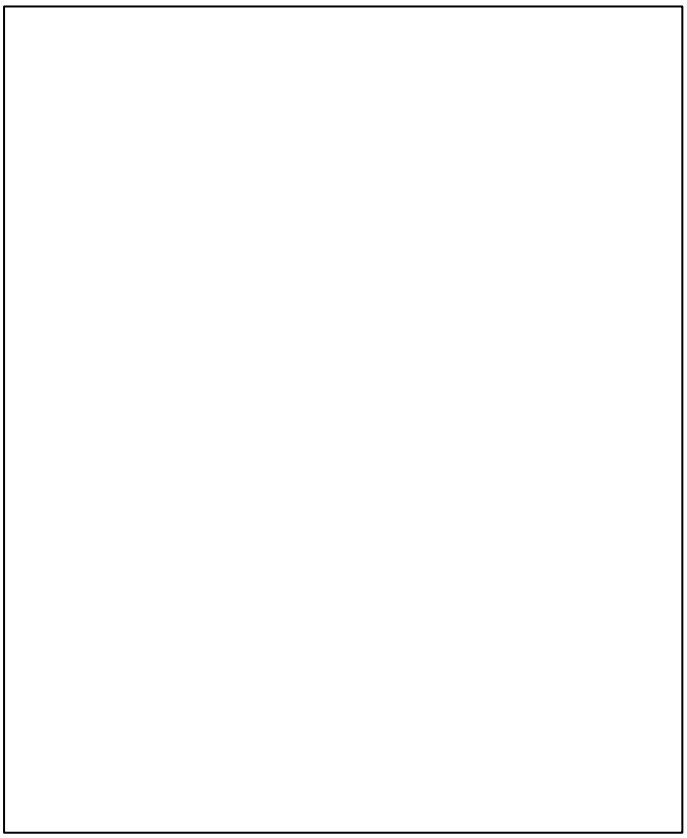
See Sec 39.5

The possibility of bridging the Whanganui River and linking the walkway with the Mangapurua Track, creating an East-West Walkway connecting the Waimarino with Taranaki, has been promoted as a development with some tourism potential. The Conservancy has noted this, but within current funding levels, will give priority to maintaining the existing opportunity. The East-West Walkway proposal will be considered further and a feasibility study prepared if visitor demand increases significantly and sufficient additional funding is made available.

See Sec 39.4

The district contains the only areas of remote zoned land in the Conservancy (largely contained within Whanganui National Park) which are an important recreational resource. The existing network of basic huts and marked routes in the Waitotara Conservation Area will be maintained to encourage recreational hunting and also provide for remote experience tramping. Development of facilities in other remote zoned areas will be minimised in order to protect natural/remote experience values. The Waitotara, Tangarakau and Aotuhia Conservation Areas are likely to be added to the Whanganui National Park.

Cross Reference
See Figure 31



Old tunnels on the Whangamomona to Aotubia Road provide good access for visitors to the park.

Some tracks and old roads outside Whanganui National Park may provide good mountain biking and horseback riding opportunities. These need to be identified.

The Whanganui National Park Management Plan identified two proposed wilderness areas, the Heao and Mangaio catchments. Because of the cost of gazettal and the need to control wild animal populations in these areas (which may involve promoting recreational hunting and possum trapping), the Department now proposes to manage these areas as Remote Experience Zones. Use of this classification will allow limited aircraft access for recreational hunting and possum trapping, while still providing for remote experience recreation. Development of facilities will not be permitted unless required for animal control or other management purposes, in which case temporary buildings will be used.

A number of concessions have been issued for guided tramping, canoeing and jet boating in Whanganui National Park.

11.5.10 Commercial (Non-Recreation) Activity

This district contains most of the abandoned farmland in the Conservancy, and has the largest area under licence (1410 ha), and the equal largest number of grazed areas (44). Significant areas are grazed without licences, because of the difficulty and cost of boundary fencing. The Ahu Ahu Ohu (commune) occupies 260 ha of stewardship land adjacent to the Whanganui National Park under a perpetually renewable Land Act lease. The Te Wera forest camp is held under a renewable Forests Act 1949 lease for a further 20 years.

11.5.11 Public Awareness

This district has extensive tracts of lowland rainforest administered by the Department. There are also large areas of privately owned forests. Public awareness needs to promote the benefits of improved animal control and fencing for protection of the Whanganui National Park's natural values among land owners, Tangata Whenua and local authorities. If large areas of land administered by the Department are added to the park, this will enable wider promotion of its features and its improved access.

This will serve to direct public attention to some of the problems of managing the park.

Increasing use of the Whanganui River will involve the Department in greater promotion of the natural, historic and recreational values of the Whanganui Journey.

11.5.12 Land Management

Cross Reference
See Sec 20.4

Some of the reserve land the Department administers in small rural settlements is no longer required for its original purpose. In Tatu, there are four areas of land the Department administers which may be assessed for disposal, or management by other agencies.

When land adjoining Whanganui National Park, is protected through purchase, gift or exchange, consideration will be given to including it in the park, where the natural, landscape, historic or recreational values justify such action.

Many opportunities for exchanges have already been identified, but are of a low priority, as the privately owned bush on offer is similar to that in large areas of the adjacent Whanganui National Park.

11.6 CHECKLIST OF KEY ISSUES

(a) Whanganui National Park

- Need for Whanganui National Park additions.
- Whanganui River Treaty claim.
- Co-operation and improved liaison with Tangata Whenua.
- The protection and management of threatened wildlife, notably brown kiwi and bats.
- Impacts of wild animals, especially feral goats and possums.
- Impacts of weeds.
- Lack of fencing of Whanganui National Park.
- Providing a range of recreation opportunities.
- Providing visitor information for the park.
- Unlicensed grazing.
- Whanganui River Water Conservation Order.
- Lack of riparian protection for the Whanganui River and its tributaries.
- Increasing public awareness of the values of the Whanganui National Park and the threats that face it.

(b) Other areas

- Increasing protection of indigenous forest on private land.
- Lack of knowledge of natural values on unprotected lands.

- Need to rationalise land the Department administers.
- Need for better consultation with Tangata Whenua over historic site management.
- Lack of information on the present status of wildlife species known to be present in the past, especially kiwi, blue duck, short-tailed bat and Waitotara *Powelliphanta* snail.
- Seasonal monitoring of kereru and night herons.
- Impacts of wild animals, especially feral goats and possums.
- Need for weed control.
- Impacts of weeds on riparian zones.
- Unsustainable land management affecting silt inflows to rivers.
- Maintenance and enhancement of outstanding amenity and intrinsic values of the Whanganui River.
- Lack of fencing

11.7 MANAGEMENT OBJECTIVES

11.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority the protection of significant natural areas in the district, identified by PNAP survey, and other resource inventories, primarily through:

- working with landowners to achieve legal and physical protection of the areas recommended for protection by the Matemateaonga PNAP survey
- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness and support for protection of areas identified through the PNAP survey.

(ii) To promote protection of areas adjoining Whanganui National Park which contain natural values or where advantages to park management are identified.

(iii) To liaise with local authorities concerning the potential adverse effects of exotic forest harvesting adjacent to Whanganui National Park.

Disposal and Exchange

(iv) To consider disposal of land and/or buildings associated with the education facility at Te Wera, once the current lease has expired.

Land Classification

(v) To implement any decision of the Minister of Conservation on the 1995 Section 8 investigation for additions to Whanganui National Park.

(vi) To consider further additions to Whanganui National Park following land acquistions, where:

- the land is either adjacent or close to the park
- the natural values and/or landscape/ecological unity justify this level of protection.

(vii) To assess the natural, historic or recreation values of land administered by the Department at Tatu by:

- applying the most appropriate protected status, or
- determining the most appropriate administering agency, or
- seeking to dispose of the land if it has no natural, historic or recreation values.

11.7.2 Kaupapa Atawhai

(i) To facilitate dialogue with Tangata Whenua in the district so that:

- the kaitiaki role of Tangata Whenua is understood by the Department
- management and protection measures undertaken on land administered by the Department are understood
- management plans which Hapu and Iwi have prepared are taken into consideration by the Department when planning is undertaken
- traditional material requirements of Tangata Whenua can be given consideration
- traditional fishing rights of Tangata Whenua are understood by the Department.

(ii) To have regard to the spiritual, historical and cultural significance of the Whanganui River to Whanganui Tangata Whenua when carrying out management functions over any reserve which includes part of the Whanganui River.

11.7.3 Native Species Protection

(i) **To determine the status of the Waitotara** *Powelliphanta* snail through:

- continuing with a public awareness campaign on this snail
- survey of the most likely habitat for this snail following local knowledge and historical information.

(ii) To control where necessary and practicable, animal threats and predators of native species in accordance with national or local species recovery plans.

(iii) To determine the impacts of land management and predators on brown kiwi through assisting with a kiwi research programme at Aotuhia.

(iv) To continue a kiwi monitoring programme in the Waitotara Conservation Area.

(v) To continue monitoring blue duck on the Manganui o te Ao River, with a view to assessment of this population as a source for future liberations in other places.

(vi) To identify and monitor short and long tailed-bat populations in the district.

(vii) To determine the status of kereru in the vicinity of Wanganui through:

- continued annual monitoring of kereru beside a local highway
- the use of radio telemetry if possible.

(viii) To identify the natural habitats of striped skink through:

- lizard trapping at known and potential sites
- research of basic ecology and behaviour.

(ix) To identify and monitor Nankeen night herons in the middle reaches of the Whanganui River.

11.7.4 Threats

Animals

(i) To maintain a low possum impact on ecological values in large representative forest areas of the district through:

- identification of suitable control areas based on such factors as ecological values, natural boundaries and forest susceptibility
- initial knockdown of the possum population using aerial poisoning and other techniques
- implementation of long term maintenance strategies
- public awareness of the need for possum control and the methods used.

(ii) To maintain a low level of goat impact on ecological values of those forest areas receiving sustained control, including the Matemateaonga Range, Whanganui River trench, Kaiwhakauka/Mangapurua valleys and identify further areas for expansion of control through:

- ongoing intensive hunting programmes to keep goat densities at acceptable levels
- further ecological investigation of areas of the district not well known
- investigating alternative control methods and strategies through research and trials.

(iii) To monitor the ecological impacts of wild animals including red deer which are not currently the focus of Departmental control programmes.

Domestic Stock

(iv) To exclude domestic stock from Whanganui National Park and other important areas through:

- a programme of fencing key boundaries and the maintenance of these fences. Where feasible, land exchanges, boundary adjustments and land acquistions will be used to reduce the complexity of fencing requirements
- the use of the provisions of the Fencing Act 1978, the Impounding Act 1955 and/or the stock trespass provisions of the National Parks Act 1980, Conservation Act 1987 or the Reserves Act 1977.

Weeds

(v) To control and, where possible, eradicate invasive weeds of natural areas through:

- maintaining weed control in key sites which the Department administers, especially willows along the Whanganui River and other weeds of riverbanks
- advocating weed control to local authorities and landholders for weeds which are known to be threats of natural areas
- research into the impact of shrub weeds, especially Himalayan honeysuckle, and on control methods.

11.7.5 Historic Places

(i) To establish and maintain a close and regular relationship with Tangata Whenua in the management and understanding of historic places associated with Iwi on the Whanganui River, including gaining the support of Tangata Whenua for management decisions that could impact upon known sites.

(ii) To support the identification, interpretation and protection of historic Whanganui riverworks.

(iii) To retain specified exotic plants associated with historic house sites within the Mangapurua Valley, but to remove wildings of these plants where they threaten the integrity of native vegetation in the valley.

(iv) To manage historic places of known significance such as the Maraekowhai niu poles, in accordance with the Conservancy Historic Resources Strategy.

11.7.6 Recreation

(i) To maintain and manage use of hut and camping facilities on the Whanganui River to provide a quality visitor experience and control impacts on natural, historic and cultural values.

(ii) To maintain the Matemateaonga Walkway and Kaiwhakauka-Mangapurua Track to tramping track standard and rationalise the provision of huts and shelters on the walkway in consultation with user groups. A minimum walking time of 4 hours between huts on the Mateamateaonga Walkway will be adopted.

(iii) To maintain the network of basic huts and marked routes in the Waitotara Conservation Area to encourage recreational hunting and provide for remote experience tramping.

(iv) To assess the suitability of tracks and old roads outside Whanganui National Park for mountain biking and horseback riding and to identify suitable opportunities.

(v) To minimise development in remote zoned areas to protect remote experience values and to manage the Heao and Mangaio areas within Whanganui National Park as Remote Experience Zones.

(vi) To promote the Whanganui National Park, access to it and provide facilities for day visitors at suitable road accessible locations on the fringes of the park, especially to the south and west.

(vii) To provide up to date interpretation and recreation information, including entrance and directional signs at key road ends and track junctions

(viii) To enhance walking access to any major additions to the Whanganui National Park with special focus on old unformed roads.

(ix) To allow recreation concessions where these are not contrary to the provisions of the Act or the purposes for which the land is held.

11.7.7 Commercial (Non-Recreation) Activity

(i) To control unlicensed grazing through fencing, exchange, retirement or licensing.

11.7.8 Freshwater

(i) To seek the restoration and protection of the Whanganui River and its tributaries through:

- supporting the Royal Forest and Bird Protection Society application for a Water Conservation Order over the Whanganui River
- advocating water quality suitable for contact recreation and the protection of intrinsic values and ecological diversity
- promoting riparian protection and appropriate land management
- promoting water and soil conservation measures in regional and district plans.

(ii) To promote a reduction of sediment and animal waste inflows to the Whanganui, Waitotara, Whenuakura and Patea catchments as priorities through improved land management such as riparian planting, wild animal control and retirement.

(iii) To promote the protection of lakes and wetlands.

11.7.9 Public Awareness

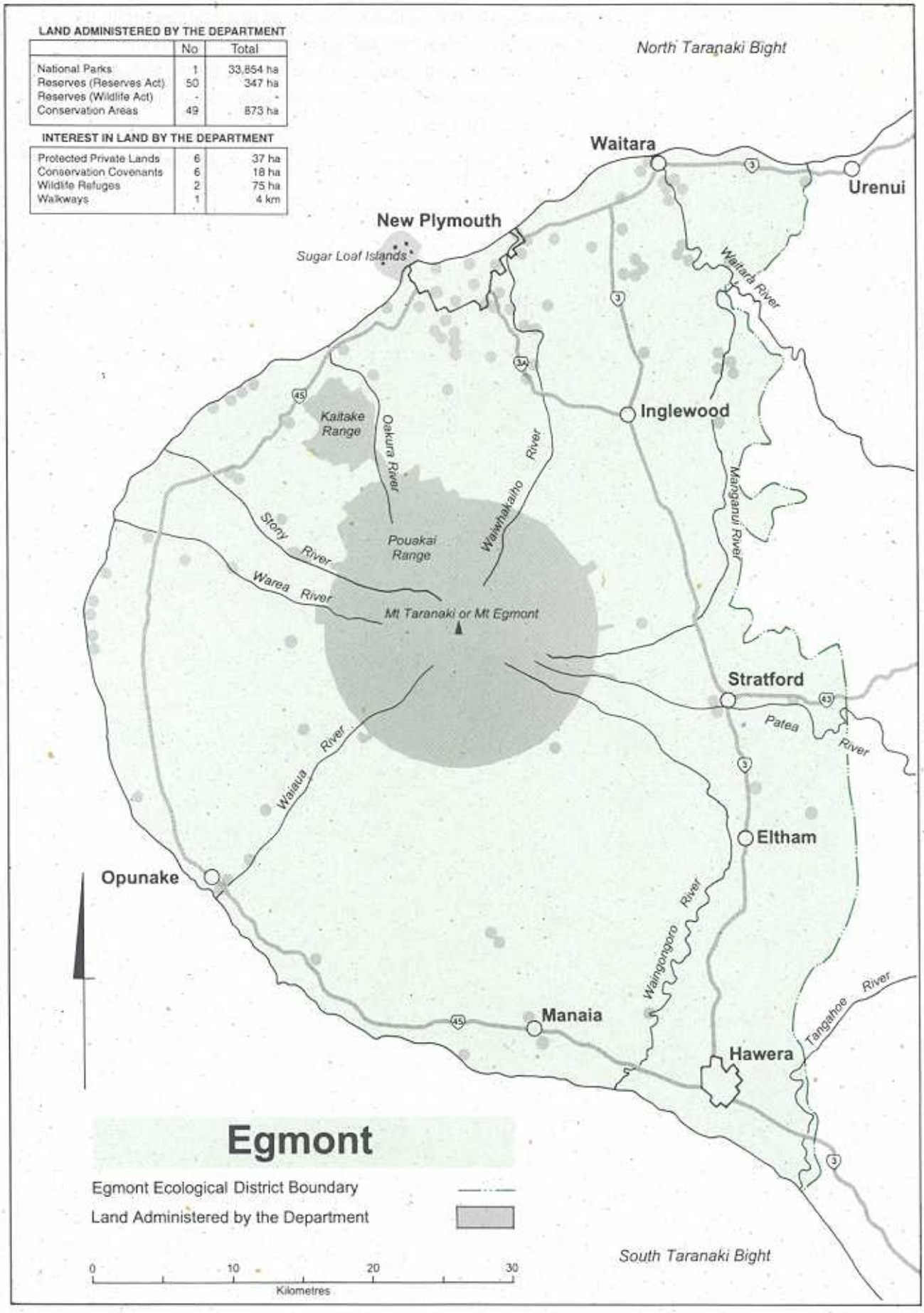
(i) To explore the options to enhance visitor information at entrances to Whanganui National Park, such as Pipiriki.

11.7.10 Management Plan

(i) To manage the Whanganui National Park in accordance with the Whanganui National Park Management Plan 1989, and subsequent reviews. The overall management philosophy for the park is, 'To preserve the park in perpetuity for its intrinsic worth, and for the benefit, use and enjoyment of the public'.

Detailed management objectives and policies are contained within the management plan.

FIGURE 12: EGMONT ECOLOGICAL DISTRICT



12 Egmont Ecological District

12.1 INTRODUCTION

Egmont Ecological District comprises the andesite volcanoes of Mount Egmont/ Taranaki, the Pouakai and Kaitake Ranges and the Sugar Loaf Islands, and the ring plains of volcanic "ash" (tephra) and boulders and other debris from volcanic mud flows (lahars). On the south coast, the materials of the ring plain can be seen to overlie mudstone of marine origin. These mudstones dominate the ecological districts which abut the Egmont district on its eastern border - the hill country of North Taranaki and Matemateaonga districts and the marine terraces of Manawatu Plains. In places, dune sands cover the coastal fringes of the ring plains.

The Egmont district comprises 270,300 ha, all of which lies within Wanganui Conservancy. The district is shown in Figure 12, along with a description of the land administered by the Department. Although 13% of the district lies in Egmont National Park (33,764 ha) and reserves, much of this is in alpine, sub-alpine and montane zones.[12] Less than 1% of coastal and semi-coastal zones and 2% of the lowlands have a protected status.

Much of the district has been developed for pastoral farming, especially dairying . Major urban settlement at New Plymouth is complemented by significant urban sites at Waitara, Inglewood, Stratford, Eltham, Hawera and Opunake. The district contains the second largest population in the Conservancy with approximately 100,800 based on the 1991 census.

More than half the scenic and allied reserves are smaller than 3 ha[4].

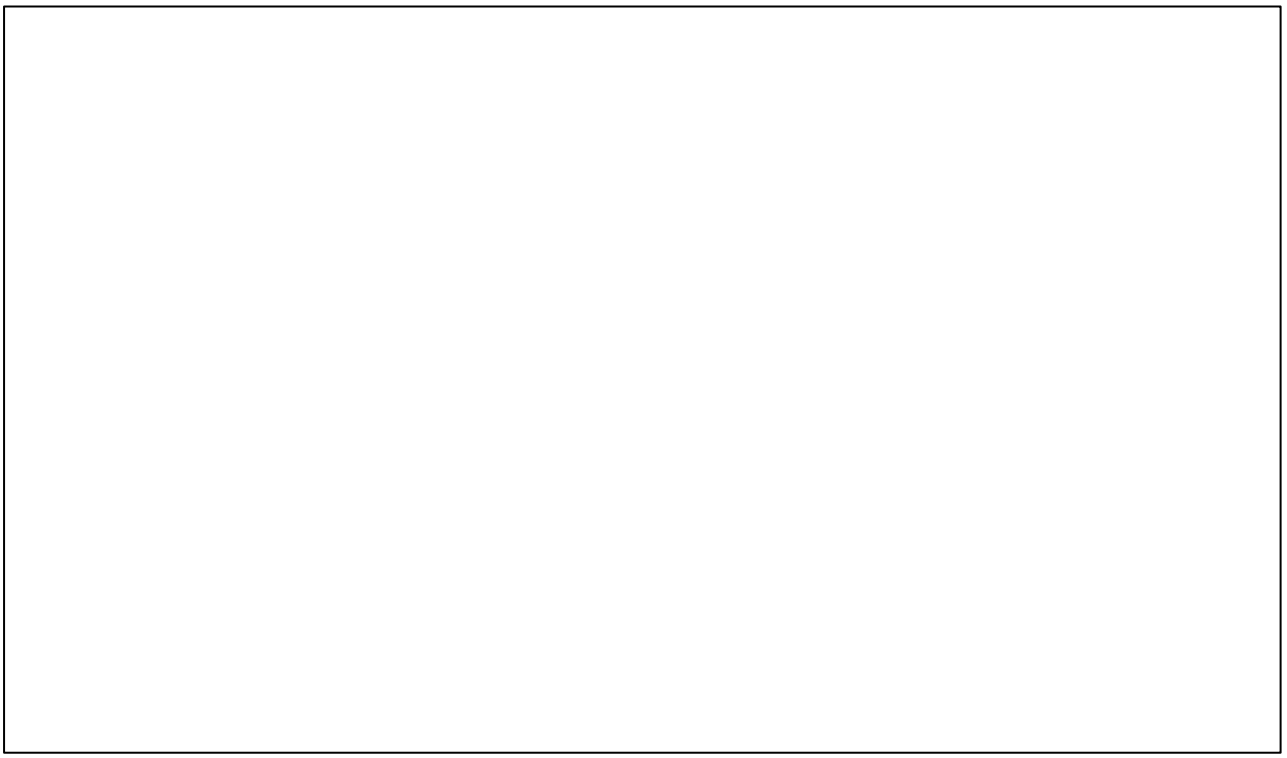
12.2. VISION

Egmont National Park will gain enhanced recognition for its natural features. The mountain will be known for its natural and historic values and relationships to Tangata Whenua. The full range of indigenous plants and animals will remain and all major animal and weed threats to the park will be eradicated or controlled. Visitors to the park have caused less damage and learn more about its natural, cultural and historic values. The impacts of commercial and recreational utilities within the park will be reduced while interpretation facilities will be enhanced. The quality and flow of water on the ringplain is protected and enhanced. The few scattered natural areas outside the park are legally protected. Key parts of the marine environment and the adjoining coast are formally protected and the remainder used sustainably.

12.3 PHYSICAL DESCRIPTION

12.3.1 Topography

Apart from the volcanoes themselves, the district comprises the surrounding volcanic ring plain and is of low relief. Its numerous streams radiate from the mountains across the ring plain to the coast, through mostly shallow but narrow stream courses with boulder beds. The coast is marked by high mudstone cliffs in the south or lower cliffs of tephra and lahar materials in the west and north. Dunes and sand beaches occur in some places, but boulders are the most common feature of the shore.



View from the Cape Egmont coast near Rabotu looking over lahar mounds to Mt. Taranaki / Egmont and the Pouakai Ranges.

The district has mainly deep, friable, well drained volcanic ash soils, with significant areas of shallow and bouldery soils from lahar deposits. There are leached soils where water tables are high; areas of peat soils occur near Eltham. Well drained alluvial soils are found along streams and rivers, and sandy soils near the coast. Soil fertility decreases with increased rainfall, as nutrients are leached out. Above the tree-line, soils are shallow and stony, with areas of bare rock.

12.3.2 Climate

The climate of the district is a product of the major westerly airflow systems affecting New Zealand combined with local topography. The mean temperature is 13.4°C near the coast at New Plymouth and 1.9°C at the summit of Mount Taranaki/Egmont.

Rainfall increases with altitude, from around 1200-1500 mm/yr near the coast to around 8000 mm/yr at the summit of Mount Taranaki/Egmont. North-west of the mountain, the climate is wet with warm humid summers and mild winters with maximum rain and prevailing south-west winds. Land south of the mountain is prone to gales with west to north-west winds, mild summers, moderate winters and an evenly distributed annual rainfall.

12.3.3 Vegetation Patterns

The original vegetation of the district was mostly forest. The exceptions were narrow strips of herbfields, flax, and shrubs on cliffs, dune vegetation, lowland wetlands, and areas above the natural treeline on the peaks of Mount Taranaki/Egmont and the Pouakai Ranges.

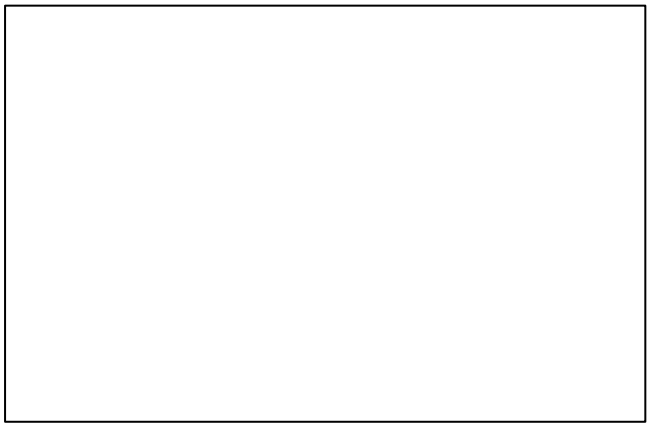
12.3.4 Water

Rivers in the district flow from Mt Taranaki/Egmont over the Taranaki ring plain to the sea. They are characterised by frequent high rainfall events but , from time to time, periods of drought may occur. The park contains the headwaters for all the ring plain rivers and provides protection for water quality. Beyond the park, rivers are subject to a variety of influences affecting water quality and quantity. These include water abstractions and discharges from industry, community sewerage schemes, dairy sheds, piggeries, and pastoral land run-off.

12.3.5 Marine

(a) Physical

The marine substrate of this district ranges from mud to coarse gravels. There are gravels and cobbles around Cape Egmont and in the South Taranaki Bight, in the east and south are muds, in the southwest there is gravelly sand and in the west there is a mixture of sand and muds. Rocky platforms which have a high sand content are widest in the northern part of the district. Airedale Reef is about 500 m wide. At the southern margin of the district is the Farewell-Egmont Rise, which consists of sand with some muddy sand.



Volcanic boulders form a beach on the South Taranaki coast near Manaia.

The inshore marine environment is dominated by platforms strewn with volcanic boulders of lahar origin. These give way to sand in the south.

Three major ocean currents pass Cape Egmont, bringing plants and animals from cool and warm waters into the area. The result is an interesting and diverse assemblage of marine organisms.

(b) Hydrography

The predominant influence on the hydrography in the southern portion of the district is Cook Strait. Strong tidal currents and storm surges influence most of the coast, though the northern area is sheltered to some extent.

The maximum tidal range is 3 m. Inshore sea surface temperatures are 12-22ºC.

12.4 HISTORY

The coastal plains, apart from an area around Pihama and Oeo, were closely settled from the fourteenth century, with numerous lahar mounds providing ideal sites for pa. By the nineteenth century, the coastal forest had been cleared for about 5 km inland.[109]

The venerated Mount Taranaki/Egmont has numerous sacred sites that were the burial places of chiefs. Over 30 occupation sites have been recorded in the Kaitake Ranges, and even more on the lower slopes of the Pouakai Range, and the mountain itself. For the mountain, there is a saying, 'Ko Taranaki te Maunga', 'Taranaki the mountain', denoting unity and perfection.

The Mount Egmont Vesting Act 1978 provided for the symbolic return of the mountain previously purchased or confiscated from the Maori people (involving some 95% of the park) to the Taranaki Maori Trust Board in fee simple on behalf of the Maori tribes of Taranaki. It then provided for the gift of the mountain by the Trust Board back to the Crown for the purposes of a national park for the use and enjoyment of all the people of New Zealand.

There has been considerable debate over the years about the name of the mountain. For the time being at least, this debate was settled by the Minister of Lands in May 1986 when he declared that the mountain shall be officially referred to as 'Mount Taranaki or Mount Egmont'.

The Sugar Loaf Islands are of cultural significance to the local Ngati Te Whiti Hapu of Te Atiawa tribe. In the past Maori occupied the islands, with the exception of Pararaki Island.

European settlement of the district began with the arrival of six ships of immigrants in 1841. By 1851, New Plymouth township was thriving and European demands for more land concerned the Tangata Whenua. A dispute over land sales led to the first Taranaki Land War in 1860. In 1865, the government confiscated land between Pukearuhe and Nukumaru. The second Taranaki War began in 1864 and ended with the death of Reverend Whiteley at Pukearuhe redoubt in 1869.[50] The prophets Te Whiti and Tohu formed the passive resistance movement at Parihaka to oppose the alienation of their land. The loss by confiscation of Maori land in Taranaki was addressed in part through the Sim Commission Report in 1928. This Commission was established to inquire into Maori grievances resulting from the confiscation of land and to recommend appropriate compensation. Such issues are now being re-examined by the Waitangi Tribunal.

Parihaka was the centre of passive resistance for Maori opposing alienation of their lands.

Development began in earnest with about 44,500 ha of inland Taranaki given by the Crown to the provincial government. A new influx of settlers cleared the land, built roads and formed a network of towns. Dairying began in the 1870s, and received a great boost from refrigeration in the 1880s. Other industry such as timber milling was important around the turn of the century. Exploration for oil began in 1865, and by 1913 there were several wells serviced by a refinery at Moturoa.[50]

12.5 VALUES AND THREATS

12.5.1 Background

The district contains the widest range of ecosystems in the Conservancy. These range in character from alpine to coastal and marine, but the areas remaining do not reflect the original proportions of each type. Most importantly, lowland ecosystems have been reduced to a few, very small, fragmented and usually highly modified remnants. Indigenous vegetation on the terrestrial part of the coastal zone has gone, or remains as only a narrow ribbon, mostly invaded by weeds. Unless there is a concerted effort now, future generations will find almost nothing of what used to live in the lowland and coastal zones .

When Europeans arrived, a coastal strip about 5 km wide and some other places had already been cleared of forest. Bracken, harakeke and scrub covered these areas. All land within a radius of 9.6 km of the summit of Mount Taranaki/Egmont was reserved in 1881. Additions to the National Park continue, the largest being the Kaitake Ranges. Unreserved lands were almost all cleared of forest, logged or drained.

Cross Reference See Sec 12.4

12.5.2 Protected Natural Areas Programme

Egmont Ecological District was the first to be surveyed in New Zealand, after the PNAP had been trialled and firmly established. The report of this survey[4] identified 50 unprotected natural areas in the region which were of types not well-represented in existing reserves. These were mostly small and totalled just over 1900 ha. If all were formally protected, the total area protected would still be only a small fraction of the region, amounting to 1% of the coastal and semi-coastal zones and 2.5% of the lowland zone. By the end of 1994, 14 of the 50 areas were protected in part or in full through arrangements with landowners (e.g. protected private land agreements) or by acquisition.

See Sec 20.1

Egmont National Park

12.5.3 Ecosystem Diversity

Egmont National Park is by far the largest and most diverse natural area in the district. Its vegetation patterns have been described in detail elsewhere[11], but can be summarised as follows.

The cone of Mount Taranaki/Egmont is often viewed as a classic example of vegetation zonation; lowland and montane forest, sub-alpine shrubland, tussockland and herbfields forming concentric rings with increasing altitude. The widespread tall forest of low-altitude parts of the park is dominated by rimu, kamahi and rata. The montane forest is sometimes called 'goblin forest' because it contains low stature trees densely hung with filmy ferns, mosses, liverworts and lichens. From about 1100 m above sea level, dense sub-alpine scrub replaces forest, and this gives way progressively to red tussock grassland. Above 1600 m there is a general increase in bare ground, with sparse alpine herbs growing in natural 'rock gardens'.

In reality, the vegetation patterns are more complex. The vegetation at any given place is not only the product of climate but also of parent rock material, slope, aspect, drainage, and soils. Also significant is the impact of past and on-going disturbances

(e.g. eruptions, landslides, cyclones, and human factors such as logging and introduced animals).

As a result, the 'classic zonation' is often interrupted. For example, the lowland rimu-kamahi-rata forest is replaced by relatively low-stature forest of kamahi and terrestrial rata on the western slopes of the main cone. It occupies land devastated by debris flows less than 400 years ago. The north of the park has the mildest climate, and has tawa forest with some kohekohe, puriri, nikau and titoki. Where slopes are gentle or flat with poor drainage, there is swamp forest of kahikatea and swamp maire, or bogs with low scrub and reeds. The largest bog, Ahukawakawa, lies between the main cone and the Pouakai Range. It covers an area of approximately 101 ha and is situated at an altitude of 920m above sea level. Although within the altitudinal range of montane forest, its dominant plants are red tussock, sedges and sphagnum moss. In all the non-forested zones the broad patterns can be altered by local conditions such as degree of shelter, soil wetness, shade, or by recent disturbance, including human activity around tracks, buildings and ski areas.

The variety of native plants in the park is small compared with other New Zealand **mountains, especially in montane and alpine zones.**[14] This has been attributed to the relative youth and isolation of the mountain. Beeches, mountain toatoa, snow totara and pigmy pine are examples of nationally widespread mountain plants which are absent from the park. On the other hand, for several native species, Egmont National Park is the only North Island location. These include mountain ribbonwood and the alpine fern *Polystichum cystostegia.*

Cross Reference See Appendix 6

Seventy-six bird species (53 native and 23 introduced) regularly occur in the district. Because it is the only large forest tract, Egmont National Park is the district's only habitat for many of these birds[15]. The park has a good range of common forest birds including tomtit, rifleman, kereru, and bellbird. Species of note include North Island brown kiwi, fernbird, New Zealand falcon and blue duck. The forest gecko is in the park, and in 1994 brown skinks were found at about 900 m above sea level.

Surveys of invertebrates have been made in the park. Several species are known from here only, and it is the only North Island locality for several others. New Zealand's largest terrestrial amphipod ('hopper') is known only in the park, as is a distinctive form of *Powelliphanta* (giant land snail).

Modification to the forest canopy and understorey has been ongoing since early this century. Goat damage which is now much reduced following concerted hunting programmes has led to the recovery of many species which were formerly heavily browsed. The goat control operation in Egmont National Park began in 1925 and is now the longest running sustained vertebrate pest control operation in the world. Possums continue to impact on canopy species particularly rata, kamahi, totara and kaikawaka. Forest recovery following cyclonic events is believed to have been seriously impaired by possum browsing.[13] Possums are preventing the wood rose from flowering and producing seed and are browsing a rare shrub in the Ahukawakawa Swamp. Recent control programmes using 1080 poison have reduced possum impacts. Hares in the swamp and in alpine areas have a localised impact on many of the fleshy herbs. A small population of pigs is being eradicated in the Kaitake Range and the deer free status of the park is being rigorously maintained. Domestic stock are now largely prevented from entering the park, though fence repairs are an ongoing task.

Weeds are mostly restricted to the park edge and lower stream and river valleys.

Ginger is being controlled on the western edge of the Kaitake Range where dense clumps prevent natural forest regeneration. Gorse occurs in dense stands along some major streams but is likely to be replaced by native species in time. Old man's beard is not currently known in the park but is a constant threat to be monitored.

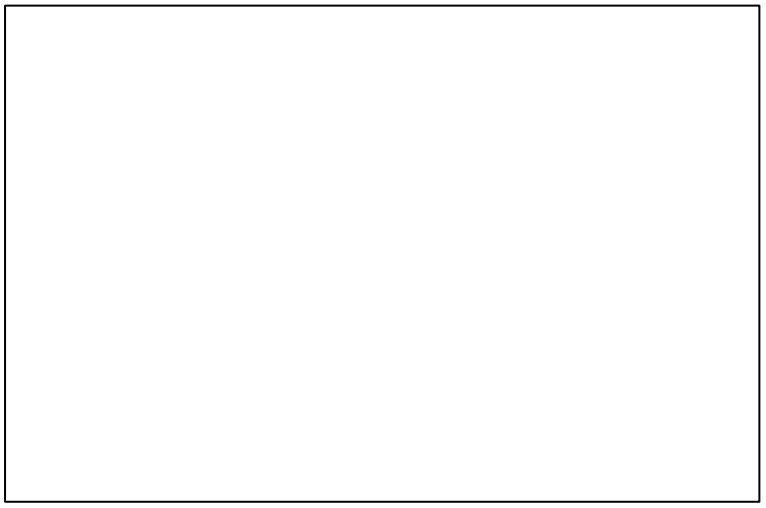
Other Natural Areas

12.5.4 Ecosystem Diversity

The dominance of the volcanic peaks makes it easy to overlook the district's scattered, mostly small, native forest remnants, very rare wetlands, and coastal herbfields on cliff tops and dunes. These remnants are priceless fragments of the diversity of ecosystems and species which were once typical of the lowlands around the volcanoes.

(a) Forest

Fragments of coastal and semi-coastal forest vary in composition, but usually contain at least some of the following trees: karaka, kohekohe, puriri, ngaio, mahoe, nikau and rewarewa, with pukatea in wetter sites and tawa in sheltered spots. Kawakawa, hangehange and tree ferns are typical understorey plants in these forests. Pohutukawa, karo and houpara are common in places, but are thought to have all been planted or to be self-establishing from planted specimens.



Northern rata trees near the Pouakai Ranges have been killed by repeated possum browsing.

Away from the coast, tawa is usually the dominant tree, with pukatea and sometimes swamp maire common in wet sites. Hinau, mahoe, rimu, kahikatea rewarewa, northern rata and kamahi are widespread and sometimes dominant, depending on factors such as wetness, soil fertility, altitude and history of disturbance. Climbers such as supplejack and kiekie can be abundant. Meeting of the Waters Scenic Reserve has good stands of podocarps, most notably matai. Hutu is abundant in a small area of swamp forest just outside the southern boundary of Egmont National Park. This area, known locally as Cold Creek Bush, has recently been purchased for addition to the park.

Possums have a significant impact on coastal and semi-coastal forest types in particular as many of the component species are highly preferred. Leaves, fruit and flowers are all eaten.

Small remnants have relatively long forest edges. This makes them more susceptible than larger remnants to damage by wind and domestic stock.

For the same reason, small remnants are also especially susceptible to weeds. Those in or near urban areas are particularly vulnerable to garden escapes, and to plants in dumped garden waste. Ginger and wandering willie are common examples. Old man's beard smothers the canopy of many small reserves and various woody weeds fill the understorey.

(b) Shrublands

Outside the national park, shrublands are uncommon and are mostly secondary growth following past clearing. Manuka is a common pioneer species, followed by karamu, tutu, mahoe, tree ferns and others. Some more stable shrub communities occur on wetlands and on the coast (see below).

(c) Wetlands

There are only a few traces of native vegetation on the former large (2900 ha) swamps in the Ngaere-Eltham area. Several plants recorded in these wetlands late last century have not been seen since in the district. Less than 2% of the district's wetlands remain outside the national park.[1,2]

Wetlands are rare and mostly small outside the national park. Harakeke, raupo, *Carex* sedges, toetoe and shrubs such as karamu, cabbage tree and *Coprosma tenuicaulis* occur in various combinations in different sites. Waipu Lagoons at Bell Block are the best example of swamps around dune lakes; as well as dense stands of flax with shrubs and tussock sedges, the lagoons have beds of bamboo spike sedge and other regionally rare wetland plants.

Twenty-six species of freshwater fish, both native and introduced species, have been recorded, including three which are considered threatened; brown mudfish, short-jawed and giant kokopu. Bittern and spotless crake are each known in only a few sites, but gold-stripe gecko is known from a number of wetlands and other places with small patches of harakeke.

(d) Estuaries

The Waitara, Waiwhakaiho and Waiongana Rivers have the district's only estuaries. Both sides of the Waitara River estuary were recommended for protection in 1986[4], but the northern side has been much modified since by weeds, inappropriate plantings, grazing and drainage. On the southern side, the Waitara River Scenic Reserve has salt marshes which are dominated by saltmarsh ribbonwood, jointed wire-rush, kapungawha and an estuarine tussock, *Carex litorosa.* It is a very significant natural area for the region, even though it is small, is subject to high levels of public use on one edge and has been partly altered by flood protection works.

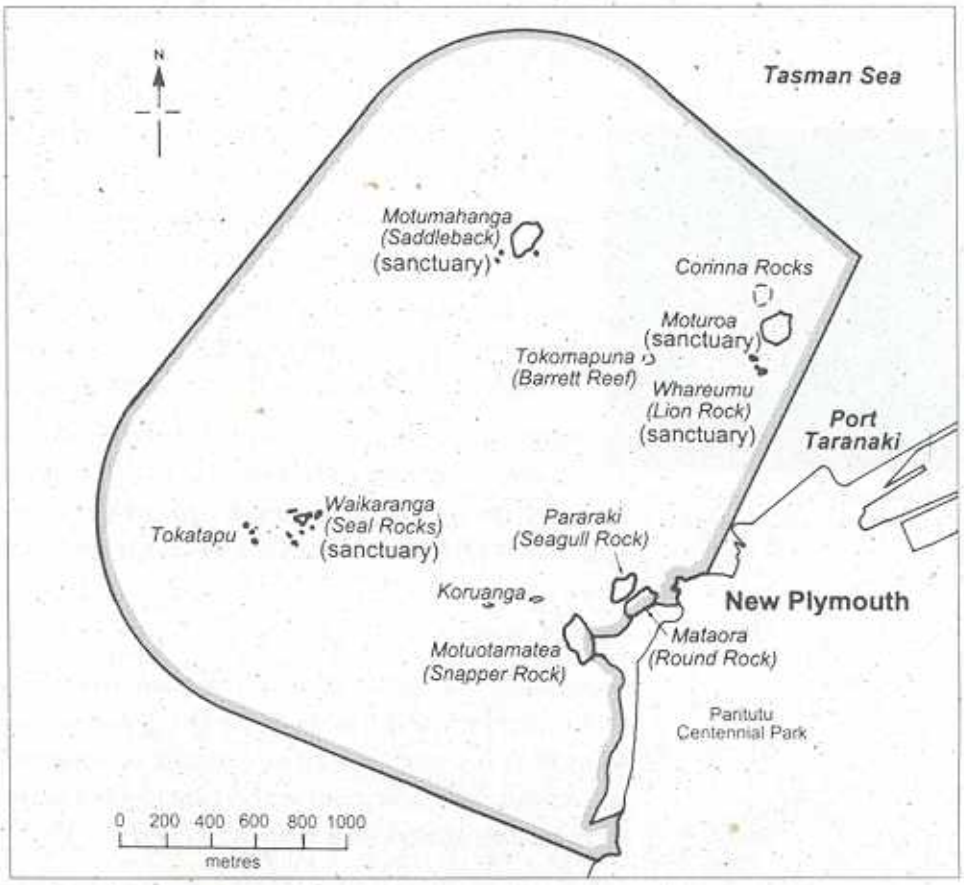
(e) Coastal cliffs, islands and dunes

Cross Reference
See Appendix 6

Some of the district's most important native plant communities are on coastal cliffs. As well as having several nationally threatened or rare species (see below), there are also plants for which this is their only North Island location, including the shrub *Hebe elliptica* var. *elliptica* and an everlasting daisy, *Anaphalis trinerve.* The vegetation is varied from site to site, depending on differences in factors such as soil, slope, aspect and site stability, history of fire and grazing. Many cliffs have harakeke (there is a curious absence of "mountain flax" or whaariki on the district's coast), toetoe, taupata, kawakawa, mahoe and koromiko, with karaka, karo and pohutukawa spreading from gardens and other plantings. Sedges (club sedge, *Carex* species, *Cyperus ustulatus*), jointed wire-rush, native grasses and ferns are locally common, or can dominate in the absence of harakeke or shrubs. Good examples are reserved at Maitahi Scientific Reserve , the Sugar Loaf Islands and Paritutu, and occur in formally unprotected places such as Waihi Beach (Hawera),

Ohawe Beach, and the coast near Pihama and Opunake. Weeds, including boxthorn, pampas and Chilean rhubarb, are invading many areas along the coast.

FIGURE 13: SUGAR LOAF ISLANDS MARINE PROTECTED AREA



The Sugar Loaf Islands Marine Protected Area deserves special mention as the Conservancy's only offshore islands.[102] The islands are identified on Figure 13 along with the boundary of the Marine Protected Area. Mammalian predators are absent from the two largest and outermost islands. The islands support 86 native plant species, including the threatened Cook's scurvy grass. The most common vegetation is taupata scrub in association with harakeke, and some emergent karo and cabbage trees. The 63 introduced plant species include several serious weeds. Boxthorn is being eradicated because it was replacing native species. Weeds are transported to the islands by the large number of starlings that roost there each evening.

The two outer Sugar Loaf Islands provide a predator-free environment for 19 species of sea birds. There are approximately 17,000 seabirds breeding on these islands annually, making it the most important locality for seabirds on the Conservancy coastline. These include the largest breeding population of diving petrel on the west coast of the North Island.

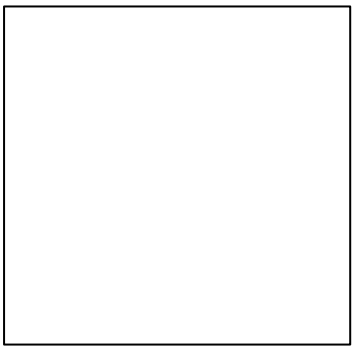
Other sea and coastal birds breeding on the islands include the grey-faced petrel, fluttering shearwater, red-billed gull, reef heron, sooty shearwater and white-fronted tern.

The islands are also the northernmost breeding colony of New Zealand fur seal.

The district's coastal herbfields on cliff ledges and cliff tops are another very significant habitat for native plants and animals. Where the mat-forming grass, *Zoysia minima*

is dominant, it is a habitat for minute herbs including forget-me-nots, buttercups, crassulas, moss grass and others. There are also prostrate shrubs such as sand coprosma, pinatoro, and patotara. New Zealand spurge is in several sites. Formal protection is lacking for most of these herbfields.[4]

Dunes are not common, and mostly very modified by weeds (especially marram grass), grazing and other factors. The most natural ones still have spinifex, pingao and club sedge, with sand coprosma and tauhinu shrubs. Harakeke and jointed wire-rush can be prominent in damp dune hollows. A reasonably large and accessible example is at Rahotu Beach.



This Notoreas *day-flying moth has caterpillars which feed only on pinatoro.*

Reef heron and waders such as variable oystercatcher and whimbrel occur on the shore in places. Gold-stripe gecko occurs in flax in scattered coastal localities.

An unnamed species of attractive day-flying moth, belonging to the genus *Notoreas,* is found only on coasts of South Taranaki and northwest Nelson. Its larvae feed on pinatoro, itself a local plant on this coast.

Farming activities, especially cattle grazing to the cliff edge, have reduced the extent of herbfields and continue to damage existing herbfields. The tight mats of plants are damaged by cattle through nutrients from their wastes and by hoof damage. These allow introduced grasses and weeds to establish.

12.5.5 Water

Ecological values of the Taranaki ring plain rivers are often high, particularly in the larger catchments such as the Stony, the Waiwhakaiho and the Waingongoro. The Stony River is protected in its natural state by Regional Rules. Native migrating fish species can easily penetrate the short distances of the ring plain rivers, except where there are fish barriers such as dams and weirs.

Removal of water from rivers for hydro-power generation, water supply, horticulture, agriculture, and industry significantly reduces river flows and damages aquatic ecosystems, fisheries, recreation, intrinsic and cultural values.

Discharges of nutrients from land run-off and point sources such as community sewage and dairy sheds can severely affect water quality, particularly during periods of low flow in summer when water temperatures are high.

Businesses which operate in the park (e.g. accommodation and recreation facilities) are required to obtain their own discharge permits. Waste water discharged from these activities can impact on park values. They therefore need to be carefully controlled to ensure compliance with the permit. In order to achieve better management of their waste water needs, it is appropriate for these businesses to take full responsibility for their permit requirements.

12.5.6 Marine

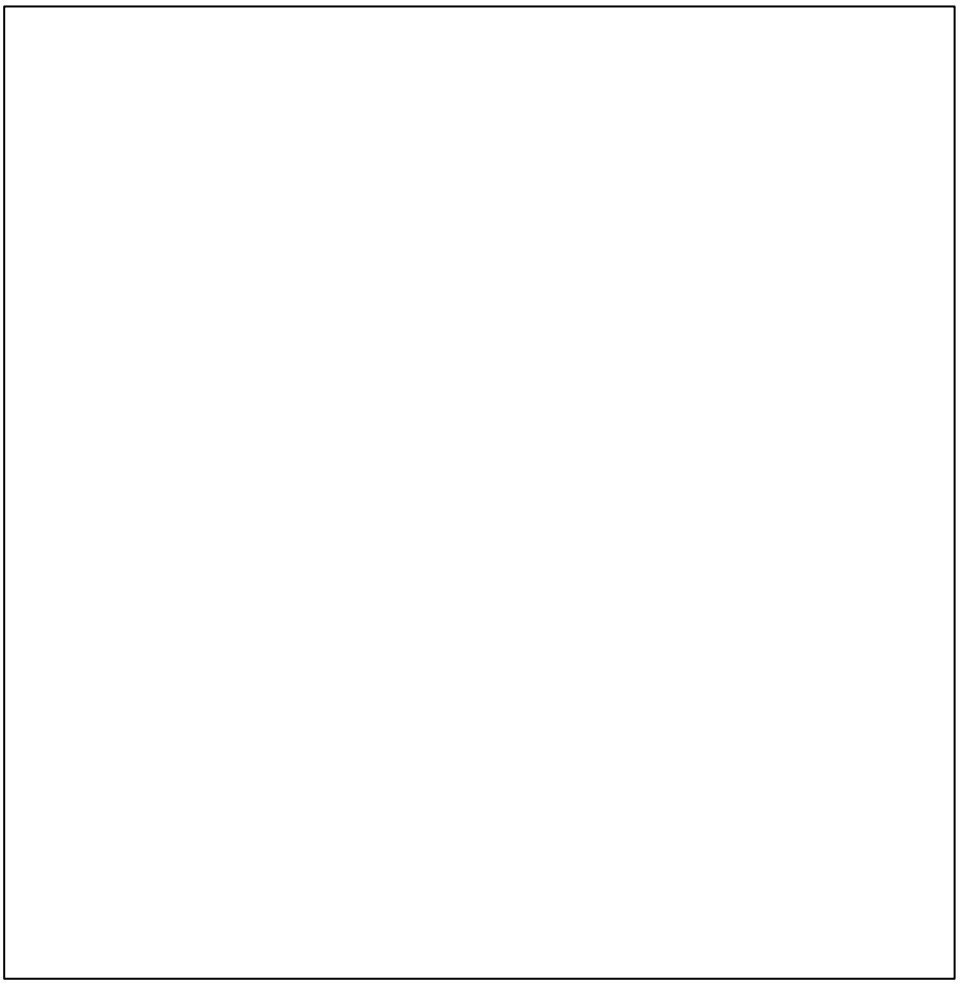
Sheltered under the rocks in the intertidal zone are red anemones, crabs and common limpets. Seaweeds are found toward the low tide mark, where the boulders are larger and more stable but are more common in the shallows.

The marine environment provides habitats for snapper, greeneyed dogfish, southern bluefin, albacore, skipjack tuna, and squid.

Cross Reference See Sec 21, 44.4.3(iv)

In the Sugar Loaf Islands Marine Protected Area, the marine habitats are protected under special legislation (Sugar Loaf Islands Marine Protected Area Act 1991). Because of the special issues surrounding management of the islands, along with their particular significance to the local community, a Conservation Management Plan is to be prepared for the islands.

There are no marine reserves adjacent to this ecological district.



Sugar Loaf Islands looking south from Moturoa Island.

The islands of Moturoa, Motumahanga (Saddleback Island), Waikaranga (Seal Rock Group), and Whareumu (Lion Rock) are sanctuaries where access is prohibited. In addition, two islands within the Marine Protected Area are wildlife refuges.

The off-shore island rock formation provides a semi-sheltered environment along a coastline that is generally very exposed. There is a diverse range of underwater habitats including sub-tidal caves, rock faces with crevices and overhangs, under water pinnacles, boulder fields and areas of sand which provide shelter for a variety of plant and animal species.

There are 79 species of fish and 65 species of encrusting sponges recorded within the Sugar Loaf Islands Marine Protected Area. The marine environment also provides habitats for starfish, sea anemones, crabs, crayfish, sea cucumbers, kina, mussels, paua, whelks and seaweed, including a variety of sub-tidal algae.

Offshore petroleum exploration creates a risk to the coastal environment from the accidental discharge of oil and the disposal of drilling muds and cuttings.

Cross Reference
See Sec 21

Certain methods of trawling over or near reef systems can cause damage to marine habitats.

12.5.7 Landscape

For visitors, and the majority of residents, the landscapes of Egmont district are dominated by the peak of Mt Taranaki/Egmont. As the subject of innumerable photographs and postcards, the mountain is the district to many people. When native vegetation covered the ring plain, the mountain would have been seen up river valleys or from across broad wetlands, framed by native trees, tree ferns, reed beds or other plants. Today the mountain has lost its natural context. People's views of it are usually framed by hedgerows, gardens or exotic trees. Photographers capture its image reflected in artificial lakes, such as Lake Mangamahoe near New Plymouth. The protection and restoration of forest remnants on the ring plain, especially riparian strips, and perhaps the re-establishment of a mountains-to-sea forest sequence would go some way to restoring the integrity of the former landscape.

Largely covered in pasture, the swarms of lahar mounds on the eastern and western parts of the ring plain are strong visual features, especially in the manner they repeat across the landscape. Much of their impact is lost when they are planted in trees. Another repeated pattern is presented by the numerous clear streams, flowing in shallow trenches over boulders or gravel as they radiate across the ring plain from their mountain sources. The large scale of both the lahar mounds and the stream patterns is best appreciated from the air.

Another important dimension to the district's natural landscapes is the coast. Although the pastures mostly extend to the cliff tops or the shore, there are still coastal landscapes which link sea and land, where human impacts are very close but are not obvious. Sea cliffs, boulder beaches, sand dunes, swards of harakeke or native shrubs, and even rare examples of coastal forest are important elements of the coastal landscapes. They could be enhanced by restoring native vegetation along more of the coast and removing visually obtrusive coastal weeds such as boxthorn, pampas and Chilean rhubarb. Consideration should be given also to screening or removing structures which intrude on coastal landscapes, including quarries and roads.

12.5.8 Plants at Risk

Egmont district has 16 species featuring in the national list of threatened and local plants. Of the various habitats described above, Egmont National Park and the coastal cliffs and dunes have the highest concentrations of them.

Egmont National Park has a large population of the endangered wood rose. Several sites for this plant are known in the park but all are affected by possum browsing. Possums, and to a lesser extent hares, are also severely impacting on a shrub endemic to Egmont National Park, *Melicytus drucei*, a relative of mahoe.[56a] It, and a shrub daisy, *Olearia capillaris*, grow on the flanks of the Pouakai Range around the Ahukawakawa Swamp.

The buttercup Ranunculus recens *on the Manaia coast.*

In 1995, a re- survey of areas of privately owned forest and wetlands close to Egmont National Park revealed the mistletoe *(Ileostylus micranthus)*, a rare native herb *(Gratiola nana)* and New Zealand's largest water milfoil (*Myriophyllum*

robustum). The native grass *Amphibromus fluitans* has a 'critical' status nationally, and has been recorded in wetlands near Bell Block and Opunake. It may now be extinct in the district.

The coastal cliff-top herbfields are the habitat for two tiny *Crassula* species. *Crassula manaia* is the more widespread, occurring in many South Taranaki coastal sites. *C. peduncularis* is known only from the Pihama coast in this district. A green hairless form of the small buttercup *Ranunculus recens*, is known only from the coast near Manaia. In similar locations there is an unnamed species of native carrot (*Oreomyrrhis*). These herbfields are subject to weed invasion and damage by stock. A few scattered coastal sites have small populations of NZ spurge. They appear to be at risk from stock trampling and smothering by weeds.

The Sugar Loaf Islands have the Conservancy's only population of Cook's scurvy grass. The islands are constantly being invaded by weeds, especially boxthorn, which threatens to smother this vulnerable plant.

A few coastal forest remnants are home to king fern. Habitat loss and stock browsing have resulted in a significant decline of this species in the district.

12.5.9 Wildlife at Risk

Cross Reference
See Appendix 6

Eighteen species of wildlife at risk have been recorded from the district. Many of these occur in Egmont National Park. Brown kiwi have been recorded in most forested parts of the park, but most commonly at North Egmont and near Holly Hut.

Twelve blue duck were released in streams on the north-eastern side of the park between 1989 and 1991. Records of released birds have come from Stony River in the west and Waiaua Stream in the south, and sightings of unmarked birds show that the species has established.

Other threatened species in the park are long-tailed bat, New Zealand falcon, and the giant land snail mentioned above.

Threatened native fish of particular significance in the district include the brown mudfish in remnant wetland areas. The tadpole shrimp, a freshwater crustacean, is an interesting occupant of temporary and standing wetlands.

Blue duck or whio have been reintroduced to suitable streams in Egmont National Park.

Threatened species around the coast include reef heron, variable oyster-catcher, Caspian tern and the occasional wrybill. The regionally threatened gold-striped gecko appears to be widespread in this district.

12.5.10 Historic Places

The Sugar Loaf Islands and reefs have a deep spiritual significance to Maori and were vital to their survival. They contain the burial places of the most important members of Ngati Te Whiti Hapu. More than eight archaeological sites and two urupa have been identified in the wider area of the Sugar Loaf Islands and associated reefs. There is more archaeological evidence of occupation on Mataora, Motumahanga, Motuotamatea and Moturoa Islands. A whaling lookout was established on Moturoa Island in the 1820s.

See Fig 22

The Egmont district was closely settled by Maori and many earthworks survive. There are 12 historic reserves administered by the Department, many of which are the sites of events or skirmishes during the Taranaki Land Wars. These sites make up one of the

most comprehensive groups of reserves with a common history in New Zealand. There are also significant Maori sites in Egmont National Park and on land of other status.

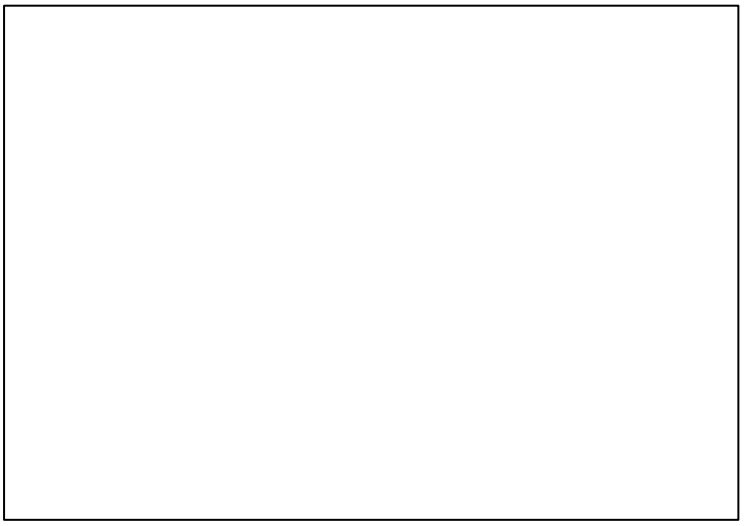
Of the 14 actively managed historic places of Maori origin in this district, half are under bush, and the others are in pasture and grazed. Over time, the archaeological features can be damaged or obscured by tree falls, erosion caused by stock and by people.

At some sites, such as Pukerangiora Pa Historic Reserve, some of the earthworks are outside the current reserve boundaries.

All of the European historic places administered by the Department in this district lie in Egmont National Park. The York Road Quarry and Boars Head Mine are associated with early mineral extraction. The North Egmont Camphouse and old Syme Hut are associated with early recreational use of the park. Old Syme Hut was removed from the park in 1997, as its major elements were damaged by heavy snow falls. The dismantled hut will be stored until a suitable future use can be found for it.

North Egmont Camphouse and Rahiri Cottage are among the few surviving historic buildings administered by the Department in the Egmont National Park. The Camphouse has a Category 1 registration from the Historic Places Trust. The condition of both the Camphouse and Rahiri Cottage has deteriorated in recent years, and their retention and restoration is seen as being linked to a viable use for each building.

The North Egmont Camphouse was originally part of the military barracks complex located on Marsland Hill during the 1860s Land Wars. In 1891 it was sledged up the mountain to its present location, where it has been associated with outdoor recreation for over 100 years .



Rahiri Cottage, built in 1929 as a toll-keepers house at the Egmont Road entrance to Egmont National Park.

Until recently, the Camphouse was run under a booking system as multipurpose accommodation, but because of the unsatisfactory condition of facilities such as ablutions and the kitchen, it was closed. A conservation plan has been completed which identifies restoration and upgrading measures for the building.

Rahiri Cottage was built in 1929 as a toll-keepers house at the entrance to the northern side of Egmont National Park. The exterior of the cottage was repaired and repainted in 1997 in its earliest known colours. The interior has yet to be upgraded.

There are 20 actively managed historic places in the district, and many others about which the Department needs to increase its knowledge.

12.5.11 Commercial (Non-Recreation) Activity

Forty sites administered by the Department in this district are occupied by commercial activities. These cover 100 ha, and comprise telecommunications sites, a museum, a hydro lake, settlement ponds for a gravel plant, a clocktower, small grassed areas

fenced off from adjoining reserves or national park, or grassed conservation areas. Nine are historic reserves (28.8ha) appropriately grazed to minimise the cost of maintaining the archaeological features. Where the areas have no natural or historic value, they will be identified for disposal or exchange.

Cross Reference
See Sec 20.4

This district has the greatest number of use applications including easements for the oil and gas industry pipeline network, and community, commercial and private access and water supply.

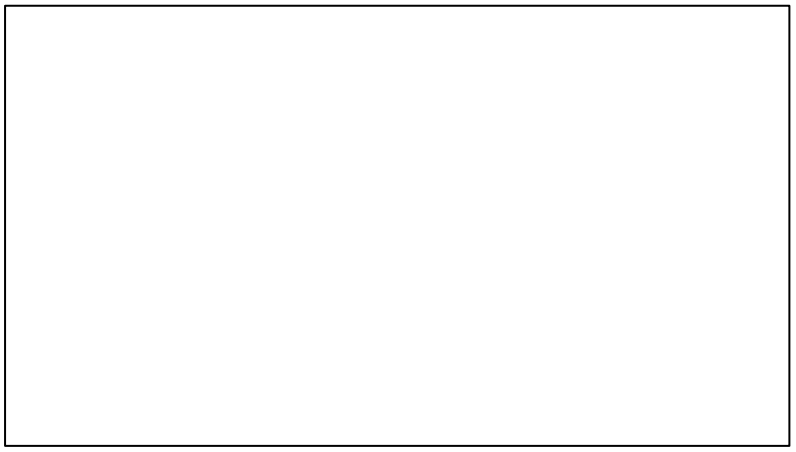
(a) Telecommunications

Mt Taranaki/Egmont is important to the telecommunication industry as the only site high enough to service the Taranaki Region and provide links from the central North Island to Wellington. With the introduction of radio telephones and television in the 1960s, four sites were set up in Egmont National Park (see Figure 14).

FIGURE 14: MAJOR TELECOMMUNICATION SITES: EGMONT NATIONAL PARK

SITE	LESSEE	TERM	ACTIVITY
Tahurangi, North Egmont	Broadcast Communications Ltd	15+15yrs to 2023	Television (3), Radio (10), Tolls, Data Transmission
Jacksons Lookout, East Egmont	Telecom Mobile Communications Ltd	33+33yrs to 2037	Cellular, Telepaging, Tolls, Radio Telephones
Carrington Road, West Egmont	Telecom (NZ)	33+33yrs to 2030	Radio Telephones, Telepaging, Tolls
Stratford Plateau East Egmont	Airways Corporation	33+33yrs to 2032	Radio Telephones, Seismic & other Data Transmission

These four sites impose significant visual impacts on the park, with the access road to the Broadcast Communications Ltd (BCL) site at North Egmont the most intrusive feature in an otherwise natural setting. All four sites were licensed under leases originally granted in the 1960s and 70s.



The telecommunications service road has physical and visual impacts on the park.

See Sec 34.10

Recent progress has seen the perpetually renewable BCL lease replaced by a finite term 30 year permit, and agreement from Telecom to replace current leases with shorter term permits is being sought. These new permits will also provide better protection for the natural values of the areas concerned.

With the current occupation rights, the impacts of these sites can be further reduced only by negotiation with existing lessees. The progressive relocation of facilities out of the park, and the reduction of physical and environmental impacts of facilities as new technology becomes available, will continue to be encouraged in discussion with the lessees.

These four sites provide adequate coverage for all foreseeable needs. Any new commercial applications that can justify location in the park will co-locate, as far as practicable, at one of the above sites. There is also scope to eventually reduce the three existing sites on the eastern flank of the park.

In addition to these major sites there are a number of antennae attached to buildings at the North Egmont Visitor Centre and Konini Lodge at Dawson Falls, and three individual radio telephone links. Minor uses such as these will continue to be permitted where they are not contrary to the provisions of the National Parks Act 1980 or the purposes for which the land is held. Future park management needs may also require a minor site on the Pouakai Range.

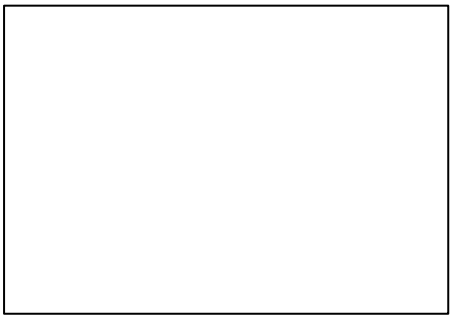
(b) Petroleum exploration and production

All of the oil and gas produced in New Zealand comes from in or adjacent to this district, from the McKee, Waihapa/Ngaere and Ngatoro oilfields and the Kapuni (onshore) and Maui (offshore) gas fields. Exploration continues here and offshore of the adjacent North Taranaki Ecological District.

This exploration and production has had limited impact on the natural and historic values, although the long term impact of the disposal of drill cuttings, drilling fluids and oily ballast waters into the marine environment remains unknown.

Cross Reference
See Sec 34.6

The geology of areas adjacent to Egmont National Park, the proximity of the Kapuni gasfield and the recently discovered Ngatoro oil field led to interest from oil companies in carrying out seismic surveys in the park. The only formal application, in 1989, was declined by the Minister of Conservation.



Off-shore drilling has the potential to impact on the environment.

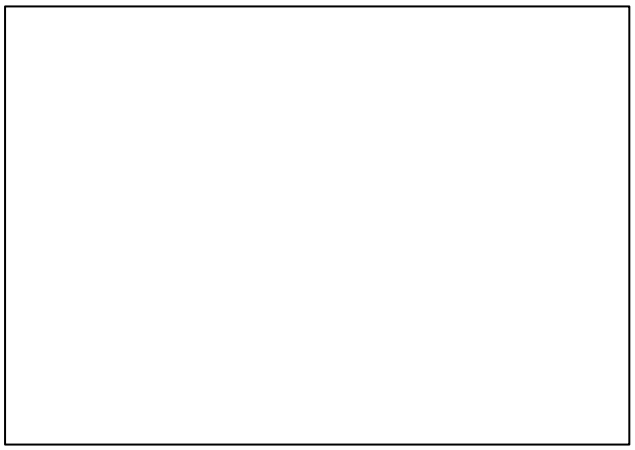
The recently approved Minerals Programme for Petroleum now excludes Egmont National Park from future petroleum prospecting, exploration and mining activity. This exclusion applies where the land (surface and subsurface) is above sea level. It does not preclude directional drilling beneath the park below sea level. The park is unavailable for inclusion in any petroleum permit because of its "fundamental sources of tribal identity and mana for the Iwi of Taranaki. The Iwi of Taranaki consider Mt Taranaki/Egmont and its associated ranges to be a tipuna (ancestor). The area is regarded as a Wahi Tapu" (Minerals Programme for Petroleum).

The Sugar Loaf Islands Marine Protected Area is also unavailable for inclusion in any petroleum permit by virtue of the Sugar Loaf Islands Marine Protected Area Act 1991. An existing petroleum prospecting licence (PPL 38437) will however continue in force in accordance with the Petroleum Act 1937. The holder of this licence is required, under Section 11(2) of this Act, to obtain the approval of the Minister of Conservation prior to commencing any programme of work if the petroleum mining exclusion area or the Sugar Loaf Islands Marine Protected Area are likely to be affected.

12.5.12 Recreation

Recreation use in the district largely focuses on the range of opportunities found in Egmont National Park. The park receives more than 360,000 visitors per annum based on 1992 figures, with the majority of public use at the three major roadends. Picnicking, viewing scenery, short walks and visits to the two park interpretation centres are popular. Schools and other groups use the park for outdoor education.

The Department provides accommodation for these groups at Dawson Falls and North Egmont. During winter, the Manganui Skifield and roadends are busy on fine days following a heavy snowfall. The Department can cater for the majority of park visitors by providing high quality facilities at roadends.



New Syme Hut, Egmont National Park, built in 1988.

The main backcountry activities in the park are tramping and climbing. The Department maintains nine public huts and over 140 km of formed tracks which require a high maintenance and servicing commitment.

The Around the Mountain Circuit is becoming more popular as a multi-day tramping opportunity, especially with overseas visitors. Use is expected to gradually increase and this will require improvements to sections of track to provide a more consistent experience and control visitor impacts. Major upgrading of huts and tracks on the circuit will be required if use increases significantly and funding is available.

Mountain and rock climbing are also major activities in the park. Winter conditions provide opportunities for technical snow and ice climbing. A number of mountain features provide opportunities for rock climbing.

Cross Reference
See Sec 39.2

Climbing to the summit of Mt Taranaki/Egmont is popular with visitors. High use has led to a need to monitor and control visitor impacts on the popular North Summit Route and to ensure that inexperienced people are aware of alpine hazards.

See Sec 37.4

Mount Taranaki/Egmont is used for hang-gliding and paragliding. Tangata Whenua are concerned about use of the summit, an area of special cultural significance, as a take-off point. The Department, while generally allowing the use of non-motorised, foot-launched aircraft in the park, will consult Tangata Whenua over the extent of the summit area, and whether restrictions should be imposed on the use of this area by such craft. Use of other areas in the park may also need to be restricted if there are effects on natural, historic or cultural values.

See Secs 35.2b and 37.4

To acknowledge the significance of the mountain, helicopter use in the park will generally be restricted to essential management requirements and search and rescue purposes.

See Sec 35.2(c)

Manganui Skifield is the only suitable skifield area in the park. Other skifields are considered impracticable because of poor access, variable snow cover, difficult topography. Development of further ski facilities would also have an adverse effect on the park's natural character. Expansion of Manganui skifield beyond the existing skifield management area and new skifield development in other parts of the park will therefore not be permitted. Management of Manganui Skifield will be monitored to minimise effects on natural values.

See Sec 39.5

Two tourist lodges, Dawson Falls and the Stratford Mountain House, operating under leases administered by the Department, offer accommodation and meals. The leases are perpetually renewable.

Guiding concessions have been issued for guided walks, climbing and mountaincraft instruction.

Three locked alpine club lodges, which operate under a licence or permit administered by the Department, are generally not available for use by the public. The operation of

these lodges will be allowed to continue under a licence or permit arrangement, but no new locked club lodges will be permitted in the park.

Recreation opportunities outside the park include six walkways and visitor facilities (picnic areas and short walks) in a number of scenic and other reserves.

Coastal recreation activities include swimming, fishing, surfing and boating. Diving, fishing and marine mammal watching occur in the Sugar Loaf Islands Marine Protected Area.

12.5.13 Public Awareness

Because most of the district between the Egmont National Park and the coast is intensively farmed, few natural areas remain and natural resources are heavily used. Public awareness efforts will target the need to improve water quality, particularly by riparian protection along the many rivers and retain existing wetlands. The Department will work closely with district and regional councils and Tangata Whenua to promote sustainable resource use.

Cross Reference
See Sec 40.1.3

Public awareness in the park will centre on improving displays at Dawson Falls and the North Egmont Visitor Centre, establishing entrance signs to the park in consultation with local Tangata Whenua and using urban opportunities to promote the values of the park. An increased public acceptance will be sought for cost effective control methods for possums in the park and elsewhere.

The Sugar Loaf Islands Marine Protected Area and increased public support for marine protection will be a focus for interpretation.

12.5.14 Land Management

See Sec 20.4

Some of the land administered by the Department in urban areas, particularly in New Plymouth, are likely to have little natural or historic value. Their future will be assessed and options explored such as disposal, vesting or exchange.

A number of local purpose reserves (e.g. Lepperton, Huirangi and Warea Cemetery Reserves) and recreation reserves (e.g. Mangamahoe and Huirangi,) are administered by the Department. There is scope for these reserves to be administered by local authorities or other agencies to better reflect local community interest.

Land adjoining Egmont National Park acquired through purchase, gift or exchange, will be considered for addition to the park.

Two unformed legal roads known as Forest Road and Surrey Hill Road adjoin or pass through Egmont National Park. These unformed roads have high natural values consistent with those of the park, but have no formal protection. They do not function as roads and their addition to the park (using Section 323 of the Local Government Act 1974) has merit. This action is likely to be costly and time consuming.

12.6 CHECKLIST OF KEY ISSUES

(a) Egmont National Park

- Addition of unformed legal roads and other adjacent land with high natural, historic or recreation values to the park.

- Recognition of the spiritual significance of Mt Taranaki/Egmont to Tangata Whenua and their involvement in management.
- The need for consultation with Tangata Whenua about tikanga and cultural values.
- Impacts of the high level of research activity and collection of specimens.
- The potential to introduce North Island robin.
- Continued release and monitoring of blue duck.
- Lack of knowledge of both bat species.
- Impact of goats and possums.
- Threat of the establishment of further wild animals, such as deer and pigs.
- Impact of weeds, especially wild ginger.
- Control of skifield development.
- Upgrade of visitor centre displays and interpretation.
- Visitor safety.
- Aircraft use.
- Improvement to facilities at road ends(including Tangata Whenua input).
- Impacts of telecommunication facilities.
- Waste water management.
- Involvement of the private sector in providing visitor services.

(b) Sugar Loaf Islands Marine Protected Area

- Petroleum exploration/production, and the risk of oil spills.
- Impact of weeds, especially boxthorn.
- Maintenance of predator free status of islands.
- Recognition of spiritual significance to Tangata Whenua.
- The need to manage marine habitats.
- Improving interpretation and public support.
- Monitoring of marine mammal watching operations.

(c) Other parts of Egmont District

- The need for protection of remnants of native vegetation, including forests, wetlands and coastal herbfields.
- The need to restore natural areas of high public profile.
- Reserve vestings or appointments to control and manage.
- The need for protection of coastal and marine values.
- Depletion of sand on beaches at New Plymouth, following coastal works.
- Consultation with Tangata Whenua on coastal management.
- Acknowledgement of Maori uses of coastal resources.

- Effects of dams and weirs on the movement of native fish.
- Import and export of species from New Plymouth port.
- Impact of weeds, especially old man's beard.
- Long term deterioration of historic earthworks.
- Petroleum exploration/production, and the risk of oil spills.
- Competitive demands for water resources.
- Lowered water quality in streams and sea, through inappropriate land use, septic tank seepages and discharges.
- Effects on aquatic ecosystems of low flows in Taranaki ring plain rivers.
- Effects of nutrient pollution from land run-off and point discharges.
- Need to improve public support for riparian protection.

12.7 MANAGEMENT OBJECTIVES

Egmont National Park

12.7.1 Land Management

Legal Protection of Land

(i) To investigate the resumption of unformed legal roads which pass through and adjoin the park, where it is considered desirable to add these roads to the park.

(ii) To consider additions to Egmont National Park following land acquisitions where the land is either adjacent or close to the park, and where natural values justify this level of protection.

12.7.2 Kaupapa Atawhai

(i) To ensure that the spiritual significance of Mt Taranaki/Egmont to Taranaki Tangata Whenua is better understood by:

- regular consultation with Taranaki Tangata Whenua on cultural matters
- seeking opportunities for dialogue when matters of cultural importance arise, particularly on matters concerning "use" in the park
- ensuring that Tangata Whenua input is sought and responded to when the Egmont National Park Managment Plan is reviewed
- seeking Tangata Whenua response to recreational activities which may conflict with their views
- ensuring that future management of telecommunications in the park will take into account the cultural values and kaitiaki role of the Tangata Whenua

- recognising customary use of water, plant life and cultural materials where this is consistent with any management plan for the park.

(ii) The Taranaki Maori Trust Board will be consulted on any proposal which is likely to impact on the special significance of Mt Taranaki/Egmont to Tangata Whenua. Individual Taranaki Iwi will be consulted as appropriate. (The Mount Egmont Vesting Act 1978 already requires that the Taranaki Maori Trust Board must be consulted in respect of any proposal to exclude parts of land comprising the mountain from Egmont National Park).

12.7.3 Native Species Protection

(i) To facilitate research and associated collection of specimens from Egmont National Park through:

- the issue of permits with conditions that safeguard against detrimental impact
- logistical support.

(ii) To continue the establishment of a viable population of blue duck.

(iii) To investigate the introduction of a viable population of North Island robin.

(iv) To assess the status of both short and long-tailed bats.

(v) To control where necessary and practiable, pests and predators of native species in accordance with national or local species recovery plans.

12.7.4 Threats

Animals

(i) To achieve a low level of goat impact within the park while pursuing methods to eradicate goats through:

- ongoing intensive hunting programmes which prevent expansion of the current goat population and eventually eliminate goats
- advocating through district plans the importance of restrictions on goat farming near the park and the establishment of a goat-free buffer zone
- investigating alternative control methods and strategies which are available through involvement in research programmes and trials
- public promotion of the benefits of control.

Cross Reference
See Sec 12.7.8

(ii) To maintain a low possum impact on ecological values within the park through:

- initial knockdown of the possum population using aerial poisoning and ground trapping/poisoning techniques
- monitoring of key 'at risk' plants and animals to determine frequency and extent of follow-up control required, especially the endemic shrub *Melicytus drucei*

- follow-up control and monitoring
- liaison and co-operation with landowners and Taranaki Regional Council possum control programmes around the park boundary along with maintenance, control and monitoring operations on the park boundary
- public promotion of the benefits of control and the methods used
- investigating alternative control methods and strategies using involvement in research programmes and trials.

(iii) To prevent the establishment of deer, pigs and other wild animals not currently established in the park through:

- enforcement of deer farming regulations and provisions of the Wild Animal Control Act
- publicity to alert the public to the risk posed by new introductions and the unlawfulness of such actions
- prompt and thorough response to reported liberations.

Weeds

(iv) To control, and where possible, eradicate invasive weeds (especially woody forest weeds and vines) through:

- maintaining weed control, especially of ginger in the Kaitake Ranges
- **advocating weed control to local authorities and landowners for weeds which are known to be threats of low land forests (e.g. old man's beard).**

12.7.5 Historic Places

(i) To manage historic sites of known significance such as the Camphouse and Rahiri Cottage according to the Conservancy Historic Resources Strategy.

(ii) To review the future use of the Camphouse as an accommodation facility and implement recommendations contained in the conservation plan for the building.

(iii) To investigate the future use of old Syme Hut as a heritage display or other appropiate use

12.7.6 Recreation

(i) To allow use of non-motorised, foot-launched aircraft in the park where this does not conflict with natural, historic or cultural values.

(ii) To generally restrict helicopter use in the park to essential management requirements and search and rescue purposes.

(iii) To control development of skiing facilities in the park by:

- monitoring management of Manganui Skifield to minimise impacts on natural values
- liaising closely with the Stratford Mountain Club to ensure appropriate management of the skifield area and supporting facilities

- requiring any proposals to upgrade or develop additional skiing facilities within the Manganui Skifield Management Area to be supported by a detailed Assessment of Effects on the Environment and firm evidence of the demand for any new facilities
- restricting the development of skiing facilities in the park to the existing Manganui Skifield Management Area.

(iv) To require all businesses that operate in the park to obtain their own discharge permits where this is a requirement of their operation.

(v) To prohibit additional club lodges in Egmont National Park.

(vi) To protect and enhance recreation opportunities in Egmont National Park by:

- providing high quality, well-maintained visitor facilities and interpretation at the major park roadends (North Egmont, East Egmont and Dawson Falls)
- maintaining huts, tracks and routes to a standard consistent with their classification and use
- improving sub-standard sections of track on the Around the Mountain Circuit
- monitoring and, if necessary, controlling visitor impacts on the North Summit Route
- providing up-to-date multilingual information at suitable locations to ensure visitors to the park are made aware of potential alpine hazards.

Cross Reference
See Sec 39.2.3(iv)

(vii) To monitor visitor use and impacts in the park. Where visitor use and impacts on natural, historic or recreation values is likely to exceed an acceptable level, the Department will promote recreational use in alternative areas, including Whanganui National Park and the proposed North Taranaki Conservation Park.

(viii) To allow recreation concessions where these are not contrary to the provisions of the National Parks Act 1980 or the purposes for which the land is held.

12.7.7 Commercial (Non-Recreation) Activity

(i) Future management of all telecommunication sites will aim to minimise their effect on natural, historic and recreation values within the park through:

- ensuring that the stabilisation programme for the Broadcast Communications Limited Tahurangi access road is completed
- where practicable, requiring additions to current sites to use existing buildings, masts and antennae already installed, or for additions to be of a similar scale to that which already exists
- assessing other applications for additions and modifications to determine their environmental and cultural effects, and permitting only those judged to have minimal effect and are not contrary to the

provisions of the National Parks Act 1980 or the purpose for which the land is held.

(ii) Where possible, outdated telecommunication leases will be replaced with new concession agreements for shorter fixed terms. When these agreements expire, the need for continued occupation will be reviewed. Any vacated sites will be rehabilitated.

(iii) Where practicable, co-location of telecommunication facilities will be pursued.

12.7.8 Advocacy

Cross Reference See Sec 12.7.4(i)

(i) Advocate controls in district plans to ensure that impacts of development adjacent to the park are minimised.

12.7.9 Public Awareness

(i) To utilize public awareness opportunities at road ends within the park to explain the natural, historic and recreation values.

(ii) To maintain up to date interpretive displays and information at visitor centres and information outlets.

12.7.10 Management Plan

(i) To manage Egmont National Park in accordance with the Egmont National Park Management Plan 1986, and subsequent reviews. Detailed management objectives and policies are contained within the management plan.

Sugar Loaf Islands Marine Protected Area

12.7.11 Kaupapa Atawhai

(i) Consult with Tangata Whenua over any proposed mangement actions which may affect historic places on the islands.

12.7.12 Commercial (Non Recreation) Use

(i) To consider and report to the Minister of Conservation on any application for a petroleum prospecting programme within PPL 38437, if the petroleum mining exclusion area or the Sugar Loaf Islands Marine Protected Area are likely to be affected by any petroleum prospecting.

See Sec 12.5.11(b)

12.7.13 Native Species Protection

(i) To maintain the predator-free status of the two largest islands in the Sugar Loaf group through:

- restrictions on island visits. (A permit is required under Section 7(4) of the Sugar Loaf Islands Marine Protected Area Act 1991 to enter these islands)

- regular island monitoring to detect introduced species
- predator contingency planning.

(ii) To monitor the impacts of marine mammal watch operations.

(iii) To protect the marine habitats and island sanctuaries within the Sugar Loaf Island Marine Protected Area in their natural state through:

- implementation of the Conservation Management Plan for the marine protected area which will ensure the protection of the habitats and historic places
- liaison with Ministry of Fisheries, Taranaki Regional Council and New Plymouth District Council to seek integrated management of the natural and historic values of the Sugar Loaf Islands and surrounding area in planning documents
- recognising the kaitiaki duty of the Tangata Whenua
- interpretation of the area to increase public understanding, appreciation of and support for marine protection
- monitoring marine mammals and other wildlife and managing public use impacts upon these species.

12.7.14 Threats

(i) To control, and where possible, eradicate invasive weeds, especially boxthorn.

(ii) To prevent the establishment of any non-native animal species not already present on the islands.

Other Parts of Egmont District

12.7.15 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the Egmont District, particularly remnant areas of indigenous forest on the ring plain as identified in the PNAP and other natural resource inventories, primarily through:

- working with landowners to achieve legal and physical protection of 50 areas recommended for protection in the Egmont PNAP
- advocating the protection of natural areas in regional and district plans and on resource consent applications
- increasing public awareness and support for protection of the areas identified through the PNAP.

Disposal and Exchange

Cross Reference
See Sec 20.4

(ii) To assess future options, including disposal, for urban land the Department administers.

Management by Other Agencies

Cross Reference
See Sec 20.5

(iii) To liaise with local authorities and other administering agencies (including Iwi authorities) over the future mangement of local purpose and recreation reserves.

12.7.16 Marine

(i) To rescue and rehabilitate marine mammals and birds as part of the Taranaki Regional Oil Spill Contingency Plan.

(ii) To advocate the protection of coastal and marine values, through the statutory consent process, where these values are affected by:

- the disposal of harbour dredgings
- developments in Port Taranaki
- works which alter the natural flow of sediment
- activities which limit the amount of habitat available for marine species.

(iii) To advocate the protection of areas with important natural, historic or recreation values in the coastal environment of the district, as identified in Appendix 8, and any further areas identified in the future.

(iv) To protect as marine reserves, representative examples of marine ecosystems adjacent to this district. Where there are unique features under threat, priority will be given to their protection.

12.7.17 Kaupapa Atawhai

(i) To encourage Tangata Whenua involvement in revegetation programmes by:

- promoting models on hapu reserves under the Tu Kakariki and Whakaruruhau programmes
- keeping Tangata Whenua informed of local, regional and national resources that are available for their sustainable use.

12.7.18 Landscape

(i) To promote landscape protection measures in plans which enhance the national significance of Mt Taranaki/Egmont by:

- encouraging the use of indigenous plants for landscape restoration and enhancement programmes in the district
- encouraging the protection of important views of the mountain, particularly from main arterial routes within the district
- advocating policies in regional and district council planning documents which protect and enhance the landscape character of the Taranaki ring plain.

12.7.19 Native Species Protection

(i) To identify and promote the protection of all wetlands and waterways of significance to native fish and birds within the Egmont District. Such areas will be prioritised and protection of their values/life-supporting capacities sought through statutory and non statutory processes.

(ii) To manage and protect significant coastal herbfields particularly those at Sutherland, Normanby and Puketapu Roads, and others with a concentration of threatened plants, through:

- working with landowners to achieve legal and physical protection of identified sites
- statutory advocacy to promote protection for such areas in regional and district plans
- monitoring and research to determine threats and remedial actions
- improving public appreciation of such sites using organised visits and written information.

Cross Reference
See Sec 12.7.27(i)

See Sec 22.1

(iii) To control, where necessary and practicable, animal threats and predators of native species in accordance with national or local species recovery programmes.

(iv) To monitor the movement of protected species via Port Taranaki through liaising with other border protection agencies, including New Zealand Customs and Ministry of Fisheries.

12.7.20 Threats

(i) To control, and where possible, eradicate invasive weeds (especially woody forest weeds and vines) in natural areas through:

- maintaining weed control, especially of old man's beard in urban forest remnants, and other priority invasive weeds in key protected areas administered by the Department
- advocating weed control to local authorities and land owners for weeds which are known to be threats to lowland forests.

(ii) To prevent the establishment of deer, pigs and other wild animals not currently established, through:

- enforcement of deer farming regulations and provisions of the Wild Animal Control Act
- publicity on the risk posed by new introductions and the unlawfulness of such actions
- prompt and thorough response to reported liberations.

(iii) To control goat and possum populations in areas of high natural and historic value through sustained control operations.

(iv) To eradicate populations of goat, possum, deer and other animal threats in areas where high natural and historic values are at risk and where situations exist which would prevent re-invasion.

12.7.21 Revegetation

(i) To improve the naturalness of modified areas administered by the Department and other agencies in and around New Plymouth and other high profile locations through:

- revegetation programmes utilising species appropriate to the management objectives of each site
- promotion of the better and wider use of native plants
- advice and support to other agencies with similar objectives.

12.7.22 Historic Places

(i) To seek a close relationship with Tangata Whenua in the management and understanding of historic places administered by the Department and to encourage greater involvement by Tangata Whenua in management.

(ii) To research the rates and processes of the physical deterioration of earthworks in order to enable better management.

(iii) To gain legal protection for features that are only partially within existing reserve boundaries, such as at Pukerangiora Pa Historic Reserve.

(iv) To manage historic sites of known significance such as the Te Koru Pa Historic Reserve according to the Conservancy Historic Resources Strategy.

12.7.23 Recreation

(i) To protect and enhance recreation opportunities in the district by:

- providing high quality, well-maintained visitor facilities and information in suitable reserves near urban areas (e.g. Meeting of the Waters and Everett Park Scenic Reserves)
- maintaining and promoting use of the Stony River Walkway
- advocating provision for improved public access to the coast and along rivers.

12.7.24 Freshwater

(i) To seek river flows which will safeguard the life supporting capacity of aquatic ecosystems of all Taranaki ring plain rivers.

(ii) To seek improved riparian and land management of Taranaki ring plain rivers to enhance water quality and to improve habitat.

(iii) To promote the removal of unused dam or weir structures or the provision of fish passes on all such structures.

(iv) To seek a reduction in the number and impact of point sources of pollution and to seek improvements in the quality of remaining discharges.

(v) To seek Tangata Whenua input on issues of cultural concern.

12.7.25 Commercial (Non-Recreation) Activity

(i) To ensure that any proposed prospecting, exploration or mining activity on land administered by the Department is properly assessed to enable any potential adverse effects on natural, historic, cultural or recreation values to be avoided, remedied or mitigated and to ensure adequate compensation.

(ii) Tangata Whenua will be consulted on any proposed prospecting, exploration or mining activity to be undertaken on land administered by the Department and their views incorporated in any Departmental report or recommendation on the proposal.

12.7.26 Public Awareness

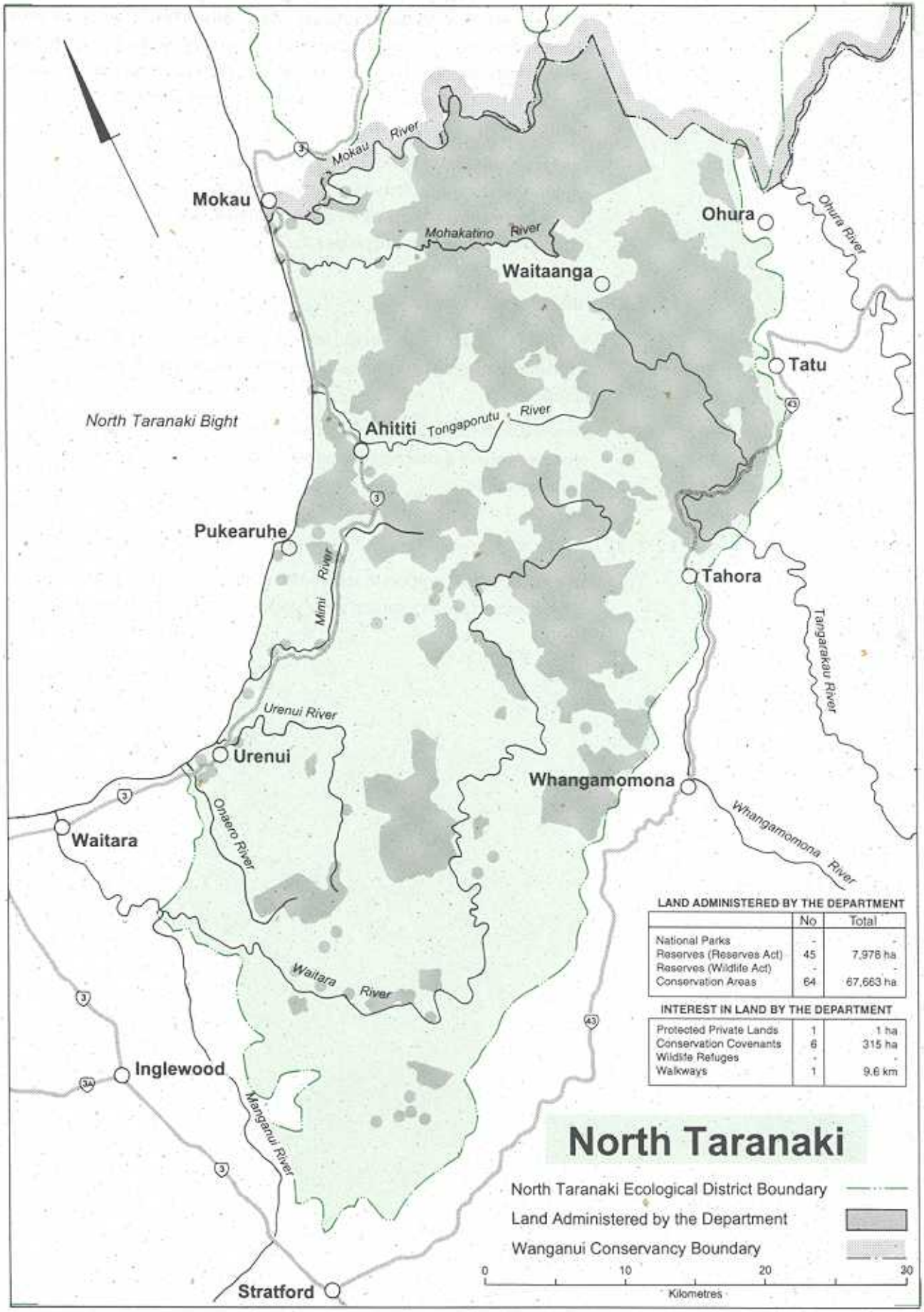
(i) To raise public awareness of the importance of protecting the few remnants of native vegetation, including forests, wetlands and coastal herbfields.

(ii) To work with the community, including land owners and managers to promote greater awareness of and support for effective riparian management.

12.7.27 Advocacy

(i) To provide active support to territorial authorities for the implementation of measures to protect natural areas under the Resource Management Act 1991.

FIGURE 15: NORTH TARANAKI ECOLOGICAL DISTRICT



13 North Taranaki Ecological District

13.1 INTRODUCTION

The main landforms of North Taranaki Ecological District are steeply dissected sedimentary hill country and a narrow coastal strip of uplifted marine terraces. Rivers run chiefly from east to west, and have estuaries at the coast. The vegetation feature which most distinguishes this district from neighbouring districts is the dominance of hard beech in places with shallow or low fertility soils. A number of native plants reach their southern natural limits in the district.

North Taranaki Ecological District comprises 257,500 ha, of which 217,500ha lie in Wanganui Conservancy (the northern portion being in Waikato Conservancy). The district is shown in Fig 15, along with a description of the land administered by the Department.

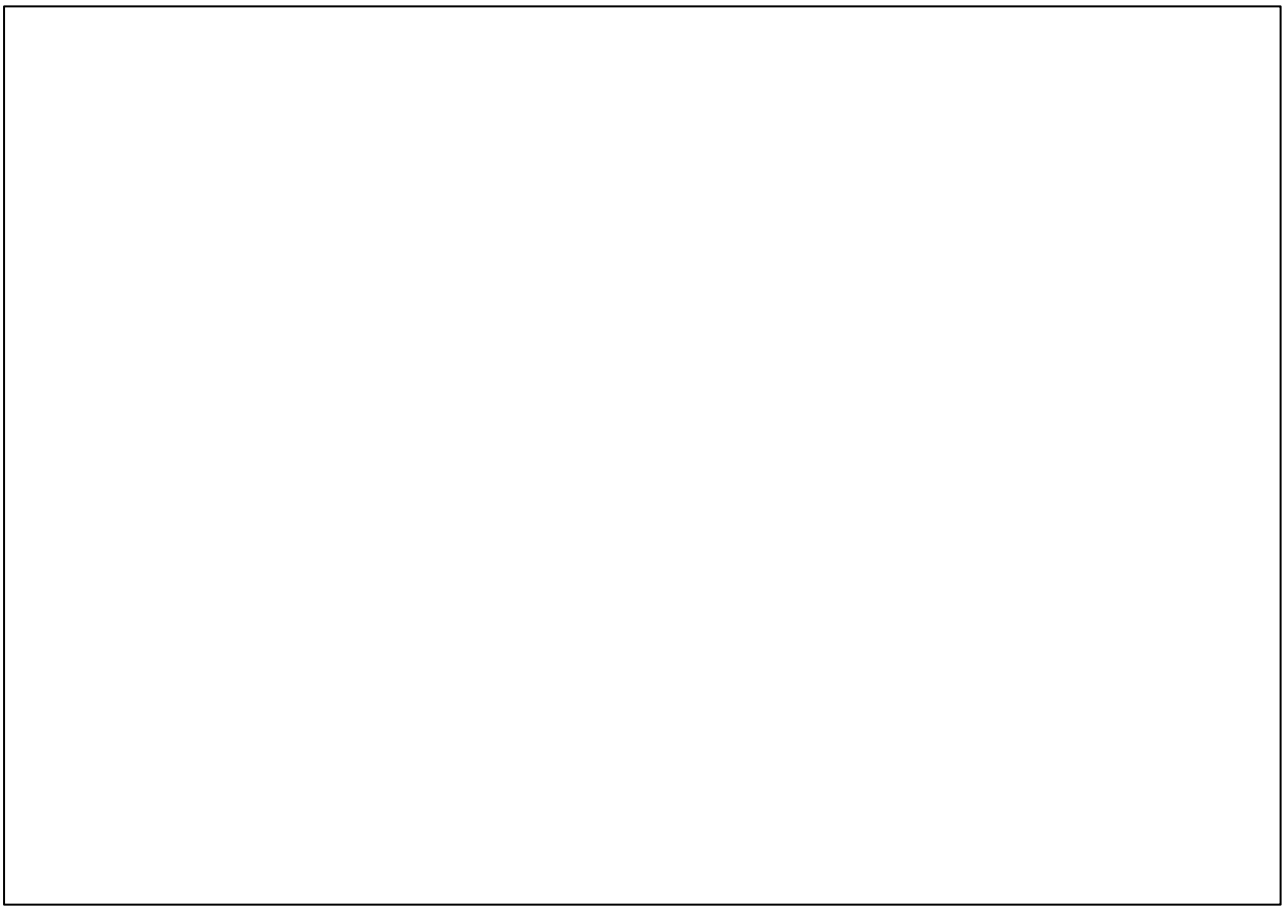
13.2 VISION

The large but often disconnected areas of protected indigenous forest are managed as a single 'Park'. This brings coherence to all aspects of management, including land status, recreational development, animal and weed control and interpretation, and an enhanced image of the worth of the area to the local community. The best areas of privately owned indigenous forest are covenanted for protection. An enhanced range of native plant and animal species is present. Animal and weed threats are controlled so the natural areas are protected. A portion of the coastline and marine environment is protected in marine reserves with strong community support. Water quality in the main rivers and estuaries is improved. Historic places are sensitively managed.

13.3 PHYSICAL DESCRIPTION

13.3.1 Topography

North Taranaki Ecological District is mainly dissected steep and broken sandstone and mudstone hill country. Old, elevated surfaces remain as the Waitaanga and Mt Damper plateau. On broken hill country, mass movement and surface erosion are very common. The hill country slopes generally from east to west, with the highest point being 602 metres above sea level (m.a.s.l.). Most of the land is under 300 m a.s.l. Over 80% of the slopes are greater than 20°. There is a narrow zone of uplifted marine terraces along the coastline, with cliffs 30-60 m high. River mouths feature sandy estuaries, spits and sand flats. There are coal seams in the Mokau coalfield in the north of the district. The hill country soils are shallow and have low fertility, but gentler land has volcanic ash deposits which produce deep well-drained soils.



The steep forested hill country and uplifted terraces of this district can be seen from the Tongaporutu River mouth.

13.3.2 Climate

The coastal parts of North Taranaki are subject to strong winds, with occasional storms of tropical origin. Valleys of the hill country are usually sheltered but the ridges and crests are exposed. Sunshine over the district is fairly uniform, around 2000-2100 hours/year, although it is less in the inland valleys which experience more fog.

Temperature variation in the district shows a coastal to inland gradient. Summers are warm and humid and winters are mild and wet. The north-west is the warmest and the south-east is the coolest. Most of the district has high annual rainfall, between 1600-2500 mm, with the coastal areas having the lower rainfall.

13.3.3 Vegetation Patterns

North Taranaki was almost entirely forested in the past, apart from very small areas of scrub and herbaceous plants on the coast, on river cliffs, and in the relatively small areas of wetlands.

The district is important for the number of plants which reach their southern limits here, including pohutukawa, mangaeo, neinei, karo, houpara, *Olearia albida*, carmine rata, and a forget-me-not, (*Myosotis petiolata* var. *pansa*.)

The patterns of remaining native vegetation have been described elsewhere[6] and are outlined below.

13.3.4 Water

This district has several notable waterways, including the Mokau, Tongaporutu, Waitara and Mohakatino Rivers. Most flow east to west, although the upper Waitara River, whose catchment occupies much of the southern half of the district, flows south-west then north-west. The larger rivers are characterised by meandering courses and deep slow-moving water, with estuaries at the coast. Although none of these rivers are formally protected, much of the riparian area along the Mokau River is set aside as scenic reserves.

The rugged hill country of the interior retains much of its natural forest cover, providing good conditions for aquatic life in these areas. Silt and sediment from eroded land is the most significant degrading influence on waterways, particularly further down the catchments where farming becomes the predominant land use.

13.3.5 Marine

(a) Physical

The marine environment is dominated by sand and consists of a narrow shelf that grades from sand to mud then back to sand over a gradually increasing depth range. Close inshore, there is a large area of mudstone, gravel and sand.

The coast is exposed to the west but sheltered from the predominant southwest winds. The area features offshore stacks, tunnels and caves. Short headlands and small bays are fronted by beaches of black sand. Large areas of boulders and small rock pools are present in the intertidal area. Occasional wave resistant beds stand out as cut platforms or reefs off the headlands.

There are two known large offshore reef systems composed of sandstone. These are Epiha (Mohakatino) Reef south of the Mokau River, and Pariokariwa Reef at Pukearuhe which includes a rock platform known as Waikiekie Reef.

(b) Hydrography

The coast is influenced by the Westland current which flows north, and occasionally, by the West Auckland current extending south into the district. These currents are both sub-tropical in origin. Sea surface temperatures range from 13°-22° C and the maximum tidal range is 3.1 m.

Storm waves from the north and west disturb the bottom sediments, but this effect tends to be less severe than in areas exposed to the dominant southerly storms.

13.4 HISTORY

Most of the inland hill country of this district was forested. Settlement comprised small villages on riverbank sites along major rivers such as the Waitara, and frequent pa and kainga sites along the coast. Between Pukearuhe and Mokau, the steep topography restricted settlement and cultivation to a fertile coastal strip no wider than 750 m. The forest provided timber, food, and fibre and the coast and rivers provided kaimoana, eels and freshwater crayfish[106].

The coast provided a major route north, part of which along the base of the Whitecliffs (Parininihi) was passable only at low tide. Other inland routes linked with the Tangarakau River and Taumaruneti.

Intertribal wars of the early 1800s between the Tainui people and North Taranaki Iwi led to a period of great uncertainty in the region. It was not until the Taranaki Land Wars that intertribal war became secondary and both the Taranaki and Waikato tribes united against the Crown.

Conflict over European demands for land led to the first Taranaki Land War in 1860. As a result, the government confiscated land between Pukearuhe and Nukumaru in 1865. The second Taranaki Land War broke out in 1864 and a number of redoubts were established which later formed nuclei for closer European settlement.

Forest on coastal and suitable inland areas was burnt or milled, and the land converted to pastoral farming. Some of the inland areas have since reverted. Coal was found on the Mokau River in the 1840s, and extracted from five mines adjacent to the river between 1885 and 1952[99].

13.5 VALUES AND THREATS

13.5.1 Background

North Taranaki district has, perhaps, the greatest variety of forest types in the Conservancy, ranging from coastal forests to those on elevated wet plateaux. In addition, the district's natural diversity includes marine and non-forested coastal communities, estuaries, and freshwater wetlands. There has been a disproportionate loss of some of these habitat types through human activities.

Maori clearing of forest for housing and cultivation would have been limited to specific sites along major rivers and on the coast. European settlement and farming led to almost complete clearing of the flat, fertile river terraces and coastal marine terraces. Farming then moved progressively on to easier slopes and inland plateaux. Timber was extracted from the earliest times, and logging still continues in some privately-owned inland forests.

13.5.2 Protected Natural Areas Programme

Cross Reference
See Sec 20.1

The PNAP report for the North Taranaki Ecological District identified 28 natural areas which contain vegetation not well-represented in existing reserves (one of the areas comprises five discrete sites along the Mokau River). The recommended areas for protection (RAPs) total some 15,700 ha. By the end of 1996, six of the RAPs had been formally protected by purchase.

The district was surveyed for the PNAP in 1986, though the report of this survey was not published until 1991[6]. The district has extensive forests which are little known and more data are needed for management decisions.

13.5.3 Ecosystem Diversity

(a) Forest

Broad-leaved coastal trees dominate native forest remnants up to about 1 km inland. Kohekohe, karaka, puriri, pukatea, mahoe and ngaio are typical species, with tawa in sheltered places; some areas have mangeao, wharangi, pohutukawa, karo and houpara. Many small remnants such as those on the coast at Urenui, Onaero and Waiiti have a range of such trees, but the richest and largest area is in Whitecliffs Conservation Area. Some of these species, particularly the last three, have been widely planted and are often self-establishing from planted specimens.

Further inland, hill country is dominated by tawa, with hinau, rewarewa, northern rata and other broad-leaved trees. Podocarps, especially rimu, become common. Steeper slopes and poorer soils may be dominated by kamahi, and ridge crests are commonly dominated by hard beech. Hall's totara, tanekaha, miro, tawheowheo and others can be common in places. Pockets of silver beech comprise the largest areas of this species in the Conservancy.

Valley floors have remnants of previous podocarp forests. The fertile and sometimes poorly drained flats are where kahikatea is usually dominant, with pukatea, black maire, narrow-leaved maire and, more locally, swamp maire, matai and totara. Swamp forest adjoins estuarine shrublands and reeds in the lower Mokau River, a sequence which is rarely seen in New Zealand today.

The forests provide habitat for every native forest bird species remaining on the mainland North Island, apart from weka. Good numbers of robin, bellbird, and pigeon remain. Short tailed bats and lizards are known.

Goats and possums are common throughout the district's forests where they have been responsible for significant change to understorey composition. The preferred food species have been progressively eliminated to be replaced by less preferred species. Rata in particular has suffered severe possum damage.

The botanically diverse coastal forests are particularly at risk and have been the focus of animal control programmes for the longest period. Pigs are well established but their impacts are localised. The few deer present are being hunted to prevent establishment of a population.

(b) Shrublands

Many shrublands are in stages of regeneration from previous clearing of forests. Manuka is usually the dominant plant in such situations, and quite quickly gives way to forest trees. More stable shrub communities occur on the coast, on inland cliffs, and in wetlands. Estuaries such as the Mokau have saltmarsh ribbonwood which, in less saline zones, grades into long-lived manuka with harakeke and sedges, then swamp forest. Inland wetlands such as in Okau Scenic Reserve have *Coprosma tenuicaulis* with manuka and stunted forest trees including kahikatea. Parts of the Waitaanga forest have wet shrubland which regenerated where past forest logging resulted in a raised water table.

Scrub on coastal cliffs is usually a narrow band between herbfields or rushes on the seaward side and low stature forest inland. Shrub species include taupata, karo, mingimingi, hangehange and kawakawa, mixed with harakeke, sedges, kiekie and cliff

toetoe (*Cortaderia fulvida*). Titirangi may have been a more common element in the past. Invasion by pampus of coastal cliff communities has become a major threat in the mid - 1990s. Inland cliffs vary in vegetation cover according to aspect, slope, moisture and rock type. Common shrubs include native 'heaths' (*Gaultheria* spp., *Dracophyllum strictum*), tutu, koromiko, and shrub daisies, *Olearia townsonii* and, locally, *Brachyglottis turneri.*

The shrub wetlands of the Waitaanga Plateau are being colonised by willows. Other shrub clearings are being invaded by pampas which prevents expansion of shrublands.

(c) Wetlands

Wetlands with forest and scrub are mentioned above. Limited areas on valley floors have swamps with herbaceous plants, including harakeke, raupo, toetoe, rushes and sedges. A good example borders the Onaero River where it flows beside Taramoukou Conservation Area. Near the coast there is more variety in plants, with sea rush and jointed wire-rush in estuaries, grading into mixtures of sedges and native broad-leaved herbs in freshwater zones. The Mohakatino Swamp Conservation Area, near the Mohakatino River mouth has more than 20 native non-woody species.[80]

Wetland drainage has seen a decline in wildlife species using these areas, but small numbers of fernbird, spotless crake and bittern can still be found.

Wetlands are also important for native fish. Several streams and rivers are known to be inanga spawning sites, though these are often threatened by adjoining land use and damage by domestic stock.

(d) Other herbfields

The very small areas of dunes in the district mostly have spinifex as the dominant native plant; pingao is rare. Succulent, salt-tolerant herbs grow on sea cliffs, sometimes as dense mats. Inland cliffs can have whaririki, tuhara, everlasting daisies and parataniwha as common herbaceous plants.

Dunes in particular are continuing to lose their naturalness through the spread of weeds especially marram grass, boxthorn and pampas.

A threatened plant of the district, pingao spreads over sand and traps it to form dunes.

(e) Water

The upper reaches of rivers in the district have very high ecological values and are representative of largely unmodified river ecosystems in dissected mudstone/ sandstone country. Catchments have retained their native vegetation, including the river margins. The rivers contain a good diversity of native aquatic fauna, including fish such as eels, whitebait species, bullies and torrent fish.

There are no artificial fish barriers such as weirs or dams. The upper catchments are remote, few towns occur and there is relatively little roading. There are only a few activities in the upper catchments which can affect aquatic habitat conditions, such as abstractions, discharges or mining.

Although the upper catchments have high ecological values they are fragile. Steep terrain combined with the mudstone/sandstone geology means that alterations to the landscape or to land uses can have significant effects on waterways. For example, vegetation removal causing slips and erosion will increase sediment loads in rivers

resulting in their degradation. While the waterways of the upper catchments look unmodified, wild animals such as goats and possums have removed the groundcover and the effects of this on water quality have not been assessed.

The mid and lower reaches of rivers generally have reduced natural values. The lower reaches of rivers are often in open land where water quality has been reduced by sediment and nutrients which reduce biological diversity.

(f) Marine

Shallow sand flats support communities of hermit crabs, tubeworms, hydroids, starfish, sand dollars and shellfish (particularly the southern olive and frilled Venus shell). Isolated rocks and outcrops of mudstone, less than 1 m above the level of sand flats, provide cover for mobile crustaceans and support growths of sponges, bryozoans and shellfish between storm events. Immobile animals live on the limited area of rock and mudstone which is higher than 1 m above the level of sand flats. Seaweed communities are limited in this area.

In water less than 20 metres deep, sand dollars are common. The habitat here is more inhospitable and dynamic, where sand is continually transported offshore over a mudstone/sandstone base. These conditions are not favoured by marine invertebrates which need a hard surface to cling to.

The reefs support a range of seaweeds and encrusting/attached marine animals, such as sponges, bryozoans, ascidians, crustaceans, fish and shellfish. The sponge communities on these reefs are exceptional.

The Epiha and Pariokariwa reef systems support one of the most diverse assemblages of seaweeds, sponges, shellfish, crabs, bryozoans and ascidians in the area. Pariokariwa Reef, situated between Pariokariwa Point and the Tongaporutu River, has a variety of unusual sponges and other encrusting species. Similar communities have not been found elsewhere along the Taranaki coastline and are rare nationally (Battersill pers comm 1994).

Offshore there is a diverse range of shellfish. These include scallops, cockles, tuatua, pipi and green lipped mussel. Offshore habitats also exist for a wide range of fish including blue cod, blue moki, warehou and snapper. A snapper and trevally spawning ground is offshore. Crayfish and a wide range of fish live closer to shore.

Studies of adjacent areas suggest that the sea floor community in the deep offshore habitat is dominated by burrowing bivalves. Inshore, the dominant habitat type between 20-30 metres depth, is extensive sandflats. Hermit crabs, tube worms, hydroids, shellfish, starfish and heart urchins characterise this inshore sea floor community.

Black and green lipped mussels, barnacles, limpets, periwinkles and sea lettuce live on the cliff faces, intertidal cliffs and inshore boulders. A variety of chitons, limpets, snails, crabs and seaweeds live where the hard surfaces have been uncovered.

Petroleum exploration takes place offshore, creating a risk of pollution to the marine environment and shoreline.

(g) Estuaries

The five significant estuaries of the district are at the mouths of the Mimi, Urenui, Mokau, Mohakatino and Tongaporutu Rivers. The Mohakatino and Tongaporutu River estuaries have similar plants and animals. They are dominated by pipi, rag worms and burrowing isopods.

Little black mussel, barnacles, green lipped mussels, rock oysters, crabs, pholads and green alga (*Enteromorpha*) are present in the intertidal zone. In the lower estuaries, sea lice and sea slaters are common and sand hoppers dominate at the high water mark.

Shrimps, yellow-eyed mullet, flounder, trevally, kahawai, jack mackerel, estuarine stargazers, clingfish, bullies, triplefins and cockabullies are all common in both the middle and lower regions of the estuaries. The estuaries are important for native freshwater fish as breeding areas for some galaxiid species.

The estuaries also provide resting and feeding areas for both national and international migratory wading birds moving between winter and summer habitats.

13.5.4 Proposed Marine Reserve

Cross Reference
See Sec 21

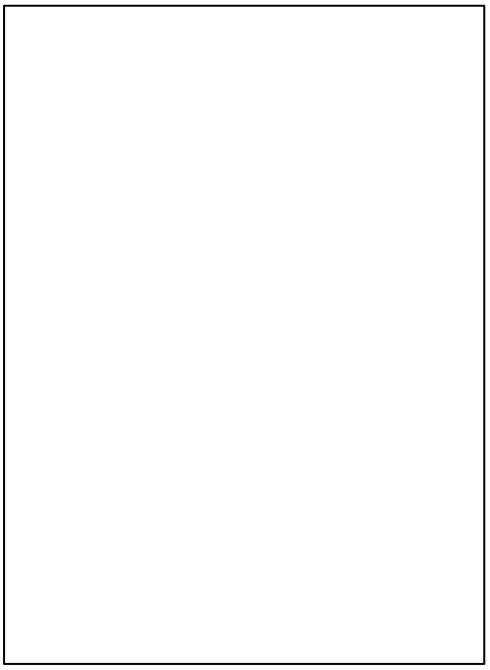
In March 1995, the Department made an application to create a marine reserve opposite Whitecliffs in North Taranaki. The aim is to establish and manage a marine reserve which includes a fully protected area free from fishing or disturbance of the marine ecosystem, but which allows the public free access.

A marine reserve would be complementary to the adjacent coastline which has significant scenic, ecological and recreational values.

13.5.5 Landscape

Most people know only the western fringe of North Taranaki, where a dramatic coastline is being sculptured by the sea from the edge of the narrow, elevated coastal terraces. The resultant cliffs are sheer or very steep, sometimes straight but mostly following a sinuous line. High tides lash the bases of the cliffs. The land/seascape is characterised by a series of headlands and bays, with sea caves and small inshore islands ('stacks'). There are sheltered inlets only where the major rivers meet the coast and form estuaries. Although the coastal terraces are generally farmed to the cliff tops, there are sufficient steep sites with native vegetation, including coastal forest, to give some natural character to most of the semi-coastal and coastal landscapes. Pohutukawa has been widely planted as an amenity tree, which enhances the natural appearance of the landscape, though this pohutukawa is not usually of North Taranaki origin.

Steep cliffs and terraces near the Whitecliffs Walkway.



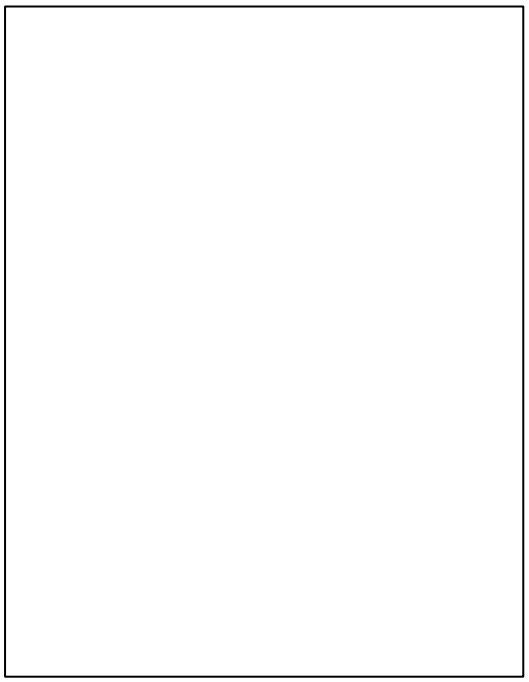
Inland, North Taranaki district merges almost imperceptibly into Matemateaonga district, as 'Taranaki back country'. Steep, dissected hills bear a mosaic of farmland and mature and regenerating native forests. Unlike Matemateaonga, North Taranaki has several large elevated plateaus, its large rivers are typically bordered by river flats and, instead of repeated landforms based on soft mudstone (papa), North Taranaki has inland areas of limestone and hard sandstones that give more variety to the landscape.

The importance of the varied and often dramatic landscapes of the district should be recognised in future landuse decisions. These include not planting exotic forests along skylines or close to tourist routes. River and estuarine margins should be protected and reinstated with native vegetation, and remnants of coastal forest, scrub, flaxland and other native vegetation should be protected to allow natural regeneration.

13.5.6 Plants at Risk

Cross Reference
See Appendix 6

North Taranaki district has nine species featuring in the national list of threatened and local plants. Of the habitat types described above, it is the coastal forest and shrublands which have the highest concentrations of these species.



Tainui growing at Mohakatino Conservation Area.

Tainui forms a significant element of a small coastal forest remnant in a conservation area near the mouth of the Mohakatino River. A larger population occurs north of the Mokau River in Waikato Conservancy. There is no natural establishment of young tainui in either site. The shrub titirangi, often cultivated, is known historically from several coastal sites from Mokau to Urenui. Today we know it just outside the Wanganui Conservancy at Mokau. Further survey may re-find the shrub on coastal cliffs in Wanganui Conservancy.

Within Whitecliffs Conservation Area, king fern occurs in a few shaded gullies where it is safe from pigs and browsing animals. This area also has *Myosotis petiolata* var. *pansa*, a native forget-me-not and an endangered native cress (*Rorippa divaricata*) was recorded here in 1976.

Also near the coast, on damp cliffs high above the Mimi River, is a population of the herbaceous daisy, *Brachyglottis turneri*. This plant also occurs along the Mokau River and the Tangarakau Gorge, mostly in places inaccessible to stock and goats.

The elevated Waitaanga Plateau and forest in the east of the district are sites for the root parasite *Dactylanthus taylorii*. Possums are severely browsing the flowers and buds of this plant, preventing regeneration. The yellow flowered mistletoe *Alepis flavida* was recorded in the past from the beech forest of the Waitaanga Plateau. Two species of red flowered mistletoe are very uncommon here and at risk from possums. One, *Peraxilla colensoi* was discovered in 1995 and *P. tetrapetala* was rediscovered after a gap of some years, in 1995.

13.5.7 Wildlife at Risk

Forest birds of particular note are the New Zealand falcon, brown kiwi and kaka. The North Island Kokako has been recorded in this district but its numbers are now believed to be low. The district is one of few places on the New Zealand mainland with breeding colonies of grey-faced petrel and fluttering shearwater. Predation and changes in land use have caused a regional and national decline of these birds.

The threatened blue duck has been recorded in the Waitara River catchment.

Both the threatened short-tailed and long-tailed bats are known. Surveys in 1994 and 1995 expanded our knowledge of their ranges considerably.

Six species of lizard have been recorded, with the most notable being the gold-striped gecko and the striped skink.

Cross Reference
See Sec 22.3.2(d)

The district is important for native freshwater fish. The Mokau River is particularly important for whitebait (galaxiid) species which include the juveniles of inanga, giant kokopu, banded kokopu, and koaro. Populations of the vulnerable black and brown mudfish are thought to exist.

The district is notable for a number of invertebrate species. Three moths have their southern limit within the district, while Mt Messenger appears to have an endemic species of scarab beetle[11].

A small population of Hector's dolphin is known to frequent the adjoining coastal waters.

The carnivorous paua slug - little is known of the invertebrates of many protected areas.

13.5.8 Historic Places

There are six historic reserves, and many other Maori sites on other protected areas administered by the Department in this district. Many issues are similar to those for historic places in the Egmont Ecological District, such as the management of earthworks to reduce their rate of physical deterioration.

Some of the places on land administered by the Department are of spiritual or historic significance to Tangata Whenua, and at least one request has been made by Tangata Whenua for the transfer of an historic reserve to their ownership. Matters involving a change of land ownership are often initially dealt with by the Waitangi Tribunal. Options open to the Department include partnership arrangements, or an appointment to control and manage, or vesting of land under the Reserves Act 1977. Other options such as changing the status of land from Crown land to a reserve for the common use and benefit of all the people of New Zealand under Section 340 of the Maori Land Act 1993/Te Ture Whenua will be investigated, but may be precluded by the current legislation.

See Sec 20.5

Some places have both Maori and European historic values, and future management would need to consider both. Any proposal to change land status would be subject to public advertising and consultation with the New Zealand Historic Places Trust.

One of the places of European origin is the limeburners' kiln which was built on the Mokau River in 1895. This was built in conjunction with coal mining activity in the area.

The six historic reserves are the only actively managed historic places in this district. The Department needs to add to its knowledge of other Maori and European historic sites on land it administers. The major threats to historic places are uninformed management and natural processes, such as coastal erosion.

13.5.9 Recreation

The district's scenic coastline, extensive areas of native forest and bush-lined rivers offer significant potential for recreation. Existing facilities are few and not well developed, although track upgrading and bridge replacement has been carried out in some areas. Large, undeveloped backcountry areas are available for 'wilderness' tramping and hunting.

The Whitecliffs Walkway provides a major walking opportunity close to New Plymouth, offering coastal views and access through an important conservation area. A marked route, suitable for more experienced trampers, links the walkway with Mt Messenger and Kiwi Road, further inland.

The Rerekapa Track, through Moki Conservation Area, and the Moki Track, along the south bank of the Waitara River, follow old stock roads through native forest and provide opportunities for easy day tramps. A small camping area is maintained on Mangapapa Road near the start of the two tracks. A network of marked routes, centred on Te Rerepahupahu Falls, traverse the expansive Waitaanga Conservation Area, allowing for a range of overnight tramping trips. Day trips to Mt Damper Falls and the old Tatu Mine are also possible. These, and a number of other short walks and historic sites, are accessible from the State Highway 43 Stratford-Taumarunui Heritage Trail, passing along the eastern boundary of the district.

Some tracks and old roads in back country areas may be suitable for mountain biking and/or horseback riding. An assessment needs to be carried out and any suitable opportunities identified.

Pig and goat hunting occurs throughout the district.

In some places, hunters and other users have experienced problems with access to areas administered by the Department, particularly where this involves crossing private land or following an unformed legal road. The Department will take steps to clearly identify and improve public access where it is a problem.

The Mokau, Mohakatino, Tongaporutu and Waitara Rivers are used for canoeing. There is growing commercial demand for tourist trips on the Mokau River, visiting sites of scenic and historic interest.

Cross Reference
See Sec 22.3.2(d)

The district's rivers are also popular for whitebaiting, particularly the Mokau where 200 stands line the riverbanks.

Coastal recreation includes fishing, diving and boating.

13.5.10 Public Awareness

The coastal and marine environment in the district is relatively unspoilt and efforts will be made to interpret it and promote its natural and historic values. The priority for public awareness will be to establish interpretation and display material for the coast as well as working with the general community to ensure wide public support for protection of marine ecosystems.

13.5.11 Commercial (Non-Recreation)Activity

Commercial activities on land administered by the Department in this district cover about 800 ha. These involve grazing licences, three easements, a Justice Department forestry lease (376 ha), a gravel storage area, a small television translator at Ohura and a school water supply site. The grazing licences cover grassed areas of reserves and stewardship areas, often not fenced from adjoining bush. Once the trees in the Justice Department forestry lease over part of the Waitaanga Conservation Area have been harvested and the land restored, it will be left to regenerate naturally. A subsequent lease will not be granted.

See Sec 20.4

Opportunities for exchanges may be available, and these will be assessed in conjunction with implementation of PNAP recommendations.

Private baches on reserve land exist at Tongaporutu, Urenui and Onaero. Where the baches are subject to perpetually renewable leases, (Urenui [121], Onaero [18]) revocation of the reserve status and disposal of the land occupied by the buildings (with an initial offer to the district council concerned) will be pursued. Proceeds may then be used to purchase other areas of high natural, historic or recreational value.

Cross Reference
See Sec 34.7

In the case of the Tongaporutu Domain (26 baches), this reserve has considerable current and future recreation use potential. Conditions on existing lease agreements require the removal of baches at the end of their 30 year lease terms. This action would be consistent with the purpose for which this public recreation reserve is managed.

See Sec 34.6

The recently acquired Mokau South land contains a current, but inoperative coal mining licence. Liaison will be maintained with the mining inspector, Environment Waikato and the Waitomo District Council to ensure that any mining activity has limited impacts.

Investigations into reopening the Tatu underground mine at Waitaanga are also being conducted. Proposed mining activities would take place on the cleared area at the old mine entrance. The existing 400m access road to the mine would most likely be retained.

Any coal exploration or mining activities will be subject to close scrutiny, and activities limited to ensure that there are no adverse effects on significant natural, historic or recreation values.

13.5.12 Land Management

Approximately 25% (or 67,663 ha) of this district is protected as reserves or conservation areas. This comprises large tracts of almost continuous forest which could be better managed in a unified manner under a 'Conservation Park' status. This would recognise a strong community of interest and enable coherent management of the area. In the event that a Conservation Park is established, a Conservation Management Plan will be prepared for the area.

See Sec 44.4.3(iv)

In addition, the PNAP report[6] for North Taranaki Ecological District recommended that all or parts of 13 stewardship areas should have their status upgraded. These included the large areas of Hutiwai-Mohakatino, Waitaanga and Moki-Makino Conservation Areas, the Waipingau catchment within the Whitecliffs Conservation Area and Poiuatoa Conservation Area.

See Sec 20.3

13.6 CHECKLIST OF KEY ISSUES

- Lack of representativeness in existing reserves.
- Native forest logging on private land.
- Development of the North Taranaki Conservation Park.
- Protection of significant natural areas on private land.
- Protection of estuaries and marine habitats.
- Marine reserve creation and management.
- Maintaining and enhancing water quality in the marine environment.

- Depletion of marine species, particularly from the reefs near settlements.
- Involving Tangata Whenua in the management of historic places.
- Recognition of the kaitiakitanga role of the Tangata Whenua.
- Indentification of joint projects with Tangata Whenua which reflect co-operation and achieve conservation outputs.
- Loss of spawning and adult habitat for native freshwater fish.
- Likely decline of kiwi populations.
- Establishing the status of short and long-tailed bats.
- Protection of mainland breeding sites for grey-faced petrel and fluttering shearwater.
- Management of whitebait fisheries.
- Impacts of possums and goats on natural areas throughout the district.
- Preventing the establishment of further animal threats such as deer.
- Impacts of weeds, especially pampas and willows.
- Long term deterioration of historic sites.
- Use of public reserve land for privately owned baches.
- Environmental risks arising from petroleum exploration and production, including oil spills.
- Deterioration of water quality through silt and sediment inflows.
- Maintaining high natural and representative values in rivers in the upper catchments.
- Lack of interpretation of coastal and marine values.

13.7 MANAGEMENT OBJECTIVES

13.7.1 Land Management

Legal Protection of Land

(i) To seek as a priority, the protection of significant natural areas in the district as identified in the PNAP and other natural resource inventories, primarily through:

- working with landowners to achieve legal and physical protection of the 20 areas recommended for protection in the North Taranaki PNAP
- advocating the protection of natural areas in regional and district plans and on resource consent applications, particularly those involving the logging of native forest on private land
- increasing public awareness and support for protection of areas identified through PNAP.

(ii) To apply the most appropriate protected status to land administered by the Department in North Taranaki by either investigating a Conservation Park for North Taranaki, or application of the most appropriate reserve or specially protected area (under the Conservation Act 1997) status for the land involved.

13.7.2 Marine

(i) To protect a representative area of marine habitats in North Taranaki through:

- the establishment of a marine reserve adjacent to Whitecliffs (Parininihi)
- working closely with Tangata Whenua
- consultation with the local community.

(ii) To advocate the protection of areas with important natural values in the coastal environment of the district, as identified in Appendix 8, and any further areas identified in the future.

13.7.3 Kaupapa Atawhai

(i) To acknowledge the mana of Tangata Whenua by:

- ongoing consultation about a marine reserve
- promoting where practical, projects which encourage co-operation on issuses such as the preservation and use of taonga and traditional cultural materials
- encouraging dialogue on the management of reserves which will lead to greater involvement by the Tangata Whenua in their administration
- ensuring that Wahi Tapu and sites of cultural significance are given appropriate protective status
- acknowledging Iwi and Hapu management plans which enhance the natural values of land, waterways, coastal landscapes and estuarine environments.

13.7.4 Native Species Protection

(i) To update existing data on the distribution, conservation status and habitats of native plants and animals.

(ii) To identify important native freshwater fish habitats through survey, and to seek protection of these through greater public awareness and improved riparian management.

(iii) To use the Whitecliffs Conservation Area as a monitoring site for brown kiwi and determine the population size. Reassess at intervals, using established national monitoring techniques.

(iv) To ensure the continuation of mainland grey-faced petrel and fluttering shearwater breeding sites through:

- co-operation with landowners to ensure all petrel breeding sites are fenced and revegetated with native plants of the district
- control of predators at these sites with the help of volunteers.

(v) To assess the status of populations of short and long-tailed bat.

(vi) To control, where necessary and practicable, animal threats and predators of native species in accordance with national or local species recovery plans.

13.7.5 Threats

(i) To maintain a low goat and possum impact on ecological values of Taramoukou, Moki/Makino, Waitaanga and Whitecliffs Conservation Areas, Mokau Scenic Reserves, and other high value conservation areas through:

- ongoing intensive hunting programmes which prevent expansion of the current goat population
- monitoring of key 'at risk' plants and animals to determine frequency and extent of possum and goat control
- poisoning and trapping of possums at intervals determined by monitoring.

(ii) To prevent the establishment in the district of deer and other wild animals through:

- enforcement of deer farming regulations and provisions of the Wild Animal Control Act 1977
- publicity to alert the public to the risk posed by new introductions and the unlawfulness of such actions
- prompt and thorough response to reported liberations.

(iii) To control and where possible, eradicate weeds in natural areas through:

- maintaining weed control, especially of willows at Mataru and Okau Scenic Reserves, pampas in the Mokau Reserves and coastal cliffs, and other invasive weeds of key protected areas administered by the Department
- advocating control to local authorities and landowners of weeds which are known to be threats to lowland forests, wetlands and riparian areas.

13.7.6 Historic Places

(i) To manage in association with Tangata Whenua, historic places on land administered by the Department of particular significance to Tangata Whenua through:

- maintaining a close and regular working relationship with Tangata Whenua in the management and understanding of such sites
- encouraging Tangata Whenua to become actively involved in management.

(ii) To better manage earthworks by carrying out research to determine the rates and processes of their physical deterioration.

13.7.7 Recreation

(i) To protect and enhance recreation opportunities in the district by :

- maintaining the Whitecliffs Walkway to a high standard
- maintaining the network of backcountry tramping tracks and marked routes to a specified standard
- providing day visitor facilities, including short walks, at road accessible locations and beside the Mokau River
- assessing the suitability of tracks and old roads for mountain biking and horseback riding
- identifying and improving public access to areas administered by the Department, in consultation with Tangata Whenua, landowners and local uthorities
- providing interpretation at key high use sites
- retaining some backcountry areas in an undeveloped state to provide for 'wilderness' tramping and hunting
- monitoring and gaining improved knowledge of visitor use in the district.

(ii) To promote and manage the range of recreation opportunities available in the district.

13.7.8 Commercial (Non-Recreation) Activity

(i) To retire land leased to Justice Department for exotic forestry within the Waitaanga Conservation Area once harvesting has been completed, and allow natural regeneration to occur.

(ii) To avoid, remedy or mitigate the effects of oil exploration and development on the natural, historic and recreation values of land administered by the Department.

(iii) To ensure that any resumption of coal mining activities on land administered by the Department has no adverse effects on natural, historic and recreation values.

(iv) To rationalise the boundaries of land administered by the Department where grazed areas can be exchanged for areas of native vegetation.

Cross Reference See Sec 34.7

(v) Baches which are subject to existing lease agreements will be administered in terms of those agreements.

13.7.9 Freshwater

(i) Promote improved water quality in the Mohakatino, Tongaporutu, Waitara and Mokau Rivers, particularly through advocacy for the retention and establishment of vegetated riparian margins in the lower catchments.

(ii) To maintain or enhance the natural vegetation cover in the upper catchments through:

- management of land administered by the Department
- advocacy for other land.

(iii) To maintain or enhance riparian areas in all catchments.

(iv) Seek protection for high value wetland areas as RAPs or through other specific protection.

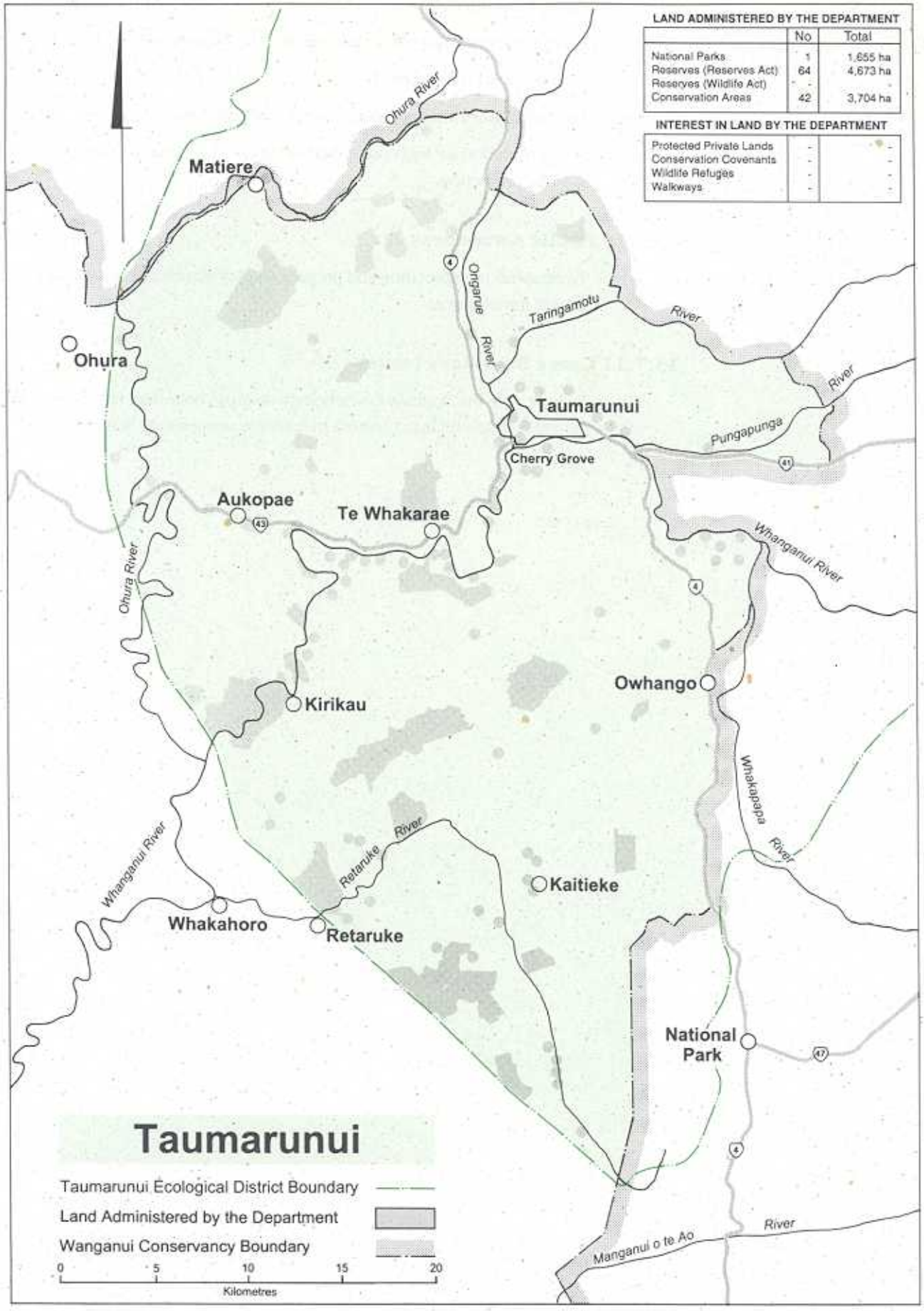
13.7.10 Public Awareness

(i) To establish interpretation and prepare display material on the coastal and marine environment.

13.7.11 Cross Boundary Issues

(i) To liase with the Waikato Conservancy on cross boundary issues such as animal control and management of reserves along the Mokau River.

FIGURE 16: TAUMARUNUI ECOLOGICAL DISTRICT



14 Taumarunui Ecological District

14.1 INTRODUCTION

Taumarunui Ecological District comprises hill country and river terraces including much of the upper Whanganui River system and northern parts of Whanganui National Park. The balance of the park lies within the Matemateaonga District.

Taumarunui district covers 241,500 ha, of which 126,800 ha lie in Wanganui Conservancy. The remainder is in Waikato Conservancy. The district is shown on Fig.16, along with a description of lands administered by the Department.

14.2 VISION

The upper Whanganui River valley and tributaries gain international and national acclaim for their scenic, recreational and natural values. Tangata Whenua are actively engaged in management for the interpretation and protection of land administered by the Department within this district. The margins of the Whanganui River and its tributaries are protected and restored to natural cover. Water quality has improved, and flows are sufficient to maintain natural values and recreational use. The extent of indigenous forest is sustained and all forests are protected from threatening plants and animals. Threatened wildlife are secure and the full range of wildlife is present.

14.3 PHYSICAL DESCRIPTION

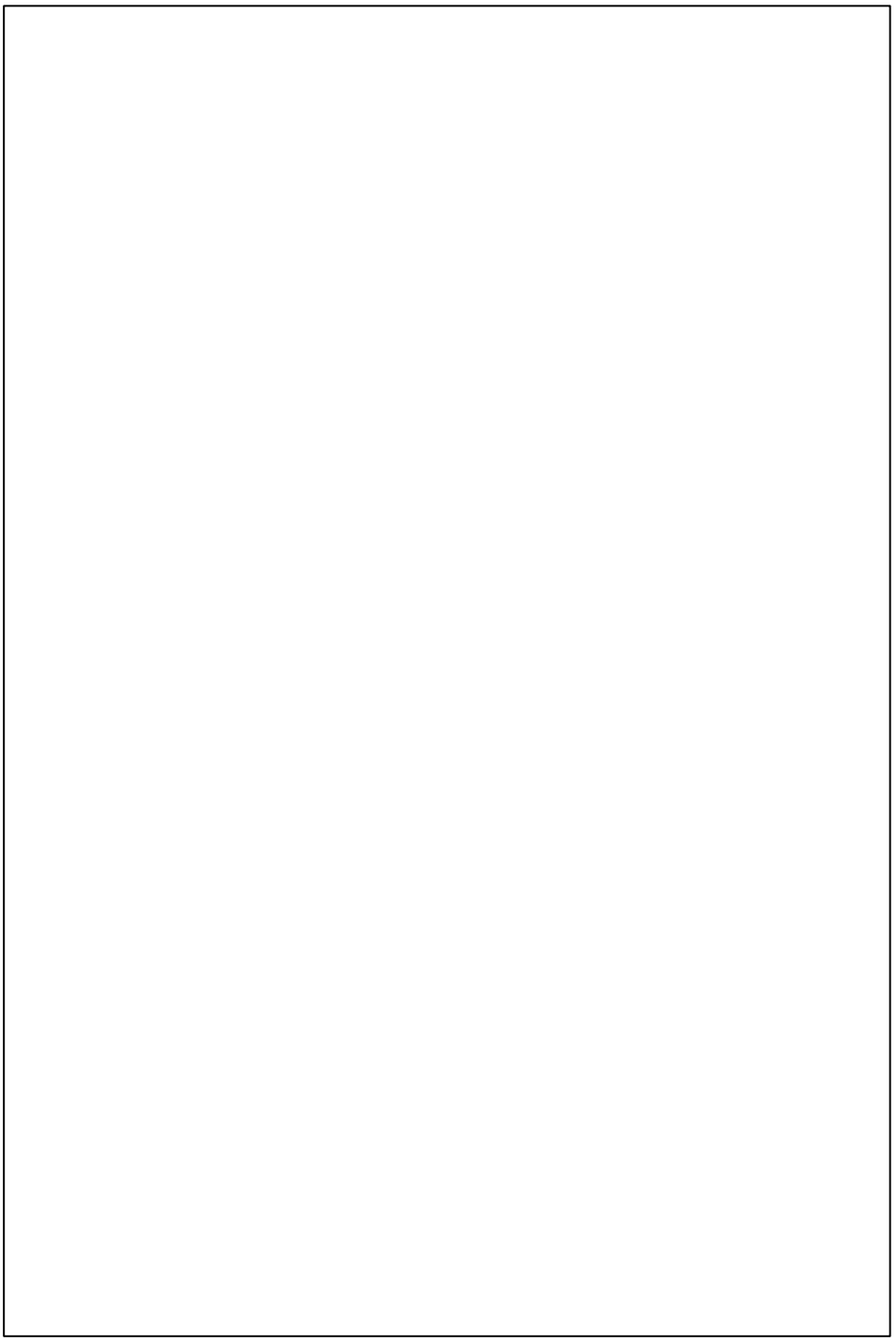
14.3.1 Topography

Rivers have cut down through the underlying soft mudstones and sandstones to produce rolling to steep hill country. Hard caps of sandstone remain as broad ridge crests with often steep bluffs at their edges. Volcanic ash overlies the flatter elevated terrain, and the river terraces of some valleys (notably the Ongarue) have deep layers of Taupo pumice, and redeposited water-borne pumice.

While the larger rivers have adjoining alluvial terraces, small streams are mostly deeply entrenched in mudstone and sandstone gorges.

14.3.2 Climate

The climate is temperate, with warm humid summers and moderate winters. The district is relatively wet, with average annual rainfall of between 1400-2000 mm. The valleys are sheltered but wind damage occurs in forests on ridges. Both fog and frost are common in the valleys.



The upper Whanganui River cuts its way through the rolling Taumarunui hill country.

14.3.3 Water

The upper Whanganui catchment dominates the landscape of this district. The Whanganui River flows west from the Volcanic Plateau to Taumarunui and there turns southwards to begin its journey to the sea, some 234 km (by river) to Wanganui. Major tributaries are the Ongarue in the north, the Ohura in the west and the Retaruke in the east. The predominant land uses in the catchment are pastoral farming and forestry. The steep land soils of the catchment and the underlying sedimentary rocks are prone to erosion.

Eight species of fish have been recorded in rivers and streams of the district, six of them native species.

14.3.4 Vegetation Patterns

This district was originally clad in native forest, podocarp-hardwood forest on the hill slopes with podocarp-dominant forest on valley floors. Cliffs provided sites for shrublands and native herbaceous plants. Small areas of wetlands were probably scattered on river terraces, and small lakes were formed where landslips had dammed streams in narrow valleys.

14.4 HISTORY

This district is part of the King Country and includes some of the upper reaches of the Whanganui River, along the banks of which were a number of Maori settlements. Elsewhere the district has scattered Maori sites such as pa, urupa and battlegrounds.

The 'Plug of Tuhua' referred in ancient times to the need for unity among the Taranaki, Whanganui, Tainui and Tuwharetoa tribes which settled around Taumarunui, and who together were guardians to the entranceway to the centre of the North Island.

Europeans were effectively excluded by the Kingite movement until the 1890s, when surveyors, settlers, shallow draught boats and the Main Trunk Railway line arrived.

In 1897, Hatrick's riverboat service extended to Taumarunui, and with the completion of the railway to Taumarunui in 1903, the river trip to Wanganui became a tourist attraction.[2] The railway was associated with rapid settlement and bush clearance. Farming was difficult to maintain as the land reverted to bush, and land abandonment was common following World War I. [101]

Since then, the viable agricultural areas have been developed and consolidated. Many forests remaining after the initial clearance were subsequently milled, until the mid-1950s.

A number of townships were surveyed at the time of settlement, but most did not develop.[2]

14.5 VALUES AND THREATS

14.5.1 Background

The land has been extensively cleared and pastoral farming is predominant in the wide terraced valleys, which bear the scars of widespread erosion. There are only isolated remnants of original forest, with a larger but mostly logged tract in the south-east. A feature of the river terraces and hill country is the predominance of juvenile totara. There are also small areas of exotic forest, mainly in the south-east.

The district's forests have many similarities to those of the adjoining Matemateaonga district to the south, but their extent has been more reduced by timber extraction and farming. Like Matemateaonga, Taumarunui's variety of habitat types is limited by the range of altitudes and the lack of natural lakes, large wetlands and the coast. However, Taumarunui has more river flats and elevated plateaus and, therefore, has a better representation of forest types of such sites. The district also has the Volcanic Plateau as its eastern boundary, and its forest composition reflects this influence, most obviously in the variety of beech forests. Several plant species of the northern North Island occur

as far south as Taumarunui district. The district is not well-documented in terms of its natural features.

14.5.2 Protected Natural Areas Programme

As at 1997, the district had not been the subject of a PNAP survey, but an inventory was made of known information on natural areas in 1995-96. The scenic reserves survey in 1983-84 for Southern Taumarunui[41] gives a good view of what is protected in reserves, but more information is needed on what kinds of plant community are not currently protected.

14.5.3 Ecosystem Diversity

(a) Forests

Most of the forest is on hill slopes, and can be broadly classed as either broadleaved forest or beech forest. As in the Matemateaonga district, tawa is the dominant broadleaved tree, with rewarewa, mahoe, kamahi and hinau. Podocarps, especially rimu and matai, were once common, but the majority of the district's forests, including those in reserves, have been logged.

All five species of New Zealand's beeches have been recorded in the district, but none is widespread.[41] Rotokahu Scenic Reserve contains the largest areas of beech with a protected status. Red beech and silver beech are locally common in this reserve, black beech and hard beech are rare. Mountain beech is not known in reserves of the district but is in the valley of the Whakapapa River. Rotokahu Scenic Reserve is of considerable importance for its rare forest types and species found no-where else, or very rarely, in the district. Among these are tawheowheo and grass tree, the latter at its southern limit in the North Island.

The district's river terraces once supported tall podocarp forest dominated by kahikatea, matai, rimu and totara. The small amount of this forest type remaining is mostly in reserves, but the sites are very susceptible to invasion by weedy shrubs and vines. The best example of a totara dominant forest is found in Te Maire Scientific Reserve.

The small forest patches have common forest birds such as grey warbler, fantail, pied tit and robin. Rarer species are known from some larger areas.

The national lizard database lists two species for the district, forest gecko and common skink. No detailed surveys have been made.

In common with the adjoining Matemateaonga district, goats and possums are in high density throughout the district's forests, except on land where control programmes are being sustained. Their impact on the broadleaved forests in particular is most noticeable with localised death of trees and depleted understorey. Beech forests are probably less affected, although palatable components of the understorey will have already been progressively replaced by less palatable species.

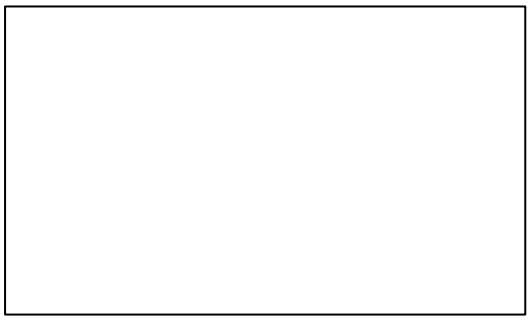
Domestic livestock are a persistent and serious problem in unfenced forest remnants particularly in riparian situations. A low density of red deer occurs mainly in the west of the district, with recent evidence suggesting that this species is spreading south westwards.

Forest margins along riverbanks are subject to colonisation by willows, purple

buddleia and Japanese walnut, particularly downstream of seed sources. Old man's beard, ivy and Japanese honeysuckle are beginning to impact on some small forest remnants especially in and around Taumarunui.

(b) Shrublands

Most of the district's scrub and shrublands are on land which is reverting to forest after past farming attempts. These are usually dominated by manuka (and sometimes kanuka) with tree ferns, broadleaved shrubs and young trees.



Parataniwha is a typical plant of shady damp valleys.

Natural shrub communities occur on cliffs, both the dry sandstones below ridge crests and the damp mudstones of river gorges. Dry cliffs are of low fertility and support shrubs of native 'heaths' (*Gaultheria, Leucopogon* and *Dracophyllum* species), manuka, koromiko, tutu and karamu. Species uncommon south of latitude 38° are known, including *Schoenus tendo, Lycopodium deuterodensum* and *Astelia trinervia.* Whaririki, toetoe and ferns are common. Ferns and herbaceous plants often predominate on wetter cliffs.

Goats and domestic livestock have access to much of the district's shrublands where they deplete the broadleaf shrub and young tree component, slowing the process of reversion to taller forest. In the same way, the expansion of shrublands into grassed areas is hindered by grazing.

Purple buddleia, Himalayan honeysuckle and barberry are common weed species of shrublands especially following soil disturbance.

(c) Wetlands

The past extent of wetlands is unknown, but today about 6 ha are in reserves and little more remains in private ownership[41]. Herbaceous weeds dominate most areas, although some patches of manuka and raupo grow in poorly drained sites.

Spotless crake are known in a raupo -*Carex secta - Baumea rubiginosa* swamp in the Retaruke Valley.

14.5.4 Water

Cross Reference
See Sec 11.5.4 and 44.2.2

The Whanganui River has outstanding natural, historic and recreational values which are described further in the Matemateonga Ecological District section. The Department will participate in activities aimed at conserving these values. The Royal Forest and Bird Protection Society has applied for a Water Conservation Order over the river. River flows in the Whanganui River are set at Te Maire near Taumarunui and these flows provide for recreational use and habitat protection. Flow rules are needed because the Whanganui headwaters (in the Tongariro Ecological District) are diverted to Lake Taupo as part of the Tongariro Power Development Scheme. A minimum flow between December and June of 29 m^3/sec, or the natural flow, whichever is lesser, was confirmed in 1992 by the High Court.

Upper catchments in the district which remain in indigenous forest have high natural values, but many of the larger rivers are degraded largely by sediment inflows from the surrounding country-side. Land clearance and erosion are therefore threats to waterbodies. There are not many point source discharges to rivers.

14.5.5 Landscape

The character of this district is typical southern King Country. In contrast with Matemateaonga and North Taranaki districts, Taumarunui has softer landforms and more settled pastoral landscapes, with 'parklands' of fine totara and dense stands of second-generation kahikatea. A vision for this area lies in the protection of the stands of kahikatea as pastoral shelter and in the enhancement of totara by supplementary planting, especially at strategic points along road reserves.

State Highway No.4 is a popular tourist route between the Volcanic Plateau and Auckland. Rest places with views of the Whanganui and Whakapapa Rivers are popular, as are spots where the volcanoes are glimpsed by south-bound travellers. Such views should be protected, and enhanced with native plantings.

14.5.6 Plants at Risk

Cross Reference
See Appendix 6

Taumarunui district has two species featuring in the national list of threatened and local plants. Both are parasitic plants that live beneath the soil surface for much of the year. *Thismia rodwayii* is known from one scenic reserve only in the district. The difficulty in recognising this plant may in part account for its rarity.

The same applies to the wood rose for which recent records are sparse. This plant though has also had a long history of collection from the Taumarunui district.

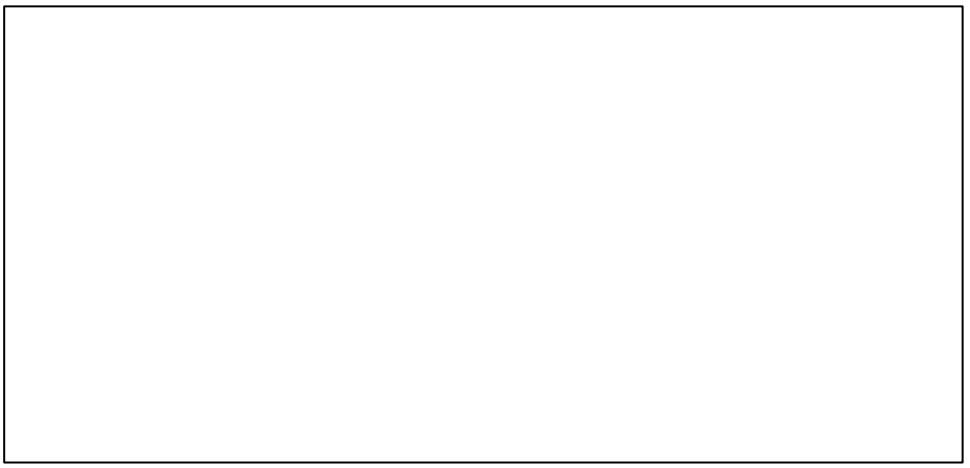
Only the flowers of Thismia rodwayi *appear above the soil surface.*

14.5.7 Wildlife at Risk

Bird species of note that persist in larger forest areas include brown kiwi, kaka and kereru. Blue duck use undisturbed parts of rivers with boulder beds, including the Retaruke and Whakapapa Rivers.

Long-tailed bats have been reported from near Whakahoro.

Probably the most significant native fish is short-jawed kokopu, a species listed as under threat nationally. The one record from this district was in 1982 from the Makokomiko Stream, 12km south of Taumarunui.



Long-tailed bat populations are known in this district.

14.5.8 Historic Places

The district includes part of the Whanganui River which is of great cultural significance to Tangata Whenua. As in the Matemateaonga district, there are a number of pa and kainga sites adjacent to the river that are located within the Whanganui National Park.

The Taumarunui area was one of the last frontiers of European settlement and has a relatively recent history of land clearance and farming.

The only actively managed historic place in this district is the Aukopae Road Tunnel, located adjacent to the Tunnel Hill Scenic Reserve. There will be other historic places in this district for which the Department will need to gather information.

14.5.9 Recreation

The upper reaches of the Whanganui River are used for fishing, canoeing and jetboating. Cherry Grove, Ohinepana and Whakahoro are major river access points, with facilities for both day visitors and river users. Day or overnight canoe trips are possible on the upper section of the river, with canoeists exiting at Ohinepana or Whakahoro. Ohinepana, Poukaria, Maharanui and Whakahoro provide overnight camping facilities for river users and are managed as part of the Whanganui Journey Hut and Camp Pass system.

Small, discrete units of Whanganui National Park are located on the upper section of river, above Whakahoro (e.g. Te Maire and Poukaria).

There are opportunities for short walks at Te Maire and Maraekowhai. There may be scope for the development of more short walks in other areas accessible by road.

The Stratford-Taumarunui Heritage Trail passes through the district, highlighting sites of scenic or historic interest.

Pig and goat hunting occurs in bush areas throughout the district.

14.5.10 Public Awareness

Taumarunui is the gateway to the Whanganui National Park for many users of the Whanganui River, and a focus of interpretation for visitors and travellers.

A priority for public awareness will be increasing community understanding of the

need for riparian planting and its benefits and effective erosion control methods. Protection of prominent landscape features threatened by erosion will also be promoted.

Small remnants of the once extensive podocarp-hardwood forests are now threatened with stock invasion and weeds. Much work needs to be done to achieve a public appreciation of the need to protect these areas. A public willingness to accept responsibility for this protection will be engendered.

14.5.11 Commercial (Non-Recreation) Activity

Most of the 13 licensed areas in this district (109.54 ha) are small areas of grass adjacent to the Whanganui River with current or potential future recreational use. There are also two easements. Unlicensed grazing is the most significant use in this district.

Some opportunities exist for exchanges, particularly adjacent to Whanganui National Park. However, like the Matemateonga district, these exchanges have a low priority.

Sunshine Scenic Reserve contains a significant exotic timber resource (Douglas fir and redwood). It is feasible to mill this resource commercially and to apply the proceeds to conservation outputs elsewhere in the locality.

14.5.12 Land Management

Some scenic reserves within this district have been named by 'number' e.g. number 3,4 and 5 Scenic Reserves. This may create problems of identification, public awareness and management.

14.6 CHECKLIST OF KEY ISSUES

- Lack of biological information on natural areas on private land (PNAP).
- The need to protect native forest on private land.
- To name unnamed scenic reserves.
- Consultation on allocation of cultural materials.
- Consultation with Tangata Whenua over historic place management.
- Illegal taking of kereru.
- Impact of possums, goats and domestic livestock.
- Unlicensed grazing by stock.
- Commercial milling of exotic timber resources.
- Marginal strip management.
- Whanganui River minimum flows and Water Conservation Order.
- Silt and sediment inflows that degrade rivers.
- The need for public awareness of riparian and forest management.

14.7 MANAGEMENT OBJECTIVES

14.7.1 Land Management

PNAP

(i) To improve knowledge of natural areas on private land by undertaking a PNAP survey of the district, in conjunction with Waikato Conservancy.

Legal Protection of Land

(ii) Promote the protection of remaining privately owned areas of native forest, especially kahikatea and totara remnant forest.

Land Administration

(iii) To achieve better recognition of those reserves currently known by numbers, through official naming following consultation with Tangata Whenua and the New Zealand Geographic Board where necessary.

(iv) To assess the preferred management of grazed areas with recreational potential.

14.7.2 Kaupapa Atawhai

(i) To recognise the mana of Tangata Whenua by:

- creating opportunities for co-operation that arise from projects which focus on a bi-cultural conservation ethic and recreational value
- sharing information that will benefit both the Department and Tangata Whenua conservation goals
- holding hui which contribute toward a better understanding of river kaitiakitanga and other matters involving traditional and cultural use on waterways
- acknowledging Hapu and Iwi fisheries
- taking into consideration Tangata Whenua practices involving the use of customary materials.

(ii) The Department will, in carrying out its management functions over any reserve which includes part of the Whanganui River, have regard to the spiritual, historic and cultural significance of the river to the Whanganui Tangata Whenua.

14.7.3 Native Species Protection

(i) To raise public awareness of the factors which have led to the decline of kereru populations in the district through displays, media and community group discussion.

(ii) To reduce the illegal harvest of kereru through:

- identifying areas particularly targeted by poachers
- implementing a compliance and law enforcement operation.

(iii) To control, where necessary and practicable, animal threats and predators of native species in acccordance with national or local species recovery plans.

14.7.4 Threats

Animal

(i) Minimise the impact of possums on ecological values in those forest areas receiving sustained control such as part of the Whanganui National Park above Whakahoro, Tapui, Rotokahu, Wall and Kokakonui Scenic Reserves, Hunua and Waireka Conservation Areas, and identify further areas for expansion of control through:

- implementation of long term control plans
- further ecological investigation of areas of the district not well known
- co-operation with regional council possum control programmes and consultation with the councils
- development of community support and understanding for animal control measures undertaken to protect remaining areas of forest remnants.

(ii) Minimise the impact of goats on ecological values of those forest areas receiving sustained control and identify further areas for expansion of control through:

- ongoing intensive hunting programmes to keep goat densities at acceptable levels
- further ecological investigation of areas of the district not well known
- investigating alternative control methods and strategies by involvement in research programmes and trials.

(iii) Monitor the ecological impacts of wild animals which are not currently the focus of Departmental control programmes and control if necessary and practicable.

Domestic stock

(iv) To exclude domestic stock from Whanganui National Park and other important areas, especially riparian strips through:

- a programme of fencing key boundaries and the maintenance of these fences
- the use of the provisions of the Fencing Act 1978, Impounding Act 1955 and/or the stock trespass provisions of the National Parks Act 1980, Conservation Act 1987 or the Reserves Act 1977
- making the public aware of the need to keep stock out of these areas.

Weeds

(v) To control, and where possible, eradicate invasive weeds of natural areas in the district through:

- maintaining weed control in key sites which the Department administers, especially weeds of riverbanks such as willows and Japanese walnut along the Whanganui River and shrub invaders such as barberry in Neilsons Conservation Area
- advocating weed control to territorial authorities, landholders and the wider community for weeds which are known to be threats of natural areas
- research into the impact and control of shrub weeds, especially Himalayan honeysuckle.

14.7.5 Historic Places

(i) To establish and maintain a close and regular relationship with Tangata Whenua in the management and understanding of historic places associated with the Whanganui River, including gaining the support of Tangata Whenua to management decisions that could impact upon known sites.

(ii) To add the Aukopae Road Tunnel to the adjoining Tunnel Hill Scenic Reserve.

14.7.6 Recreation

(i) To protect and enhance recreation opportunities in the district by:

- providing and maintaining facilities for day visitors and river users at Ohinepana and Whakahoro
- providing and maintaining overnight facilities for the use of canoeists and jetboaters as part of the Whanganui Journey Hut and Camp Pass system
- providing facilities for day visitors, including short walks, at road accessible locations
- providing information and interpretation at suitable locations for visitors to Whanganui National Park.

14.7.7 Commercial (Non-Recreation) Activity

(i) To realise the economic value of the exotic timber resource in Sunshine Conservation Area through:

- investigation of the commercial feasibility of milling this resource
- applying the proceeds from any sale of the timber to restoration of the area and to priority management activity in the locality.

(ii) To require the restoration, using appropriate native species, of any land milled and the involvement of the miller, as may be specified in the restoration work.

(iii) To control grazing of unlicensed areas by fencing, retirement or licensing.

14.7.8 Freshwater

(i) To seek to maintain the minimum flow confirmed for the Whanganui River by the 1992 decision of the High Court.

(ii) To promote land management which will maintain high values in headwater catchment areas.

(iii) To promote land management (e.g. riparian retirement and planting) which will enhance degraded river sections.

Cross Reference
See Sec 44.2.2.(a)

(iv) To seek restoration and protection of the Whanganui River and its tributaries through:

See Sec 11.5.4

- supporting the Royal Forest and Bird Protection Society application for a Water Conservation Order over the Whanganui River
- advocating water quality suitable for contact recreation and the protection of intrinsic values and ecological diversity
- riparian protection
- water and soil conservation measures in regional and district plans.

14.7.9 Advocacy

(i) To promote landscape protection measures for the Whanganui River Valley through regional and district plans.

(ii) To promote the protection of riparian vegetation particularly along the Whanganui, Retaruke and Ohura Rivers.

14.7.10 Cross Boundary Issues

(i) To liaise with the Waikato and Tongariro/Taupo Conservancies on cross-boundary issues such as animal and weed control, natural area protection and the Water Conservation Order over the Whanganui River.

TREATY OF WAITANGI

15. Introduction

Cross Reference See Appendix 2 for definition of Tangata Whenua

The Department administers the areas and resources in its care for all the people of New Zealand. It is bound by Section 4 of the Conservation Act 1987 to give effect to the principles of the Treaty of Waitangi. This affects the activities of the Department in many ways but particularly in the need for regular consultation with the Tangata Whenua who are the traditional kaitiaki. Only through building a close relationship with Maori at a local level can the areas of mutual concern be identified. The challenge is one of finding a common ethic, of meeting Maori aspirations within the legal constraints under which the Department operates.

The Kaupapa Atawhai networks that were established in the early 90s are an important foundation for this work. Consultation has been a much used word of the last few years when networks were being established. Now there is an emphasis on co-operation and consensus as both Treaty partners endeavour to find the common ground upon which joint ventures and co-operative projects can take place and Maori perspectives can be integrated into the work of the Department.

The Department's obligation to give effect to the principles of the Treaty of Waitangi has important implications for traditional sites such as Wahi Tapu (sacred places). Consultation with Tangata Whenua over management of such sites will be critical. In some instances it may be appropriate for Tangata Whenua alone to hold detailed information about the location and historical significance of a place and/or to oversee its management.

The Kaupapa Atawhai Manager has to interface with Tangata Whenua in what has become an information exchange role. However, there is also a need to develop mediation, negotiation and advocacy skills which are becoming an occupational requirement.

16. Treaty Obligations

Effective consultation and relationships with Tangata Whenua are essential for satisfactory outcomes in dealing with Treaty obligations. The challenge will be to find enough common ground for the goals and aspirations of both parties to be met. This will then allow consultation to continue with mutual goodwill and reasonable expectations.

Section 4 of the Conservation Act 1987 states that '. . . the Act shall be so interpreted and administered as to give effect to the principles of the Treaty of Waitangi . . .'. This requires the Department to have recognition of the Crown's principle of partnership with Tangata Whenua in all its management responsibilities. In order to carry out its statutory obligations, the Department cannot treat Maori as just another interest group. Their status, as people who hold traditional rights and authority over ancestral lands, water and other taonga, is acknowledged in legislation and requires that their values are respected and upheld.

The courts and the Waitangi Tribunal have outlined in detail the Treaty obligations of both parties. These include the right of the Crown to make laws in exchange for the obligation to protect Maori interests, the obligation of the Crown to recognise tribal rangatiratanga and customary authority over their own resources and finally the obligation that an implied partnership is not merely passive, but extends to an active protection of Maori interests. This is an evolving area of law and practice. A set of the principles of the Treaty are outlined in Appendix 1.

Effective co-operation with Tangata Whenua will achieve mutually beneficial conservation outcomes along with the integration of Maori perspectives into the work of the Department. This could include such things as partnership strategies with Tangata Whenua, projects which enhance relationships, and the identification and protection of Tangata Whenua taonga.

16.1 Objectives

(i) To assist with settlement of claims under the Treaty of Waitangi as required by Government, directed by Head Office, and in liaison with Tangata Whenua and Crown agencies.

(ii) To develop effective relationships with Tangata Whenua which enable Treaty obligations to be dealt with in a practical, reciprocal and progressive way.

(iii) To establish, maintain and enhance effective co-operation with Tangata Whenua in the protection and management of natural and historic resources and open and free dialogue in the Conservancy on all aspects of conservation work.

(iv) To give effect to the principles of the Treaty, recognising the principle of co-operation and integrating the concept of Kaitiakitanga into conservation policies and practices.

16.2 Explanation

The Department is bound by government decisions on Treaty claim settlements and needs to facilitate the process in a positive manner. There are currently six claims directly affecting land administered by the Department in Taranaki and large areas of inland Wanganui. Others may follow.

Part of the Department's obligation under the Treaty is to build co-operation with Tangata Whenua. This entails encouraging Tangata Whenua to take an effective role. It requires a recognition and understanding of Maori values and their inclusion in conservation policies and practices.

Tangata Whenua have often asked the Department to help with resource issues of concern to them. The Department will assist Tangata Whenua, as resources permit, to gain knowledge and understanding so they may have input into resource management processes.

The Department's Treaty obligations should be undertaken in such a way that they meet Tangata Whenua needs under the Treaty. Where they cannot be met, there should be a willingness to work through issues and arrive at a consensus.

16.3 Implementation

(i) *Provide timely and high quality advice to the Director General, the Minister of Conservation and the Crown on specific Treaty of Waitangi issues.*

(ii) *Respond to Crown instructions regarding implementation of the findings of the Waitangi Tribunal.*

(iii) *Incorporate Treaty perspectives and principles into all the Conservancy's work and train staff to facilitate this.*

(iv) *Work with Tangata Whenua and Crown agencies to assist in resolving any claims, including conservation issues, through the Waitangi Tribunal mediation process.*

(v) *Increase staff awareness of the historical context of the Treaty of Waitangi and the principles of the Treaty of Waitangi.*

(vi) *Consult with claimants over conservation management of affected areas.*

16.4 Outcomes

- A greater awareness amongst Conservancy staff of Treaty obligations and mutual co-operation and understanding between Tangata Whenua and the Department.
- An understanding of Tangata Whenua conservation values and a shared conservation ethic.
- Greater public awareness of the implications of the Treaty for conservation management.

Cross Reference
See Sec. 17

- By understanding the nature of past grievances and contributing to their resolution, the Department will be better equipped to ensure future grievances are avoided.

17. Kaupapa Atawhai

Developing a co-operative relationship with Tangata Whenua in the management of natural, historic and recreational values on land administered by the Department has been given a high priority in the Conservancy. Bringing Maori conservation values and principles into the Department's policies and planning requires both parties to be adequately prepared so that the content, intention and outcome of the proposals are clearly understood.

17.1 Objectives

(i) To develop effective co-operation between the Department and Tangata Whenua in the protection and management of natural and historic resources administered by the Department.

(ii) To integrate the Kaupapa Atawhai functions into all aspects of the Department's work.

(iii) To strengthen conservation achievement by drawing on the cultural values of Tangata Whenua and Pakeha in the management of natural and historic resources.

(iv) To ensure there is open and effective communication with Tangata Whenua about conservation issues.

17.2 Explanation

As part of its response to the Treaty of Waitangi, the Department established the Kaupapa Atawhai network within its structure for the purpose of:

- Identifying the extent of Tangata Whenua interest in natural and historic resources the Department administers, through monitoring and participating in Treaty of Waitangi claim resolution processes and developing partnership perspectives with Tangata Whenua in the management of natural, historic and recreation values.
- Identifying Tangata Whenua conservation principles and practices through processes of consultation with Tangata Whenua and incorporating these successfully into conservation management.

Given the current pressure on Tangata Whenua resources to respond to consultation with central and local government, it may be helpful if Tangata Whenua identify priority issues which the Department should address first. More particularly, the identification of Tangata Whenua conservation values will enable the active participation of Maori in conservation management in the Conservancy.

There will be an early need to establish an agreement between the Department and Tangata Whenua to work co-operatively towards sharing information and developing appropriate strategies for applying this in conservation management in Wanganui Conservancy.

Kaupapa Atawhai work has required the development of extensive Whanau, Hapu and Iwi networks as well as connections with non-government organisations

(NGOs) and local, regional and territorial authorities. These networks have been firmly established and form an important part of the consultation process. They help to facilitate the Department's communication with Tangata Whenua.

Staff training and awareness work, along with co-operative projects, continue to be important. Because such work has a significant impact on the promotion of goodwill with Tangata Whenua, the importance of that work will grow. Field centre staff in particular will undertake specific staff training in tikanga and cultural orientation because of their frequent contact with Tangata Whenua.

A current move is to integrate Kaupapa Atawhai work with all functions of the Department so that the Maori perspective is reflected in all our work.

17.3 Implementation

(i) Identify areas of importance to Tangata Whenua which are administered by the Department and develop successful strategies in consultation with Tangata Whenua.

(ii) Increase staff awareness of the history and cultural values of the Tangata Whenua of the Conservancy through training workshops, so that staff will be able to undertake the kind of consultation that leads to co-operation and shared outcomes.

(iii) Increase Tangata Whenua awareness of the Department's objectives, policies and activities so that they can appreciate how the work of the Department can complement and enhance their own conservation objectives.

(iv) Work with Tangata Whenua regarding the implementation of this CMS and conservation issues generally in their rohe.

(v) Ensure that consultation with Tangata Whenua on conservation issues is early, on-going, informed and effective.

(vi) Negotiate with Tangata Whenua to establish a collective forum to advise the Department on the implementation of this CMS where issues are pan tribal.

(vii) Explore with Tangata Whenua the means whereby customary conservation practices (e.g. Rahui) may be used and supported to achieve shared conservation goals.

(viii) Public awareness will be used to assist the Kaupapa Atawhai Manager to promote the benefits of effective co-operation with Tangata Whenua in the protection and management of natural and historic resources.

(ix) Work towards agreement on the exercise of Kaitiakitanga with Tangata Whenua and define responsibilities.

(x) Facilitate dialogue by assisting Tangata Whenua to gain the skills and understanding of issues in order to become more involved in conservation management.

(xi) Establish and maintain a Tangata Whenua network for consultation through the Kaupapa Atawhai Manager and develop a framework to enable the Department and Tangata Whenua to

consult with confidence. Consultation will be carried out primarily by the staff concerned with a particular issue, and wherever possible will occur on a 'face to face' basis.

(xii) Endeavour to meet Tangata Whenua in their area at times convenient to them.

(xiii) Involve conservation board members in Tangata Whenua concerns.

(xiv) Seek Tangata Whenua views on all relevant planning matters.

(xv) Consult with Tangata Whenua so that:

- *needs concerning traditional materials are considered*
- *practices involving customary use are considered by the Department*
- *Hapu and Iwi plans can be integrated into wider conservation management in the Conservancy.*

(xvi) Integrate Maori and Pakeha concepts of conservation into management plans and policies.

17.4 Outcomes

- An understanding of Maori conservation values and a bicultural conservation ethic.
- A mutual acceptance of conservation objectives and implementation, co-operation on matters of mutual concern and the use of Tangata Whenua values and perspectives to achieve conservation objectives.
- Tangible progress in solving conservation issues of mutual concern, where both parties accept responsibility for contributing to this progress.

18. Wahi Tapu

Wahi Tapu are taonga (treasures) of Tangata Whenua. They may include places, objects or landscape features which hold special spiritual, emotional or historical significance to particularTangata Whenua. Respect is necessary when enteringthese special places because of the tapu associated with them.

Wahi Tapu include:

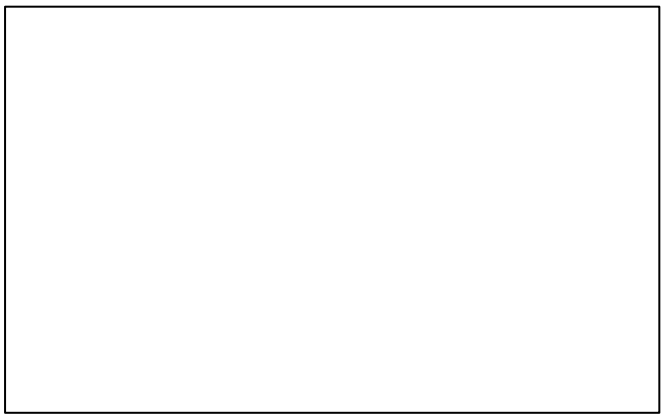
- burial grounds (urupa)
- places where important people lived or significant events took place
- areas where tapu activity took place
- the realm of a kaitiaki
- specific mountains and rivers.

18.1 Objectives

(i) To develop a greater awareness of the spiritual and cultural meaning of Wahi Tapu.

(ii) To respect the Tangata Whenua meaning of Wahi Tapu in conservation management work undertaken on land administered by the Department within the Conservancy.

18.2 Explanation



Kawau Pa Historic Reserve is an important Wahi Tapu on the North Taranaki coast.

Cross Reference See Sec 4.2,17 and 26.3

Traditional information about Wahi Tapu is often kept secret by the Tangata Whenua. The mana of Wahi Tapu is lost or diminished as a result of improper use of such information or activity which violates the tapu and is the cause of resentment by Tangata Whenua.

A written record of precise locations should not be necessary for the Conservancy's management purposes. However, generalised mapping at a broad scale would save both parties the time, expense and trouble of unnecessary consultation. Where Tangata Whenua are prepared to share information with the Department about their Wahi Tapu, the Department will ensure that it does not carry out, foster or authorise activities which violate their Tapu. Wahi Tapu sites on land administered by the Department will be registered under the Historic Places Act where Tangata Whenua agree on this action.

Where conflict arises over protection, use of and access to Wahi Tapu, goodwill and co-operation will be crucial to the resolution process. Adequate consultation and information sharing will be critical.

18.3 Implementation

(i) Adequate consultation and information sharing will be encouraged between the Department and Tangata Whenua.

(ii) Tangata Whenua participation will be sought when formulating policies for the protection and management of Wahi Tapu.

(iii) With the agreement of Tangata Whenua, Wahi Tapu sites will be registered under the Historic Places Act.

18.4 Outcome

- The meaning of Wahi Tapu is understood by the Department and reflected in all its conservation management work.

CONTENTS

PART C - FUNCTIONS

PART C

MANAGEMENT OF NATURAL AND HISTORIC RESOURCES

19 Introduction

These sections (19-28) of the CMS set out how the Department will conserve the range of natural and historic values in the Conservancy. This includes native plants and animals, special habitats and historic places. It deals with:

- identifying and protecting land and marine habitats
- active management of threatened species and communities
- active conservation of special places of historic value
- the role of research, survey and monitoring in management.

Management of these resources must be justifiable and well planned. Tools such as the Protected Natural Areas Programme (PNAP) and species recovery plans, play key roles in directing the Department's strategic approach. In order to optimise benefits, all protection work will be guided by accepted strategies.

A number of terrestrial ecosystem types remain under-represented on land administered by the Department. Their identification via the PNAP has been an ongoing task. The survey programme will continue as a priority. The eventual aim is to complete a PNAP evaluation for all ecological districts and regions in the Conservancy.

Cross Reference
See Sec 20.1

Implementation of survey results, though largely reliant on available finance, is becoming increasingly important as surveys are completed. The focus will be on achieving protection of under-represented land in coastal, riparian and lowland areas. Other land protection initiatives will be pursued where the benefits to conservation are high and resources, such as the Forest Heritage Fund, are available.

There is a significant length of coastline in the Conservancy. The protection of representative habitats in the coastal and marine area is a priority. This will be achieved through Conservancy proposals or by supporting concepts for protection from other groups.

See sec 21

There is now a strategic direction for the management of historic places on land administered by the Department. It will be a priority to address gaps in knowledge, increase awareness and undertake assessments of specific historic places of value through development of a protection plan.

See Sec 24

There is a small number of nationally threatened bird species in the Conservancy. Emphasis will be given to ongoing protection of two of these species: North Island brown kiwi and blue duck. National recovery plans provide the direction for these species. Management of other bird species will follow national priorities and Conservancy initiatives (e.g. New Zealand pigeon and mainland petrel colonies).

See Sec 22

For species other than birds, the strategy for protection will similarly be based on the national recovery priorities. This will involve species of lizards, bats, insects,

freshwater fish, marine mammals and native plants. Work will be directed toward gaining knowledge of the health of these populations and protection of their habitat.

A long term goal is to maintain healthy populations of threatened species in their natural environment. This also requires care of the habitat itself. Management will need to acknowledge that maintenance of these values should not depend upon continual human intervention. In the short term, species may be subject to intensive management (e.g. captive rearing, island refuges, propagation). These actions, however, need only be done in the context of a longer term strategy in which the species is restored to its natural range.

Substantial areas of natural habitat will only be maintained through plant and animal control. Successfully managing plant and animal threats will be a key part of protection work. The sections on animal and plant pests therefore need to be read in conjunction with this section. Enforcement is an equally important facet of species and habitat protection work. Resources will be allocated to ensure compliance with legislation.

Cross Reference
See Secs 28, 31 and 32

No protective effort can be successful in the absence of good information. Research, survey and monitoring are all identified as key parts of any protection programme and will be provided for. Neither can protection effort be sustained in the absence of public support. Public support for protection of important resources will be enhanced with greater public awareness of their values and threats along with the management which is required to protect those values.

See Sec 26

20. Land Management

Land management requires effort over a broad range of statutory functions. Activities within and between these varying work areas have to be rigorously prioritised to ensure that resources are directed to achieve the best results for conservation.

The formal protection of under represented habitats has the highest priority, followed by other habitat conservation initiatives. Land exchange, where it specifically contributes to the protection of important habitats, will also be given high priority.

Other related activities, such as the general disposal and exchange of land, review of protected status, and assessing appropriate management agencies for protected areas, all have secondary priority. Within these activities, the focus will be on work which will result in the best benefit to conservation (e.g. reclassification of reserve land to provide stronger recognition and management of the values present).

General land administration by the Department is largely in response to statutory applications under the acts which it administers, or has a consent role. The priority is for this work to be dealt with efficiently and within reasonable time frames. This work will sometimes impact on the resources allocated to habitat protection work.

20.1 IDENTIFICATION OF NATURAL AREAS FOR PROTECTION

Many types of native vegetation and landscape in the Conservancy are protected within national parks or reserves. Much of this is steep high altitude land which has low potential for farming. Conversely, lowland forests, on coastal and easy country, wetlands, riparian areas and dunes are types of natural areas which are greatly depleted. Remaining sites often have little or no protection.

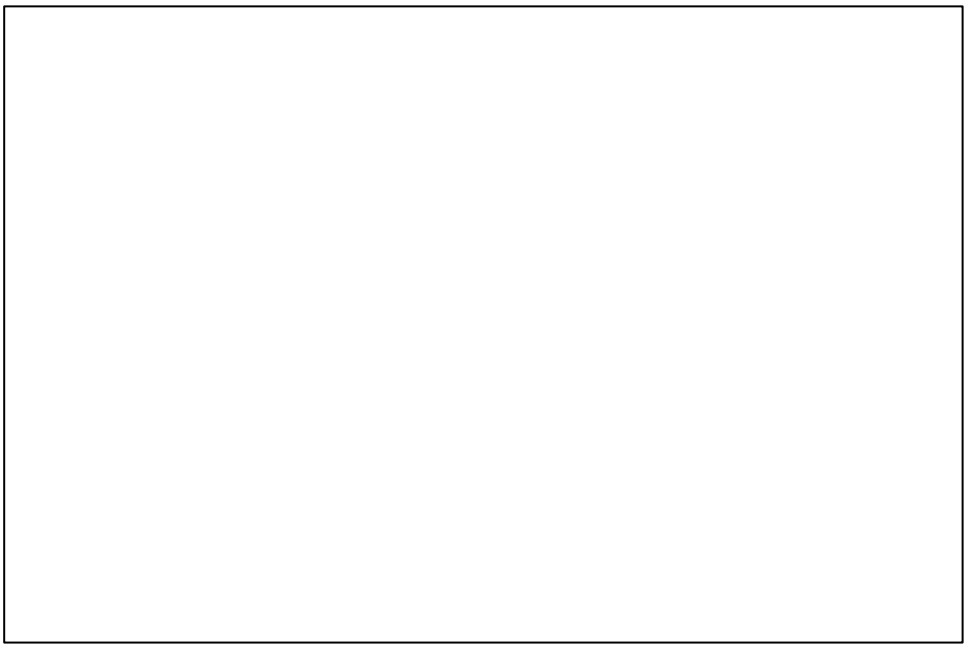
Better protection for these areas needs to be sought, especially where they are sparsely represented in land currently administered by the Department.

The Protected Natural Areas Programme (PNAP) was set up in 1983 to systematically survey New Zealand to identify representative examples of each class of natural ecosystem in each of the 268 ecological districts. Its task is to identify the full range of natural ecosystems and landscapes which gives New Zealand its recognisable character. When the best representative examples of each type are found, they become the priority areas for protection.

The PNAP is not the only means of identifying land worthy of protection. Other data sources such as Sites of Special Wildlife Interest (SSWI), Wetlands of Ecological and Representative Importance (WERI) and the Coastal Resource Inventory (CRI) all provide valuable information used in identifying important sites.

20.1.1 Objective

To identify important natural areas not yet protected in the Conservancy.



Remnants of forest in farmland are assessed during Protected Natural Area Programme (PNAP) surveys.

20.1.2 Explanation

The Conservancy contains all or part of 13 ecological districts, including substantial parts of eight (Figure 5). Each district exhibits its own particular combination of features (human, climatic, landform and vegetation). The PNAP involves field survey of each district, followed by publication of a report which identifies the natural areas that together best represent the full range of ecological diversity in the district. These are referred to as Recommended Areas for Protection (RAPs).

In 1996, eight of the districts will have published reports. The recommendations in these reports already form the basis of an active protection programme. The strategic approach to this work, and how priorities for action are determined, are addressed in the following section.

Cross Reference See Sec 20.2

An advantage of the PNAP is its ability to recognise ecosystem types which have little protection. The Department will continue to use this programme to guide the use of resources to protect these areas. Figure 17 outlines the survey programme for the remaining ecological districts.

Full field survey has been used for the completed reports. This approach, however, may not be essential in all the remaining five districts. Where a district has a high percentage of natural areas already protected, a field reconnaissance may be all that is required.

The PNAP provides a good understanding of each ecological district, though it does not cover all values (e.g. terrestrial and aquatic fauna). While the PNAP will be the main ongoing programme, the contribution of other data (e.g. WERI and SSWI) will continue to be acknowledged in the protection process. This may be specially so where important unprotected habitat is identified. These data will need to be regularly updated to ensure they remain valid.

Improved knowledge of natural values within the Conservancy will allow a better response to public concerns involving unprotected areas under threat, and recognition of such areas in district plans. The rigorous and thorough basis of PNAP work is a strength in this respect.

Commitment to the programme recognises that there are many ecosystems poorly represented in existing protected areas. Allocation of resources to this work is therefore at least equal in importance to managing land already administered by the Department.

FIGURE 17: PNAP SURVEY PRIORITIES

ECOLOGICAL DISTRICT	TOTAL AREA	% AREA IN CONSERVANCY	PRIORITY
Egmont	270,300	100	Completed
North Taranaki	257,500	85	Completed
Foxton	105,000	73	Completed
Moawhango	139,500	69	Completed
Woodville	98,500	1	Completed
Rangitikei	407,800	98	Completed
Manawatu Plains	312,300	92	Completed
Taumarunui	241,500	53	High
Matemateaonga	544,000	99	Completed
Tongariro	212,500	12	High
Manawatu Gorge - North	35,500	1	Low
Manawatu Gorge - South	52,500	21	Medium
Ruahine	139,500	9	Medium

High Priority:	1 to 3 years
Medium Priority:	2 to 5 years
Low Priority:	5 to 10 years

20.1.3 Implementation

(i) Complete the survey phase of the PNAP for the Taumarunui Ecological District.

(ii) Encourage and assist adjoining Conservancies in completing PNAP reports for districts which have small areas of overlap in the Wanganui Conservancy (Tongariro, Ruahine and Manawatu Gorge North and Manawatu Gorge South districts).

(iii) Regularly update WERI, SSWI and CRI as supporting data for protection initiatives.

(iv) Give urgency to implementing the recommendations from the published reports.

(v) Use results from all PNAP to advocate the protection of important natural areas through district and regional plans and for resource consent applications which may impact on these areas.

(vi) Maintain ongoing consultation with landowners and Tangata Whenua in all aspects of PNAP.

20.1.4 Outcome

- *Important ecosystem types within the Conservancy will be protected.*

20.2 LEGAL PROTECTION OF LAND

While much of the Conservancy's diverse natural and cultural environment is protected, there are many important areas yet to be protected. Seeking legal protection for these areas and formally adding them to the protected areas network will be a priority for the Conservancy.

Protection can be achieved in a variety of ways to meet the situation and level of protection desired. Statutes administered by the Department which provide opportunities for legal protection include the Reserves Act 1977, Conservation Act 1987, National Parks Act 1980 and the Wildlife Act 1953. The first three statutes can include foreshore, but cannot be used to protect seabed.

Other acts like the Resource Management Act 1991 and Te Ture Whenua Maori Act 1993 can be used to control land use that may impact on identified natural and historic values. The Resource Management Act also provides a means of protecting land, and in particular riparian areas, through regional or district plans, designations and heritage orders. This can, however, impose an additional cost on the Department.

The purchase of land, covenants, land exchange and gifting of land are all means by which the Department can bring important natural areas into the protected areas network.

Considerable resources are often required to achieve legal protection. The Department is unable to protect all areas worthy of protection. It is therefore important to identify those areas which have the highest priority and to work closely with associates such as the Queen Elizabeth II National Trust. Section 20.1 of this CMS discusses the processes used to identify and recommend land for protection in the Protected Natural Areas Programme(PNAP).

(a) Identification of areas

The PNAP is the main, but not the sole, means of identifying areas for protection and deciding priorities for allocating and seeking funds. While this can be seen as a proactive step toward achieving legal protection of land, other protection work is generated as opportunities arise. Landowners sometimes directly approach the Department to protect natural features on their property. If little or nothing is known about such areas, an ecological assessment is required first to gauge the area's significance.

(b) Legal protection

Land which is acquired by gifting, exchange or purchase is added to the protected natural areas network and can be identified for a particular purpose. The purpose of protected areas classification is to ensure appropriate control and management.

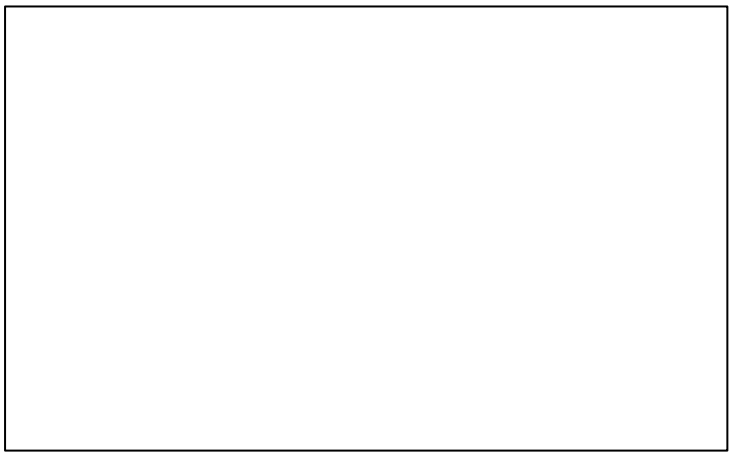
Conversely, protection of natural and historic values on land in which the Department has an interest, but which is retained in private ownership, involves the establishment of some form of protective management regime over the land

Cross Reference
See Sec 20.3

(e.g. conservation covenants, protected private land agreements, management agreements and leases).

(c) Funding

Funds to assist protection are held at a national level. This ensures available financial resources are directed to the highest priority protection needs in New Zealand.



Some lake margins in the upper Moumahaki Stream catchment were recommended for protection following PNAP survey, not only for the unusual vegetation but also to protect the lake's natural values.

The protection of forest ecosystems is targeted by the Forest Heritage Fund (FHF) and the Nga Whenua Rahui (NWR), which although serviced by the Department, report independently to the Minister of Conservation. The FHF is nationally contestable and applicants include the Department, Tangata Whenua, landowners, local authorities, other government departments and public organisations. Nga Whenua Rahui has been established to facilitate the voluntary protection of indigenous forest on Maori-owned land. Funds are allocated to cover initial purchase, fencing, survey and legal costs but are not generally available for ongoing maintenance of the areas protected. Non-forest ecosystems can be protected through the Department's Land Acquisition Fund (LAF) and NWR.

(d) Other protection methods

Other mechanisms exist for the protection of land such as encouraging local authorities to offer financial incentives such as rate relief where land with natural or historic values has been voluntarily protected or enhanced by the occupier.

The Queen Elizabeth II National Trust was set up under its own Act in 1977 with the objective of encouraging the protection, preservation and enhancement of open space on private land. Wetlands, streams, lakes, forest remnants, archaeological and geological features, coastline and rural landscapes can all be protected by open space covenants with the National Trust.

The National Trust is an independent organisation that offers landowners an alternative to dealing with a government department.

20.2.1 Objective

To provide effective legal protection for areas of important natural or historic value, by the most appropriate and cost-effective method.

20.2.2 Explanation

As funds are limited, it is not possible to legally protect all of the areas offered or identified. All approaches made by landowners to secure protection over their land are vetted and prioritised. This aims to select those areas that possess the best natural, cultural or historic values. Priority is based on:

- the importance of values in the area
- the threats to those values
- the practical opportunities for protection
- the linkage with land administered by the Department, particularly the Conservancy's two national parks and the conservation land and reserves in North Taranaki.

It is difficult to rank areas for priority protection because the PNAP identifies the best representative samples of each ecosystem type. Because of this, there is a need to constantly evaluate what should be protected using the criteria listed above. This will indicate which areas are given immediate attention. In general, habitats identified through formal survey programmes, such as PNAP, will have priority for action over other areas.

Allocation of funds is determined by national priorities which are based on established ecological and economic criteria. The guiding principle in approving funding is to give value for money. Methods other than outright purchase are preferred wherever possible. Compulsory protection through the use of heritage orders and designations will be used only in exceptional circumstances.

Generally, applications for funds are favoured where there:

- are high natural and historic values
- is landowner or third party (local authority/conservation group) assistance e.g. contribution towards costs
- is proof of ability to manage the land in perpetuity.

Implementation of legal protection often depends on the co-operation and willingness of the landowner. Many landowners look to the Department for the outright purchase of land because of prevailing economic conditions. Others are reluctant to negotiate voluntary protection because of the associated high costs or because they do not see any benefits. Some prefer dealing with bodies independent of the Crown, such as the Queen Elizabeth the Second [QE II] National Trust.

Cross Reference
See Sec 44.1

The Department can promote riparian protection through both its statutory and advocacy roles under the Resource Management Act. Effective protection of riparian areas via the legislation will be sought where it will contribute to the protection of natural values and enable public access to, and use of waterways, lakes and the coast.

See Sec 20.4

Proposals involving the exchange of land will be undertaken only where there will be a benefit to conservation. Complex procedures for the exchange of land administered by the Department for private land, means exchanges must be carefully assessed.

Protection achievements within the Conservancy (including acquistions, gifting, exchanges, conservation covenants and PPLs) are identified in Figure 18. Of primary importance to the Conservancy is implementation of the PNAP. The identification of 'Other Land Protected' in Figure 18 includes land not identified in the PNAP, but which has been afforded protection because of high natural and historic values.

FIGURE 18: PROTECTION ACHIEVEMENTS - WANGANUI CONSERVANCY

ECOLOGICAL DISTRICT	NUMBER OF RAP'S IDENTIFIED WITHIN THE CONSERVANCY	NUMBER (AND AREA) OF RAP'S PROTECTED	OTHER LAND (AND AREA) PROTECTED
Foxton	29	0	2 (22 ha)
Manawatu Plains	17 *(1)	0	3 (36 ha)
Rangitikei	54 *(2)	0	3 (46 ha)
Moawhango	6	0	0
Matemateaonga	5 *(3)	0	17 (898 ha)
Egmont	50	14 (329 ha)	6 (18.6 ha)
North Taranaki	20	5 (3,703 ha)	9 (9543.5 ha)
Taumarunui	0	0	2 (46.5 ha)
Woodville	0	0	0
Tongariro	0	0	0
Manawatu Gorge - North	0	0	0
Manawatu Gorge - South	0	0	0
Ruahine	0	0	0
TOTAL	179	19 (4,032 ha)	42 (10,610.6 ha)

(As at April 1997)

NOTE:

*1. Cross Reference: See sec 8.5.2

*2. Cross Reference: See Sec 9.5.2

*3. Cross Reference: See Sec 11.5.2

4. Other Land does not include marginal strips.

20.2.3 Implementation

(i) Assess land protection proposals against national priorities, the significance of the values present and the conservation gains which could be achieved.

(ii) Give specific priority to implementing PNAP recommendations, and those arising from other survey work when the habitat is highly valued and under immediate threat.

(iii) Ensure that the most appropriate statutory mechanisms are applied to the protection of areas possessing important natural or historic values.

(iv) Seek to meet the costs of protection, including fencing, survey, legal fees through the most appropriate source (e.g. FHF, LAF, NWR).

(v) Maintain close liaison with other relevant protection agencies (e.g. QEII Trust).

(vi) Stimulate local community involvement in the establishment and management of protected areas through active discussion and information sharing.

(vii) Use processes under the Resource Management Act to seek controls in district and regional plans over activities that could affect outstanding natural features, areas of significant indigenous vegetation or significant habitats of native species.

(viii) Advocate through the Resource Management Act for the protection of land of high natural, historic or recreation value which borders the coast, lakes or rivers.

(ix) Advocate through the Resource Management Act for the protection of habitats under threat, such as wetlands.

(x) Advocate to local authorities the use of financial incentives for the owners of private protected land possessing important natural or historic values.

20.2.4 Outcomes

- The protected areas network within the Conservancy will be enhanced with the addition of further areas containing important natural and historic values.
- Increased community awareness of and direct participation in the protection of areas containing important natural or historic values.
- No further loss of important natural areas within the Conservancy.

20.3 CLASSIFICATION OF LAND ADMINISTERED BY THE DEPARTMENT

The Conservancy's protected natural areas network is administered and managed under a variety of statutes and includes national parks, reserves and conservation areas.

The Reserves, Conservation and Wildlife Acts provide for the classification of protected areas for different purposes and management objectives. The protection of natural and historic values is the primary management focus in most instances. Other management objectives range from strict preservation of ecosystems or species, to extensive human modification, recreation or other specific purposes. These categories can sometimes be confusing, making consistent management of these areas difficult.

Classification or status change generally requires public advertising and gazettal, but the process varies under each Act. Actively reviewing the status of land the Department administers can be a lengthy and complex process which must be justified.

20.3.1 Objective

To review, where appropriate, the status and classification of land administered by the Department to achieve the best legal and administrative framework for the protection or management of natural and historic values.

20.3.2 Explanation

When the Department was established in 1987, it assumed responsibility for areas managed by the former departments under the Reserves Act, and National Parks Act and Wildlife Act. Under the Conservation Act, the Department is responsible for former Crown land and State Forest that was allocated because of its natural and historic values. These areas are now deemed to be held for 'Conservation Purposes' and, in most cases, await formal setting apart under the Conservation Act.

FIGURE 19: LAND CLASSIFICATION - WANGANUI CONSERVANCY

AREA CLASSIFICATIONS	NUMBER	TOTAL
National Park	2	108,084.5467 ha
Conservation Areas:		
Stewardship	272	162,946.1465 ha
Marginal Strip	84	546.5527 ha
Conservation Park	1	746.0277 ha
Sanctuary Area	3	2,356.9489 ha
Land for Administration Purposes	1	0.2738 ha
Recreation Reserve	44	1,287.5228 ha
Scenic Reserve	220	22,837.7461 ha
Growth and Preservation of Timber	5	361.7194 ha
Historic Reserve	20	66.3780 ha
Scientific Reserve	6	361.2941 ha
Local Purpose Reserve	47	111.1415 ha
Government Purpose Reserve	4	44.7263 ha
Wildlife Management Reserve	4	139.7687 ha
TOTAL	713	299,890.7932 ha
LAND AREAS WHERE THE DEPARTMENT HAS AN ADMINISTRATIVE ROLE		
Wildlife Refuge *	4	251.5694 ha
Protected Private Land Agreements *	12	166.3284 ha
Conservation Covenants *	29	629.8147 ha
TOTAL	45	1,047.7125 ha

Footnote:

1 This figure does not identify reserves where administration has been vested in a local authority.
2. A number of reserves have yet to be formally classified under the Reserves Act 1977.
3. * While the Department has an administrative role for these areas, it may not have any active management responsibilities.

Each of the above Acts provides for a variety of classifications, some of which have overlapping or similar purposes. The main classifications are summarised in Figure 19 above. The existing classifications and legal status of some areas in the Conservancy may not reflect or provide adequate protection for the values which exist.

At times it is necessary to review the purpose for which a particular piece of land is held. A change of purpose may better recognise a special value or assist in the management of an area. An example of this may be an assessment of land administered by the Department for addition to an adjoining national park.

Review and change of classification and legal status of land administered by the Department will take place when it would better:

- **recognise and protect the natural and historic values present**
- **recognise and protect the purpose for which the land is held**
- **provide for appropriate management, for example where access or activities need to be restricted to protect values.**

20.3.3 Implementation

(i) *Review the status and classification of land held under the Conservation Act (Stewardship areas in particular) and under the Reserves Act where there may be merit in applying a particular specially protected areas status or classification to reflect their natural and historic values.*

(ii) *Classify all new reserves upon acquisition based on the purposes for which they were acquired.*

(iii) *Investigate and implement additions of land administered by the Department to Egmont and Whanganui National Parks where such land meets the criteria specified in Policy 7 of the National Parks and Reserves Authority 'General Policy for National Parks'.*

Cross Reference
See Sec 11.5.1(a)

20.3.4 Outcome

- Land administered by the Department within the Conservancy will be appropriately classified so that management decisions reflect priority values.

20.4 DISPOSAL AND EXCHANGE OF LAND

Land the Department administers may become surplus and be identified for disposal or exchange in a number of circumstances:

- a rationalisation of land holdings and the need to focus management on areas with natural and historic values
- approaches from the public, particularly landowners who adjoin land administered by the Department, who may wish to purchase or exchange land
- administering agencies (such as territorial authorities) may seek to have protection removed to enable them to sell the land or acquire the freehold title for their own purposes

- the reserve or conservation area no longer has the qualities that initially led to its protection.

Both the Reserves and the Conservation Acts contain specific provisions to deal with the disposal and exchange of land. Disposal of land under these acts is a complex process, determined by the status of the land and its previous history. Disposal of most land is subject to public notification and consultation with appropriate Tangata Whenua. Consultation with the Crown's land disposal agent, Land Information New Zealand (LINZ), is also required. Because of these requirements, disposal is often a lengthy and expensive process, which may outweigh the benefits unless the additional costs can be recovered.

LINZ is responsible for the process of dealing with Crown lands identified as surplus. It needs to investigate the requirement to offer back properties to former owners under Section 40 of the Public Works Act 1981. This incurs an additional cost to land disposal work. A Cabinet decision relating to the disposal of Crown land after 1 July 1993 has led to the development of a mechanism to protect specific Maori claims to surplus Crown land. As a result, any land disposal or exchange initiated by the Department will generally pass through the Protection Mechanism for Maori Interests in surplus Crown land. The possible options will be for a property to be either returned to Tangata Whenua, placed in a landbank or be free for disposal on the open market. Planned disposal actions need to be considered in this context.

The Department must act strictly in accordance with the requirements of the legislation and current government instructions. Departmental Land Disposal Guidelines and Procedures set out the rationale, steps to identify surplus land and the procedures to be followed for its disposal.

Land exchanges involving stewardship areas require approval from the Minister of Conservation, following consultation with the relevant conservation board. An exchange proposal must enhance the values of land managed by the Department and promote the purposes of the Conservation Act. A similar rationale applies to the exchange of reserve land.

It is extremely unlikely that the need will arise to exclude land from either Egmont or Whanganui National Parks. Such an action would require an Act of Parliament.

Exchange of marginal strips for another strip of land may also be authorised by the Minister of Conservation, provided the exchange will better achieve the purposes of marginal strips.

20.4.1 Objectives

(i) To dispose of areas which do not contain existing or potential natural, historic and recreation values.

(ii) To promote the exchange of those areas with no identified values for land where protection is desirable.

(iii) To maximise the benefit to conservation in any disposal or exchange of surplus land.

20.4.2 Explanation

Most reserves and other land administered by the Department within the Conservancy possess high natural, historic and recreational values or have the potential to develop into important ecological areas. Disposal of such areas will generally not occur. Conversely, there is other land, for which the Department has a statutory responsibility (e.g. government and local purpose reserves) that have little or no natural or historic value and would be more appropriately used for other purposes. In addition, the interface between forest and pasture may not match legal boundaries. In these situations there may be scope to rationalise boundaries through land exchange.

Areas may no longer be considered suitable for the Department to retain for a number of reasons. These include:

- the destruction or loss of vegetation or other natural or historic features
- lack of any feature that would enhance the natural, historic or recreational values of adjacent land administered by the Department
- existing values can be adequately protected by other means, (e.g. conservation covenants, management agreements) or can be managed by other bodies or persons
- an exchange proposal offers a chance for a net benefit for natural and historic values.

Disposal or exchange of land will usually proceed only where there is a net benefit to natural and historic values from the sale proceeds, if there is an equality of exchange or if the exchange secures the protection of equal or greater values. Any sales revenue is generally directed into the Department Trust Accounts which is then used on a national basis to assist in the acquisition and formal protection of land with high natural and historic values. This ultimately has benefits for the management of the land the Department administers, in that resources can be directed into high value areas.

Proposals from applicants to purchase land administered by the Department, e.g. local authorities and adjoining landowners, will proceed only where they meet administrative costs and where there is a net benefit for natural or historic values. This is particularly so for land exchange where there can potentially be high costs to both parties for survey and fencing. Proposals for land exchange will also be assessed under protection of land criteria discussed in Section 20.2.

Some recreation or local purpose reserves may no longer fulfil the purpose for which they were created. In such circumstances, the removal of the protected status and subsequent disposal will be considered. Where title is derived from the Crown, LINZ will be directed to dispose of the land at market value and the proceeds will be directed to Departmental accounts. In other instances, where title reverts to the territorial authority, the authority will usually be required to direct proceeds from the sale to a reserve trust account for the benefit of other reserves it administers.

20.4.3 Implementation

(i) Assess land administered by the Department for disposal or exchange where:

- *land possesses no existing or potential natural, historic or recreation value*

- *a change of classification or purpose would have no benefit*
- *transfer of control to a more appropriate agency/person is promoted*
- *there is limited potential for restoration to native vegetation.*

(ii) Consider proposals for disposal or exchange of land only where a net benefit will result and where applicants will generally meet all related administrative costs.

(iii) Consult with relevant Tangata Whenua, conservation boards, regional fish and game councils and user groups where a disposal or exchange proposal may be of particular interest or concern.

(iv) Initiate the sale of land where areas are shown to have no existing or potential natural or historic value and are likely to be readily marketable.

(v) Direct LINZ, following reserve revocation and where title is derived from the Crown, to initiate Section 40 and the Protection Mechanism for Maori Interests in Surplus Crown land.

(vi) Consider alternatives to disposal, such as long-term leases where the land has no existing or potential natural or historic value and where sale of the land is economically impractical.

20.4.4 Outcome

- Benefits of all land disposal and exchanges will outweigh costs.

20.5 MANAGEMENT BY OTHER AGENCIES

There are many areas of protected Crown land subject to the Reserves Act which are administered by organisations other than the Department. Under this Act, reserve land can be controlled and managed or vested in local authorities, Maori Trustees, Iwi Authorities, voluntary groups (e.g. scout associations, play centres), boards or other trustees. Appointments to control and manage, and vest Crown reserves require the consent of the Minister of Conservation. These reserves often have little natural or historic value, but nonetheless are important in terms of providing open space, recreation, social, educational or community purposes.

Appointments to control and manage reserve land, and vestings, authorise the controlling body to direct resources toward managing the reserve for the purpose for which it was set aside. Vesting of reserves provides for greater 'ownership' for the controlling body than an appointment to control and manage. It can, for example, allow the controlling authority to issue leases or licences without seeking approval from the Department where the proposed use conforms with a management plan approved under the Reserves Act. Suitable persons may also be appointed to manage marginal strips with the Minister's consent.

The functions and powers of administrative agencies are set in the Reserves Act. In carrying out their duties, these agencies need to recognise reserve values and ensure that they are not compromised. Ministerial consent requirements and reserve

management plans do place controls on management and assist in the protection of the reserve.

The Minister of Conservation is empowered to grant concessions on reserves which are vested in the Crown, including any reserve controlled or managed by administering bodies.The Department is involved in disposal, or where changes in the use of the land are proposed.

Often administering agencies will consider granting leases and other occupation rights over reserves for uses such as grazing, forestry, sporting and community activities. The consent of the Minister of Conservation may be a pre-requisite. All proposals are required to be consistent with the principles of the Reserves Act and the purpose for which the reserve was classified (e.g. for recreation reserves there is an emphasis on the retention of open space).

The maintenance of public access to, and use of, reserves is a key principle which administering agencies need to contemplate when considering tenancy proposals.

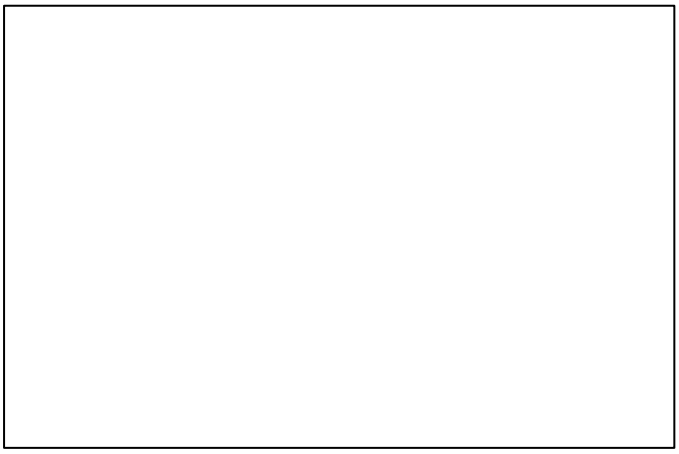
Administering agencies of reserves will, in carrying out their functions, be guided by the principles set out in this strategy and are required to prepare management plans for such reserves.

20.5.1 Objectives

(i) To ensure that all reserves managed by other agencies are administered for their primary purpose under the Reserves Act.

(ii) To transfer administration of reserve land to appropriate administering agencies where it is primarily used for recreation or community purposes and where it contains little or no natural and historic values. In some cases a public process will be required before a reserve can be vested.

20.5.2 Explanation



Turuturu Mokai Pa near Hawera. This historic reserve is managed by the South Taranaki District Council with strong interest from Ngati Tupaia and the local community.

The Department encourages the management of reserves by other agencies for the purposes of their classification and in accordance with the Reserves Act. Conversely, there are other reserves which are currently vested orcontrolled and managed by other agencies which may be more appropriately managed directly by the Department.

Where there is a strong local community interest or involvement in managing a reserve, it may be practical to delegate day to day control and management to a local authority or community group. Vesting may be appropriate where there is a strong community interest in a particular reserve and where there is an appropriate body in whom to vest. Many recreation reserves and some scenic reserves are of mainly local significance. In these instances it is appropriate for a local body, such as a district council, to have the administrative role.

Before vesting a reserve under Section 26 of the Reserves Act 1977, the Minister of Conservation is required to publicly notify the vesting proposal and to consider any relevant objections and submissions. Such notification will not be required where:

- the body in whom the reserve is to be vested has had the financial or other responsibility for acquisition of the reserve
- the reserve is either a local purpose reserve or a recreation reserve
- the relevant conservation board and fish and game council have advised the Minister that the proposed vesting does not have any adverse effects on the management of, and interest of the public in the reserve and where public notification is considered by them to be unnecessary.

The functions and powers of administrative agencies are set out in the Reserves Act. In carrying out their duties, these agencies need to recognise reserve values and ensure that they are not compromised. Ministerial consent requirements and reserve management plans do place controls on management and assist in the protection of the resource. This CMS will guide both the Department's input and the administering agencies' actions in carrying out their management work.

The Reserves Act provides the only means for the appointment of other organisations to control protected areas. If the Department wishes to appoint an alternative agency to control an area, the land would have to be made a reserve.

20.5.3 Implementation

(i) *Pursue the transfer of the administration of reserves to other groups where this will better reflect their purpose and management needs.*

(ii) *Consider affording reserve status to areas administered by the Department to allow administration by other agencies.*

(iii) *Publicly notify proposals to vest reserves except where this is not required under the Reserves Act.*

(iv) *Review, with the agreement of the present administering agency, the administration of Crown derived reserves to determine their most appropriate management, including vesting.*

(v) *Assess reserve management plans and management proposals by administering agencies against the principles of the Reserves Act, the purpose of the reserve and the directions in the CMS.*

20.5.4 Outcome

- Efficient administration of protected Crown land will be undertaken by the most appropriate agency.

20.6 LAND ADMINISTRATION

The Department has a number of statutory land management responsibilities under the Public Works Act, Conservation Act, Resource Management Act and Reserves Act, in addition to functions already described in previous sections. These responsibilities include land transactions involving the use, status, or administration of land held under these Acts.

Processing of certain applications on behalf of 'clients' (mainly local authorities) is done on a cost recovery basis. The work is reactive since it is not usually initiated by the Department. Until district plans become operative, the Department will continue to be involved in the evaluation of riparian protection through application for exemptions and reductions from esplanade area requirements upon subdivision or road stopping. This will become an advocacy function once district plan rules are in place.

Under the Conservation Act, marginal strips are automatically reserved on the disposal of any Crown land. The disposing agency must advise the Department of its intentions to dispose of such land. The Director-General has 20 working days in which to advise if he intends investigating whether the marginal strip should be wider than 20 metres. Marginal strips may also be either waived or reduced in width prior to disposition of Crown land. Before a waiver or reduction can be granted the Minister of Conservation will need to be satisfied that the purpose of such a strip is not diminished or that the land can be protected effectively by other means. All applications will be assessed in accordance with Section 24 (BA) of the Conservation Act 1987.

The Minister is required to consult with the conservation boards and the fish and game councils in respect of any application to waive or reduce a marginal strip. These bodies may request the Minister to advertise the application. All applications must be dealt with before the disposition takes place. It is not possible to waive or reduce a marginal strip after the disposition has occurred.

In the Conservancy there are many areas of land, particularly recreation and local purpose reserves, for which the Department has an overseeing role under the Reserves Act, rather than a direct administrative role. Consent from the Department must be sought by administering agencies for such actions as granting easements over reserve land, granting or transferring leases and cancellations of vestings. Other actions that fall under this role of land administration include:

Cross Reference
See Sec 34.5

- reserve classification (or reclassification)
- declaring land to be reserve
- reserve naming or name change
- approval of bylaws
- appointments/revocation of reserve administration.

There are several provisions under the Public Works Act for which the Department has responsibilities. These relate to any areas administered by the Department or to land subject to the Reserves Act administered by other agencies, that are required for a public work or are, for example, to be taken for road or accessway purposes.

The Department also handles many requests to revoke the protected status of land to allow for its subsequent sale or disposal. Concurrently, requests are often made for the

cancellation of vesting or an appointment to control and manage. Provided these actions are consented to, the Department must notify these decisions in the New Zealand Gazette.

The Department also maintains a National Land Register which includes details of all lands it administers. It records basic information such as the name of the area, its classification, size and legal description. This provided the basis for the CMS Land Inventory contained within Volume 2, which gives additional information on such matters as physical description, historical significance and management needs.

Cross Reference
See Sec 26.3

The Department, in conjunction with local authorities, administers the Harbour Board's Dry Land Endowment Revesting Act 1991. Portions of land under this Act have been identified as having natural or historic value and will become land held under the Conservation or Reserves Acts. Often subdivision is required to protect these values, leaving the balance of the land to be disposed of (often to current lessees who wish to freehold the land). While policy dealing with this work has been set, its implementation will continue for some years. Accordingly, it is appropriate, in the CMS to acknowledge an ongoing commitment of resources to this work.

20.6.1 Objective

To effectively administer and manage land according to legislation.

20.6.2 Explanation

Land transactions covering land administered by the Department relate to the Minister of Conservation's functions under the Reserves, Conservation, National Parks, Resource Management and Public Works Acts. These Acts generate applications where consent is required often before work takes place on the land involved.

20.6.3 Implementation

(i) Process land administration applications from outside agencies within either statutory timeframes, or where no statutory timeframe is prescribed, within a reasonable time.

(ii) Costs will generally be recovered in the processing of statutory consents from outside agencies.

(iii) Conclude, where possible, known commitments inherited from parent departments for land disposals, rationalisations or other actions.

(iv) Revoke the protected status where the disposal of land has been requested and consented to.

(v) Maintain a register of all land administered by the Department within the Conservancy.

(vi) Assess the names of areas, and rename (or formally name them) where more historically and culturally appropriate names are identified and are supported by Tangata Whenua and the local community.

(vii) Complete actions required by the Harbour Board's Dry Land Endowment Revesting Act and assess applications to modify or destroy land subject to this Act.

20.6.4 Outcomes

- All land administration functions within the Conservancy will be undertaken efficiently while safeguarding natural, historic and recreation values.
- Achieving effective legal protection for riparian areas through the creation of esplanade strips and reserves.

21 Marine Conservation

The Department has a role in establishing and managing protected marine areas. This is achieved primarily through the creation of marine reserves under the Marine Reserves Act 1971. Under this Act, marine areas that contain underwater scenery, natural features, or marine life which is of such distinctive quality, or so typical or beautiful or unique that its continued preservation is in the national interest, can be preserved and set aside for scientific study.

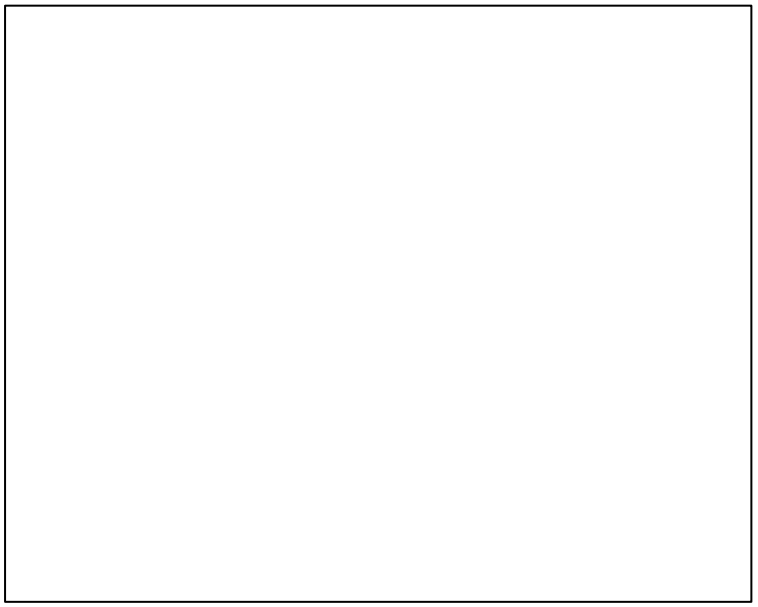
Nationally, the Department aims to establish a network of representative (typical and unique) areas around New Zealand's coastline. These reserves, once established, would serve to protect marine life and habitats (the plants and seabed), in their natural state, both for their own sake and for the benefit of people, including scientific study, both now and in the future.

Marine reserves provide a baseline which can assist in the understanding of coastal and marine ecosystems and the effects of exploitation. The ongoing monitoring of marine reserves can provide information on the natural state of the environment and on the effects of activities in the marine ecology.

Cross Reference
See Sec 13.5.4.

There are no marine reserves in the Wanganui Conservancy, although an application to establish a marine reserve in North Taranaki was made in March 1995.

The Department has a role in promoting the protection initiatives of other organisations and educating people about marine habitats and the benefits of protected marine areas.



An application has been made to protect this area around Whitecliffs in North Taranaki as a marine reserve.

Public support is essential for the establishment and management of protected marine areas. Wide consultation with the Tangata Whenua and public interest groups ensures that any proposals for marine reserves are thoroughly investigated and have the support of the local community.

There is an opportunity to assist Tangata Whenua who wish to make applications to establish taiapure and mataitai reserves. The Department can provide information on the coastal environment from the Coastal Resource Inventory and monitoring programmes. Liaison with Tangata Whenua is important, particularly when investigating and establishing marine reserves.

21.1 Objectives

(i) To identify and establish a network of marine reserves which protect representative and unique examples of the coastal environment within the Wanganui Conservancy.

(ii) To establish and effectively manage marine reserves and protected marine areas for their natural values.

(iii) To increase knowledge of marine ecosystems and increase the level of protection over the coastal environment.

(iv) To increase public support for and awareness of the benefits of protecting the coastal environment in its natural state.

(v) To assist Tangata Whenua to achieve their conservation objectives for the coastal environment.

(vi) To encourage local organisations and groups to actively investigate and apply for marine reserves.

21.2 Explanation

The long term survival of the natural character of the coastal environment depends on the maintenance of species diversity and the protection of the life supporting capacity of the sea. The protection of both representative and unique marine habitats will ensure that there are examples of the coastal environment where the natural balance is maintained.

Marine reserves may provide a relatively unmodified environment which can be used as a baseline to assist in the understanding of marine ecosystems and the effects of exploitation. Regular monitoring of the coastal environment will be carried out to identify changes and to assist in the identification of natural trends.

Cross Reference
See Sec 22.3

Protection of the coastal environment also aids in the conservation of some freshwater fish species which pass through estuaries and to the sea as part of their life cycle.

Public support is essential in the successful establishment and management of marine reserves and marine protected areas. Submissions received on the 1993 CMS discussion document show a strong commitment within local communities for establishing and extending the protection of the coastal environment. As the authority that administers the Marine Reserves Act 1971, the Department is in a position to respond to requests from the public for greater protection of the coast.

Marine reserves provide the most comprehensive protection of marine ecosystems, but in some instances it may be necessary to implement alternative methods of protection.

The Sugar Loaf Islands Marine Protected Area is located off the coast at New Plymouth. Protection for this area was achieved through special legislation. The management of the area is shared between the Department of Conservation, which has responsibility for the management and protection of the water, sea bed, foreshore,

See Sec 12.5.6

and islands, while Ministry of Fisheries has jurisdiction over the marine life (with the exception of the marine mammals and birds). Because of the special issues surrounding management of the islands, along with their particular significance to Tangata Whenua and the local community, the Minister of Conservation previously required the preparation of a Conservation Management Plan for the islands under section 17E (3) of the Conservation Act. Preparation of the plan began late in 1993 with the release of a public discussion document.

Tangata Whenua, through the establishment of taiapure and mataitai reserves under fisheries legislation, are able to manage areas of special significance as a source of food or for spiritual or cultural reasons. Taiapure and mataitai reserves can be complementary to marine reserves.

Cross Reference
See Sec 44.3

In addition to seeking formal protection of specific areas, the Department, through the Conservation Act 1987, is able to advocate the conservation and protection of marine biodiversity and protection of habitats.

21.3 Implementation

(i) To identify sites which may be suitable for marine reserves, including:

- *those marine habitats which are representative of the Conservancy's coastal environment, which include extensive areas of seabed covered by sand, siltstone, mudstone, reefs and estuaries*
- *any distinctive or unique features or habitats in the coastal environment.*

(ii) To promote the benefits of marine reserves and other marine protected areas.

(iii) To consider proposals from other organisations for marine reserves and protected marine areas, and to provide advice on the process and issues associated with establishing protection over the coastal environment.

(iv) To employ alternative methods of protection where these provide adequate protection of coastal and marine ecosystems.

(v) To include local communities in the evaluation of sites for protection as marine reserves and pursue the establishment of marine reserves where there is a good level of community support.

(vi) Inform organisations and interested people about the Conservancy's progress in establishing and managing marine reserves and marine protected areas.

(vii) Prepare a management plan for a marine reserve where:

- *the area is vulnerable or there are issues which require careful management, or*
- *criteria listed under Section 44.4.3 (iv) are met.*

See Sec 44.4.3 (iv)

(viii) Monitor changes within marine reserves and protected marine areas for comparison with unprotected coastal areas.

(ix) To encourage people and interested organisations to research the coastal environment.

(x) Inform the public about the Marine Reserves Act . Promote a high level of compliance and enforce the provisions of the Act where necessary.

(xi) Provide information on marine ecology and protection of the environment to organisations and a wide cross section of the community.

(xii) Provide information to support Tangata Whenua in their identification and management of taiapure and mataitai reserves.

(xiii) Consult with appropriate Tangata Whenua to resolve any issues concerning proposals to establish marine reserves, and investigate opportunities for complementary marine protection proposals.

(ix) Advocate the conservation of marine life and its habitat.

21.4 Outcomes

- Representative and unique examples of marine ecosystems will be preserved.
- Marine reserves will enable habitats to approach a near-natural state and form benchmarks against which other unprotected marine areas can be compared.
- People will have the opportunity to experience and enjoy theirmarine heritage in a near-natural state and participate in its continued protection.

22. Conservation of Native Plants and Animals

22.1 LEGAL RESPONSIBILITY FOR NATIVE PLANTS AND ANIMALS

Native plants and animals are protected under a number of pieces of legislation. The Wildlife Act 1953, and the Marine Mammals Protection Act 1978 deal directly with the protection of native species, wherever they occur. These Acts cover a range of situations from the taking of plants from a reserve to the holding of lizards in captivity, and extend to the protection of New Zealand's native animals and plants overseas through international agreements.

The level of protection varies immensely from that afforded to plants and native fish, which are essentially protected only on land administered by the Department, to other specified native animals which are protected wherever they occur.

The Wildlife Act protects many of New Zealand's more conspicuous native animals including all native frogs and bats, most native birds (some of these are partially protected as game birds) and reptiles, selected introduced birds (including little owl and crimson rosella) and some native invertebrates. Although this Act protects these animals from direct human or human associated disturbance (e.g. shooting, trapping, or harassment) it does not adequately protect their habitat except in specially protected areas such as Wildlife Sanctuaries.

North Island brown kiwi.

The Marine Mammals Protection Act protects all marine mammals (whales, dolphins, seals and sealions) within New Zealand waters from human disturbance and harm. Regulations control the disturbance caused by commercial marine mammal watching enterprises and the behaviour of people near marine mammals.

Cross Reference
See Sec 22.2

The Native Plants Protection Act 1934 provides only limited protection for most native plants.

The Trade in Endangered Species Act 1989 governs the trade in specified plant and animal species by regulating their export and import, and fulfils our international obligations under the Convention on International Trade in Endangered Species (CITES).

See Sec 22.3

The Freshwater Fisheries Regulations 1983 provide limited protection for native fish, through the creation of faunistic reserves (which do not protect habitat effectively) and by requiring free passage of native fish through obstacles such as dams and weirs. Section 6 of the Conservation Act 1987 generally outlines the Department's responsibilities for the conservation and management of native freshwater fish.

The Whitebait Fishing Regulations 1994 control the take of whitebait, which are the juvenile forms of a number of species of native fish (e.g. inanga and giant kokopu).

Other legislation, such as the Conservation Act 1987, National Parks Act 1980, Reserves Act 1977 and the Resource Management Act 1991, provide varying levels of protection for native plants and animals and their ecosystems.

Cross Reference
See Sec 44.1

22.1.1 Objective

To maintain the full diversity of native plants and animals, and their habitats in the Conservancy, and protect them through relevant legislation.

22.1.2 Explanation

The Department continues to produce policies on many protected species which may be kept in captivity. These include native parakeets, lizards, parrots, waterfowl, raptors and injured wildlife. These policies are designed to ensure the protection and well-being of the animals and advise on their housing, feeding and general conditions.

Applications for the holding of more common protected species are considered in the light of the above policies. Applications to hold threatened species will not be considered unless the species is part of a co-ordinated captive breeding programme and the application has the support of the programme co-ordinator. Threatened species management will generally be focussed on maintaining the species in its natural environment.

Many calls are received from the public regarding injured wildlife. To ensure efficient handling of these animals, a small number of suitably qualified people are authorised and encouraged to deal with injured wildlife. Occasionally, injuries require treatment by a veterinary surgeon. In these cases, assistance will be given only where the injured animal is a rare or threatened species.

Applications are occasionally received from the public for permission to have protected species mounted. Under the Wildlife Act, permits can only be issued where the mounted specimen is to be donated to a museum or other educational institution. Mounted specimens of protected species (except for legally obtained game birds) cannot be retained by individuals, unless specifically authorised by the Director General (e.g. kiwi, kereru and native fish)

Many species managed by the Department also form a traditional part of Maori culture, and, therefore, Maori have an interest in the way they are managed. The Department will consult with Tangata Whenua in the management of protected species, where they have an interest.

See Sec. 34.1

22.1.3 Implementation

(i) Applications to hold or liberate protected animals will be processed in terms of the relevant legislation, Departmental policies and guidelines.

(ii) Authorise suitable persons to care for injured protected animals and provide advice and support. Assist with veterinary costs where rare or threatened species are involved.

(iii) Process permit applications to hold red and yellow-crowned parakeets and Category A lizards on a case by case basis and as determined by Departmental policy. Other applications to hold threatened species, where there is a captive breeding programme, will be considered in accordance with any recommendation from the species recovery co-ordinator. Applications to hold protected species will be considered on the basis that the species to be obtained will be from a person already having an appropriate permit.

(iv) Permit applications to take native plants and animals from areas administered by the Department will be required to demonstrate a legitimate research need, educational or cultural purpose.

(v) Applications to liberate protected animals will be considered under the criteria of a captive breeding programme, species recovery plan, or in the rehabilitation of injured birds.

(vi) Prohibit collection of protected animals from the wild except for legitimate scientific purposes.

22.1.4 Outcomes

- The protection and conservation of all native plant and animal species, particularly those that are threatened.
- The effective implementation of Departmental polices and guidelines for the assessment of applications covering protected animals and plants.

22.2 MARINE MAMMALS PROTECTION

The Marine Mammals Protection Act 1978 and the Marine Mammals Protection Regulations 1992 are administered by the Department. These provide for the establishment of marine mammal sanctuaries, for permits in respect of marine mammals, the disposal of sick or dead specimens and the prevention of marine mammal harassment.

Species which have been recorded in this Conservancy's coastal waters include killer whale (orca), common dolphin, the endangered Hector's dolphin, New Zealand fur seal, pygmy sperm whale, sperm whale, large baleen whales and Shepherd's beaked whale.

22.2.1 Objectives

(i) To provide for the protection of marine mammals in accordance with the Marine Mammals Protection Act and the Marine Mammals Protection Regulations.

(ii) To maximise the use of dead specimens for the benefit of conservation, science and for cultural purposes.

22.2.2 Explanation

(a) Marine mammal strandings

Whale and dolphin strandings are infrequent along the Conservancy's coastline and usually consist of single sick, injured or dead animals. The Department is responsible for dealing with stranding events, the rehabilitation of animals to the sea, and where necessary, the disposal of distressed or sick animals. The Conservancy has trained staff to deal with stranding events and to minimise harassment of distressed animals.

Seals often haul out at various points along the coastline. This is normal behaviour and these animals should not be disturbed.

(b) Provision of whalebone and teeth

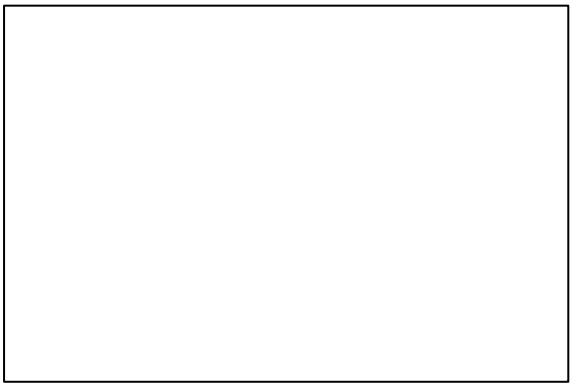
Cross Reference
See Sec. 34.1

The Conservancy receives a number of requests for whalebone for traditional purposes.

Disposal of whalebone and teeth will be done only after consultation with the Tangata Whenua. Whale jawbone and teeth are Taonga and will be made available to Tangata Whenua wherever possible.

Often specimens are required by museums or other approved institutions for research or display purposes, and these will be approved only after consultation with Tangata Whenua.

(c) Commercial marine mammal watching



The New Zealand fur seal is becoming more common around the coast and breeds on the Sugar Loaf Islands.

Increased public awareness and interest in marine mammal watching thoughout the country has resulted in an increase in the number of boat operators offering tours to view them. This in turn has increased the disturbance of those animals. The Marine Mammals Protection Regulations require commercial tour operators to obtain a permit for marine mammal watching. Permits are issued through the Department's Head Office and monitored by conservancy offices. The Regulations also protect marine mammals from disturbance and harassment.

(d) Sugar Loaf Islands fur seal colony

See Sec. 12.5.6

The Sugar Loaf Islands Marine Protected Area provides habitat for the country's northern-most known breeding colony of New Zealand fur seals. Breeding has recently been recorded with up to five pups/year being raised. Monitoring of the breeding success and total numbers of animals will be carried out.

22.2.3 Implementation

(i) Actively seek information on marine mammal sightings with help from the public and maintain a database to record such activity.

(ii) Maintain a marine mammal rescue plan to ensure effective response to stranding events by fully trained staff.

Cross Reference See Sec. 34.1.2(a)

(iii) Allocate whalebone in consultation with Tangata Whenua and in accordance with national guidelines.

(iv) Provide data on marine mammal specimens to researchers to further the knowledge and ecology of marine mammal species.

See Sec. 44.3

(v) Advocate the protection of marine mammals in regional coastal plans and through fisheries liaison groups.

(vi) Monitor the population dynamics of the New Zealand fur seal colony in the Sugar Loaf Islands Marine Protected Area.

(vii) Issue and closely monitor the operation of any concessions for commercial marine mammal watching to ensure impacts on marine mammals are minimised.

22.2.4 Outcome

- All marine mammals in the coastal waters of the Conservancy are protected.

22.3 FRESHWATER FISHERIES

New Zealand has 53 species of freshwater fish comprising 33 species of native fish and 20 introduced species. Of the native fish, some such as whitebait and eels are well known while others such as mudfish and giant kokopu are relatively unknown[54]. Ninety percent of our native freshwater fish are endemic and 60 percent are diadromous, i.e. they regularly migrate to and from the sea as part of their life cycles.

Freshwater fisheries are managed under two pieces of legislation; the Fisheries Act 1983 and the Conservation Act 1987 (as amended by the Conservation Law Reform Act 1990).

The Fisheries Act is administered by the Ministry of Agriculture and Fisheries and generally deals with the management of commercial fisheries.

The Conservation Act is administered by the Department and deals specifically with the conservation of non-commercial freshwater fisheries. The Department's function is aimed at the preservation of native fish (including traditional fisheries), the protection of recreational freshwater fisheries, the protection of freshwater fish habitats and the transfer and release of aquatic life to land administered by the Department or to sites where it does not already exist. Any Maori fishing rights over the freshwater fishery are unaffected by Section 26ZH, Part VB of the Conservation Act.

Electric fishing is an important means for finding and identifying species.

Both the Fisheries and Conservation Acts have regulations which deal more specifically with aspects of freshwater fisheries management and include:

- Freshwater Fisheries Regulations 1983 (Under the Fisheries Act 1983)
- Whitebait Fishing Regulations 1994 (Under the Conservation Act 1987)
- Fisheries (Amateur Fishing) Regulations 1986 (Under the Fisheries Act 1983).

Cross Reference
See Sec 44.2

Other legislation also relevant to the management of freshwater fisheries includes the Resource Management Act 1991. This Act deals, amongst other things, with the protection of water quality and wetland habitat and this aspect is primarily managed by regional councils.

Of the 33 species of native freshwater fish, 18 have been recorded in this Conservancy, while seven of the 20 introduced species have also been recorded.

22.3.1 Objectives

(i) To protect and conserve native freshwater fish and their habitats.

(ii) To maintain the diversity and enhance the abundance of native freshwater fish in the Conservancy.

(iii) To promote greater public awareness of native fish and their habitats.

22.3.2 Explanation

(a) Sports fish

Sports fish are those species specified in the first schedule of the Freshwater Fisheries Regulations 1983 and include brown and rainbow trout, salmon, char, tench and perch. All of the species in this schedule are introduced. Fish and game councils (for all areas of New Zealand other than Lake Taupo) have responsibility to manage these fisheries.

See Sec 46

(b) Eels

New Zealand has two species of freshwater eel, long-finned and short-finned. The administrative responsibility for these species is shared between the Department, which has a responsibility for native freshwater fish conservation and the protection of habitat, and MAF which manages the commercial eel fishery, including the issue of permits for specified areas (subject to laws and regulations governing that land) to commercial eel fishers.

Where commercial eelers wish to carry out commercial eeling on land administered by the Department, they will require an approval pursuant to Section 17(1)(f) of the Conservation Act. This permit authorises the holder to carry out a trade or business, including commercial eeling on land administered by the Department. For other land statuses, commercial eel fishing is prohibited by the Reserves Act (s50) and restricted by the National Parks Act 1980 (s5).

There is concern among many groups about the future of eel species. Evidence is now available which suggests that eel stocks are diminishing. While permits can be issued for land administered by the Department, areas which have been identified 'as containing important fisheries values', will generally be closed to commercial eel fishing to help conserve the resource. Additional areas of particular significance to the maintenance and enhancement of the eel resource may be identified in the future and also be generally closed to commercial eel fishing. Where required, regulations will be sought to implement these restrictions.

(c) Lamprey

Large numbers of this species have been recorded in rivers in the Conservancy, particularly in the Whanganui and Patea Rivers. Little is known of the ecology of lamprey and its status remains uncertain. Lamprey is an important food source for Maori, particularly in the Wanganui Conservancy where they are taken using traditional methods. There is no commercial take of this species.

Cross Reference
See Sec. 34.1

(d) Whitebait

The whitebait run is made up of the juveniles of six species of native fish (five galaxiids and smelt). Whitebait fishing is an important recreational and cultural activity throughout the Conservancy and is managed by the Department through the provisions of the Whitebait Regulations 1994 and the Freshwater Fisheries Regulations 1983.

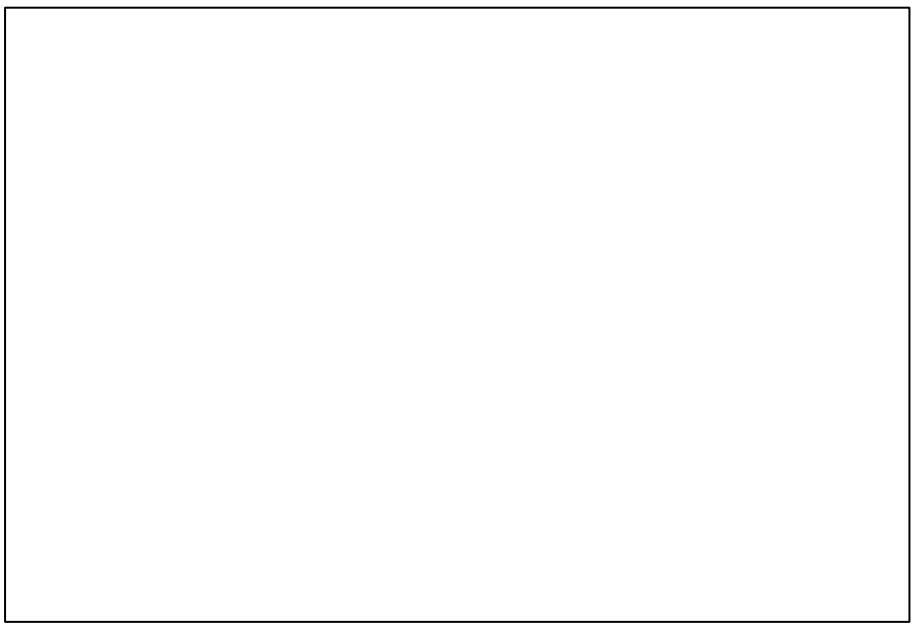
See Sec. 13.5.7

The Mokau River in North Taranaki is the only river in the Conservancy where permanent stands are authorised. Whitebait stands are necessary to cater for the large number of people wishing to fish this river and to help protect the river banks from undue erosion.

See Sec. 44.2

Little is known about the biology of many of the species that make up the whitebait catch. However, the protection of habitat through riparian management and maintenance of water quality will remain the most effective tool in maintaining the biodiversity of whitebait species and indeed all native freshwater fish. A national public awareness strategy for whitebait conservation is to be prepared.

(e) Inventory and habitat protection



More surveys are needed of the threatened giant kokopu to determine its range in the Conservancy.

Much of the current knowledge on native fish in this Conservancy has been based on one-off surveys or incidental sightings which only indicate whether species are present or not. This type of inventory will continue. However, where records of threatened species such as mudfish, short-jawed and giant kokopu are established, or significant spawning habitats for whitebait species are identified, more intensive quantitative assessments of population size will be undertaken. Information gathered on populations of particular species (e.g. brown mudfish) will then be used in the establishment of management programmes and/or habitat protection.

(f) Fish passage

Sixty percent of our native freshwater fish must migrate to the sea to complete their life cycle (e.g. eels migrate to the oceans to breed with juveniles returning to the freshwater systems to reach maturity).

Many of our waterways have weirs and dams which impede the passage of some species. These barriers prevent the recruitment of species to a waterbody and can eventually cause the local extinction of species. Hundreds of kilometres of suitable habitat can become inaccessible to some species. The Department has specific responsibilities under the Freshwater Fisheries Regulations 1983 relating to fish passage. In many cases barriers are no longer required (e.g. tide gates) or can be more sensitively designed to include fish passes, while any new ones will need to provide for fish passage.

The maintenance of fish passage is a national priority for the Department.

(g) Noxious fish

All species of noxious fish are introduced and defined by regulations with only two species having wild populations; koi carp and rudd. These have both been recorded in Wanganui Conservancy. At this stage, the populations are confined and do not appear to be a problem.

The Freshwater Fisheries Regulations 1983 prohibit the possession of and unauthorised introduction of noxious fish species.

(h) Freshwater fisheries management plans

The Conservation Act provides for the production and implementation of freshwater fisheries management plans. These can apply to one or more species of freshwater fish in any area.

22.3.3 Implementation

(i) *The commercial removal of native freshwater fish (including eels) will be prohibited from areas managed under the Reserves Act. Such removal will also be prohibited fromNational Parks, except where it is provided for in a Management Plan.*

(ii) *The Department is unlikely to issue permits for the commercial removal of native freshwater fish from those areas listed below which contain important fisheries values:*

- *Hawken's Lagoon Conservation Area*
- *Pukepuke Lagoon Conservation Area*
- *Waimahora Swamp Conservation Area*
- *Lake Koitiata.*

Other areas may be subsequently identified as having important fisheries value and added to the above list where:

- *they hold communities of native freshwater fish which are representative of that wetland type*

- *they hold populations of threatened native freshwater fish species*
- *the site is significant to Tangata Whenua as a traditional fishery*
- *the site is important for research.*

(iii) The Department will consider applications for the transfer and release of freshwater fish species according to criteria outlined in Section 26zm of the Conservation Act and make recommendations on such applications to the Minister of Conservation.

(iv) The Department will liaise with the North Island Eel Fishers Association to seek regular information on eels taken from land administered by the Department.

(v) Work closely with Tangata Whenua, M.A.F. and research scientists on the commercial eel harvest from areas administered by the Department (other than those areas specified in (i) above).

(vi) The Department will not support the erection of whitebait stands on rivers other than the Mokau.

(vii) Enhance current data bases on native freshwater fish through inventory and quantitative population assessment.

(viii) Protect and manage areas identified as important indigenous freshwater fish habitats to enhance their biodiversity. (e.g. brown mudfish in South Taranaki wetlands).

(ix) In co-operation with local authorities, identify potential barriers to native fish migration. Promote the installation of effective fish passes and monitor their effects.

(x) Consult Tangata Whenua on the management and enhancement of culturally significant species, such as inanga, lamprey , eel and koura.

(xi) Prepare and implement Conservation Strategies where sufficient information has been gathered on a species to achieve effective understanding and conservation.

(xii) Enforce regulations relating to noxious fish to ensure that these species do not become established in waterways, other than those they already occupy in the Conservancy.

(xiii) Liaise with fish and game councils and regional councils in the protection of freshwater fish habitats.

(xiv) Prepare a strategy to raise public awareness of native fish species along with the importance of protecting their habitat.

(xv) Advocate the protection and enhancement of water quality and aquatic habitats required to maintain and enhance the native fisheries.

Cross Reference
See Sec. 44.2

22.3.4 Outcomes

- Effective management of all native freshwater fish populations to ensure conservation and enhancement of existing and future populations of these species.
- Noxious fish will not become further established within the Conservancy.
- Greater public awareness of native fish and their habitat requirements.

23 Management of Threatened Species

Before the arrival of humans, New Zealand's native plants and animals were evolving in an environment totally free of today's introduced mammalian predators and browsers. Many native animals, including birds and insects developed characteristics in response to the absence of introduced mammals, such as becoming flightless or, at the very least, ground-dwelling with reduced wing-bones and stout legs. Habitat modification was largely restricted to natural events and processes such as flooding, erosion and fires. The first mammalian predators, the Polynesian rat (kiore) and dog, were brought to New Zealand by the Polynesians.

Cross Reference
See Sec. 31 and 32

The arrival of Europeans in the last 200 years saw widespread habitat destruction and fragmentation, including loss of forest, wetland and other habitats. This period also saw the introduction of many animal and weed threats. Today, these influences, along with direct human disturbances continue to threaten the survival of an increasing number of indigenous species. Areas of remaining habitat within the Conservancy are identified on Figure 21.

The Department attempts to ensure the long-term survival of the widest possible range of species naturally occurring in these habitats. An important part of this work is to prioritise threatened species according to their degree of threat and/or significance. The Department has produced a ranking system which sets out the national priorities for the conservation of New Zealand's threatened plants and animals.[56] This Conservancy has produced a separate document which merges species of particular significance to the Conservancy with the national priorities. Figure 20 sets out priority species for management in the Conservancy. Limited resources dictate that only the most significant of those identified will receive attention, with other programmes being initiated as priorities shift and resources allow.

Short-tailed bat. A recovery plan for New Zealand's native bats has been prepared.

Species require co-ordinated and well thought out approaches for their management, and the Department produces Species Recovery Plans for most threatened ones. Plans of particular relevance to the Conservancy include blue duck, kiwi, bat and *Dactylanthus taylorii*. These plans combine the current knowledge and status of a particular species with objectives and management guidelines in the short to medium term. They are subject to regular review as more information is gathered on species or as their status changes.

The Conservancy's management of threatened plants and animals is based on plans identified in Figure 20. This also sets out species priorities within the Conservancy and identifies initial management actions which will be undertaken. Future actions will largely depend on the outcome of the initial action. Detailed species management objectives and implementation are identified in the Part B

place sections, while Appendix 6 lists the occurrence of threatened species by ecological district.

23.1 Objectives

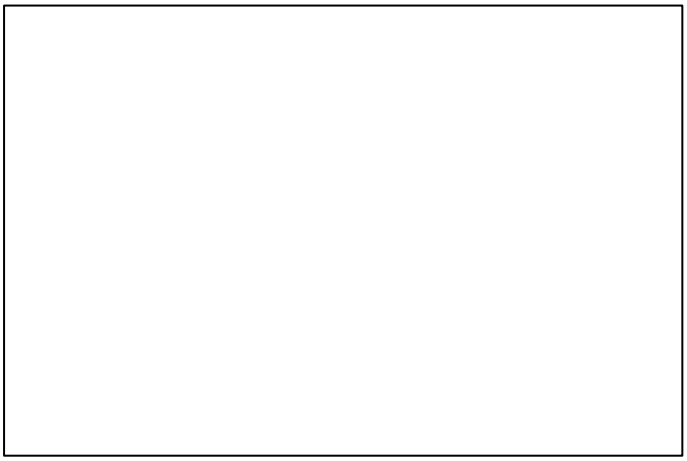
(i) To manage threatened species in order to enhance their populations and improve their conservation status.

(ii) To enhance the natural diversity of native animal and plant populations where appropriate in the Conservancy.

23.2 Explanation

(a) Species and ecosystem management

Threatened species management in New Zealand has concentrated on ensuring the continued survival of individual species through specifically designed management programmes such as predator trapping, browser-proof exclosures or behavioural manipulation (e.g. supplementary feeding to induce breeding activity).



Woodroses are monitored and some are covered by wire cages to exclude browsing animals.

These programmes have been integral in the maintenance of critically endangered species, such as kakapo and black robin, where non-intervention may have meant their extinction.

The Department is endeavouring to take a more proactive approach to threatened species management through the recovery planning process and through ecosystem management. This latter approach may in the long-term ensure that New Zealand's biodiversity is maintained and enhanced.

Many individual species programmes have looked at the factors limiting a particular population. The results point to habitat loss and fragmentation, the direct effects of predators and the indirect impacts of browsers depleting food resources. The long-term answer to maintaining species on the mainland may well lie in our ability to both manage the individual components of communities and to effectively and efficiently manage mainland ecosystems in their entirety through animal and weed control programmes. Research has shown that the success of threatened species programmes on the mainland depends to a large extent on our ability to control predators and browsers.

(b) Island refuges

Islands, particularly those that are free of introduced mammals, present opportunities for particular threatened species and ecosystem management that are absent on the mainland. This Conservancy has only one island group, the Sugar Loaf Islands, which present opportunities for threatened reptile or invertebrate management, subject to approved plans. This issue is addressed in the Sugar Loaf Islands Marine Protected Area Conservation Management Plan.

Cross Reference
See Sec 12.5.4(e)

The potential of maintaining mainland habitat 'islands' is also being pursued in

the Conservancy at Paengaroa Scenic Reserve. This programme is one of seven in New Zealand.

Mainland island habitats are a relatively new concept in conservation management, the aim of which is to protect and restore habitats on the mainland through intensive management of introduced pests. They are referred to as mainland 'island' habitats because they are manageable areas, isolated by means of fencing, geographical features or more commonly, through intensive management. Unlike islands which are discrete land masses surrounded by sea, mainland islands are subjected to continual re-invasion pressure from pests and predators in surrounding areas, and therefore require an ongoing commitment.

(c) Species transfers

The transfer of species to secure or restored habitats is an important tool for species management. Species under threat on the mainland may be transferred to pest free islands. Alternatively, some could be placed in restored habitats, to areas of other suitable habitat or used to enhance existing populations.

A programme of releases of both captive-reared and wild blue duck to Egmont National Park has begun.

All species transfers will be subject to an approved recovery plan and will be monitored to determine the success or otherwise of the transfer. Procedures for considering transfers are set out in national guidelines.

(d) Survey and monitoring

Threatened species management relies on a good knowledge of the distribution, range, numbers and trends of a species. Priority must be given to establishing these parameters before undertaking any intensive management.

23.3 Implementation

(i) *Priorities for species management will be assessed in terms of both the Department's national priorities (Molloy and Davis 1994[56]) and the Conservancy's own Species Conservation Strategy.*

(ii) *Where a species recovery plan or strategy exists for a species, management initiatives in the Conservancy will follow policies contained within the nationally approved plan or strategy.*

(iii) *Where population data are insufficient for species management, survey and/or monitoring of that species will be undertaken.*

(iv) *Species databases will be regularly updated.*

(v) *The effectiveness of species and ecosystem management programmes will be subject to regular review, and change where required, to maximise benefit to the species or community involved.*

Cross Reference
See Sec 22.3

(vi) *Surveys for significant native freshwater fish (e.g. giant kokopu, short-jawed kokopu, black and brown mudfish) will be*

undertaken to determine their distribution in the Conservancy, and management requirements.

(vii) Survey of threatened plants, based on historical and current records,and monitoring, will be an important part of determining threats and subsequent management requirements.

Cross Reference
See Sec 26.2

(viii) Monitoring of known threatened plant populations will be carried out on a regular basis, with the monitoring interval determined by the nature of the likely threats, i.e. yearly or biennial monitoring where no specific threats have been identified and more regularly where a change in status is likely.

See Sec 20.2

(ix) Where threatened plants occur on private land, the Department will explore ways of physically and legally protecting the plants in consultation with landowners.

(x) Management of threatened plants will be directed in the first instance toward protection and enhancement in the wild. That will usually mean removal or minimisation of threats, planting to increase populations and legal protection if required.

(xi) Cultivation of threatened plants away from their natural sites may be carried out to provide a backup to very vulnerable populations, or where wild populations cannot be saved.

(xii) The Department will take an active role in advocating the protection of threatened native plants and their habitats.

See Sec 34.1

(xiii) Consultation will be maintained with Tangata Whenua to ensure that they, and the Department, are aware of plants of cultural value at risk.

(xiv) Links with professional and amateur botanists, zoologists and agencies will be maintained and enhanced to ensure a sharing of knowledge and expertise on threatened plants and animals. Research on plant and animal species will be encouraged.

(xv) Priorities for ecosystem based management will be assessed according to either the particular significance of species forming that community and/or the representativeness of the community as a whole.

(xvi) Where practical, the public will be given the opportunity to become involved with threatened species management in the Conservancy.

(xvii) The creation and maintenance of mainland habitat 'islands' will be investigated.

23.4 Outcome

- The maintenance and enhancement of the natural biodiversity of the Wanganui Conservancy.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
BIRDS			
Australasian bittern	O	2	Monitor numbers and update distribution records. Secure habitat where able.
Banded dotterel	C	3	Monitor numbers/breeding areas.
Blue duck	B	2	Monitor Egmont/Manganui o te Ao populations. Enhance existing populations where required.
Caspian tern	O	3	Monitor numbers.
Dabchick	C	2	Monitor numbers/breeding.
Flutttering shearwater	*	3	Assess results of habitat protection and predator control at nest sites.
Grey-faced petrel	*	3	Assess results of habitat protection and predator control at nest sites.
Kereru	B	2	Continue monitoring site near Wanganui. Use radio telemetry if possible.
New Zealand falcon	B	2	Monitor and update records.
Nankeen night heron	*	1	Monitor numbers and breeding
North Island brown kiwi	A	2	Set up two major monitoring sites to assess trends. Conduct research on habitat use.
North Island fernbird	*	3	Monitor populations and distribution to assess trends.
North Island kaka	B	2	Monitor numbers/distribution.
North Island kokako	B	3	Monitor extant population. Follow up reliable sightings.
North Island robin	*	2	Monitor numbers Conservancy wide. Conduct close-order monitoring in Waitotara Conservation Area.
Reef heron	O	3	Monitor numbers.
Royal spoonbill	O	4	Monitor numbers.
Variable oystercatcher	C	3	Monitor numbers.
White heron	O	4	Monitor numbers.
Wrybill	B	4	Monitor numbers.
Yellow-crowned parakeet	C	3	Monitor numbers.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
FISH			
Banded kokopu	C	3	Survey and identify significant populations and secure habitat.
Black mudfish	C	3	Survey and identify populations and secure habitat.
Blue-gilled bully	*	3	Survey and identify populations and secure habitat.
Brown mudfish	B	2	Survey and identify populations and secure habitat. Undertake transfers as appropriate.
Giant kokopu	B	3	Survey and identify populations and secure habitat.
Koaro	C	3	Survey and identify significant populations and secure habitat.
Lamprey	M	3	Monitor populations.
Short-jawed kokopu	A	2	Survey and identify populations and secure habitat.
REPTILES			
Gold-striped gecko	C	2	Select significant population and monitor.
Small-scaled skink	A	1	Implement management/research as per recommendations in Conservation Strategy. Prepare "Recovery Plan".
Striped skink	A	2	Implement management/research as per recommendations in Whitaker 1993. Prepare "Recovery Plan".
MAMMALS			
Short-tailed bat	A	2	Identify populations and initiate monitoring.
Long-tailed bat	B	2	Identify significant populations and monitor.
Hector's dolphin	B	3	Monitor numbers in North Taranaki.
New Zealand fur seal	*	3	Monitor numbers/breeding at the Sugar Loaf Islands Conservation Area.
INVERTEBRATES			
Powelliphanta marchanti (native land snail)	*	3	Maintain records and monitor.
Powelliphanta 'Egmont' (native land snail)	B	1	Monitor population.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
INVERTEBRATES (continued)			
Powelliphanta 'Waitotara' (native land snail)	I	1	Survey and confirm presence. Monitor.
Tadpole shrimp	*	2	Review existing literature and specimens. Maintain records.
Tara taranaki (giant amphipod)	I	1	Undertake research to assess threats to population
Namalycastis tiriteae	I	2	Review existing literature and specimens.
PLANTS			
Acaena rorida (bidibidi)	A	1	Monitor changes in abundance and seek legal protection of sites.
Dactylanthus taylorii (root parasite)	A	2	Protect and monitor selected sites. Implement recovery plan directives.
Melicytus drucei (shrub)	A	1	Monitor exclosures, prepare and implement recovery plan.
Olearia hectorii (tree daisy)	A	2	Assist with research and protect key sites, manage for regeneration
Prasophyllum sp.aff patens (orchid)	B	1	Monitor and seek legal protection of main habitat.
Olearia capillaris (shrub)	*	2	Monitor exclosures.
Euphorbia glauca (sand milkweed/ N.Z. spurge)	C	2	Monitor population trends at main coastal sites including exclosure.
Lepidium oleraceum (Cook's scurvy grass - erect cress)	B	3	Reduce weed and other competition from Moturoa Island. Monitor replanting success and population trends.
Pittosporum obcordatum (small tree)	B	3	Monitor regeneration. (permanent plot)
Pittosporum turneri (small tree)	B	3	Survey and monitor animal impacts.
Sebaea ovata (herb)	A	1	Maintain and enhance coastal habitat; start new population from seed.
Hebe speciosa (shrub)	C	3	Complete survey and seek protection of any identified sites.
Pomaderris apetala (tainui - tree)	O	1	Monitor largest population. Investigate and implement habitat manipulation to encourage regeneration.
Deschampsia caespitosa (a grass)	C	3	Confirm presence and assess threats.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
PLANTS (continued)			
Eleocharis neozelandica (a prostrate sedge)	B	2	Monitor known populations and seek protection of key sites.
Thismia rodwayi (underground herb)	*	3	Monitor populations at known sites.
Peraxilla colensoi (parasitic small shrub - red mistletoe)	B	3	Monitor flowering of protected plants; protect new plants as discovered.
Peraxilla tetrapetala (parasitic small shrub - mistletoe)	B	2	Protect and monitor plants as discovered.
Tupeia antarctica (parasitic small shrub - mistletoe)	B	3	Monitor protected plants and protect new plants as discovered.
Crassula manaia (prostrate herb)	*	1	Monitor populations; identify key threats and seek legal protection.
Crassula peduncularis (prostrate herb)	B	2	Monitor populations; identify key threats and seek legal protection of main site.
Pimelea 'Turakina' (small shrub)	I	1	Monitor transplanted plants and seek legal protection of main site.
Pimelea arenaria (small shrub)	*	2	Monitor.
Pimelea aridula agg. (small shrub)	I	4	Monitor.
Ileostylus micranthus (parasitic shrub - mistletoe)	*	3	Monitor population trends of Parapara populations.
Melicytus flexuosus (small tree)	C	1	Reduce weed competition at key sites and monitor population.
Amphibromus fluitans (a grass)	O	2	Survey past locations and monitor key sites.
Pterostylis micromega (orchid)	A	3	Monitor as discovered.
Alepis flavida (parasitic shrub - yellow mistletoe)	B	3	Further survey ; protect and monitor plants as discovered.
Mazus novaezeelandiae (a herb)	C	1	Monitor key population(s), depending upon current taxonomic review of species.
Muehlenbeckia ephedroides (prostrate shrub)	*	3	Monitor.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
PLANTS (continued)			
Teucridium parvifolium (a shrub)	C	3	Monitor at known sites.
Limosella 'Opunake' (a herb)	I	1	Survey Opunake site to confirm presence and seek legal protection if necessary.
Limosella 'Manutahi' (a herb)	*	1	Monitor.
Myosotis 'Volcanic Plateau' (small forget-me-not)	*	1	Monitor.
Myosotis 'pansa' (small forget-me-not)	*	4	Monitor.
Celmisia 'Mangaweka' (a mountain daisy)	*	1	Monitor.
Brachyglottis turneri (a large daisy herb)	*	2	Monitor known populations.
Leptinella dispersa subsp. rupestris (prostrate herb)	*	2	Monitor.
Pseudopanax ferox (small tree)	*	3	Seek protection for single known Conservancy site.
Tetrachondra hamiltonii (a herb)	*	2	Monitor; seek legal protection of site.
Coprosma obconica (small tree)	*	2	Reduce weed competition at key site and monitor population.
Urtica linearifolia (a nettle)	B	3	Monitor.
Cardamine 'Reporoa Bog slender var' (a small cress)	I	2	Seek legal protection of Reporoa Bog and monitor.
Coprosma wallii	B	2	Monitor.
Carex uncifolia (a small sedge)	B	3	Monitor.
Ranunculus ternatifolius (prostrate buttercup)	C	3	Monitor. Seek legal protection of site.
Ranunculus recens 'Moawhango' (prostrate buttercup)	A	4	Continue monitoring.
Ranunculus recens 'Manaia' (prostrate buttercup)	*	2	Seek legal protection of key coastal site and continue monitoring, transplant some to new site.

FIGURE 20: SPECIES MANAGEMENT PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

	NATIONAL RANK	CONSERVANCY RANK	PROPOSED INITIAL ACTION
PLANTS (continued)			
Rorippa divaricata (large cress)	B	3	Survey to determine extent and monitor.
Adiantum formosum (giant maidenhair fern)	*	2	Monitor.
Korthalsella salicornioides (a dwarf mistletoe)	I	3	Monitor.
Myriophyllum robustum (an aquatic herb)	B	3	Monitor.
Pachyschistochila papillifera (a liverwort)	A	1	Locate and monitor.
Temnoma angustifolium (a liverwort)	A	1	Locate and monitor.
Ditrichum rufo-aureum (a moss)	I	2	Locate and monitor.
Orthodontium ruahinense (a moss)	I	2	Locate and monitor.
Gratiola nana (a herb)	O	3	Monitor, including transplants from 1996.
Marattia salicina (a fern)	O	2	Monitor known populations.
Centipeda minima (prostrate daisy)	*	3	Monitor.
Isolepis basilaris (small sedge)	B	2	Monitor.
Libertia peregrinans (sand iris)	I	2	Survey to determine extent and monitor.
Uncinia strictissima	I	3	Survey to re-find, then protect and monitor
Oreomyrrhis “delicatula” (a small herb)	I	2	Monitor.
Oreomyrrhis “minutiflora” (a small herb)	*	2	Monitor.
Anemanthele lessoniana (a large grass)	*	2	Monitor.
NATIONAL RANKING: (Setting priorities for the conservation of New Zealands threatened plants and animals. Molloy and Davis, 1994)			

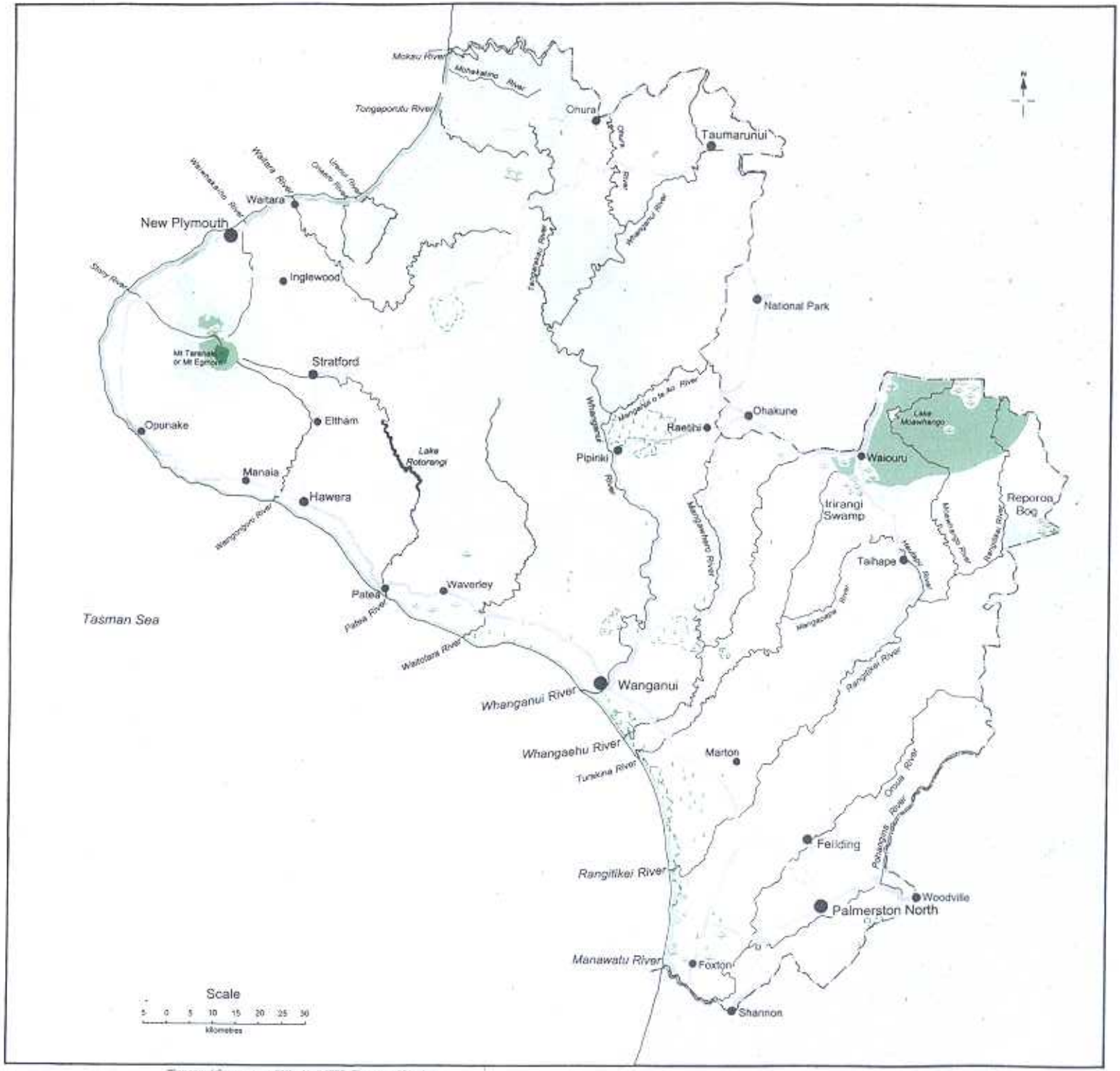
A Highest priority species for conservation action
B Second priority species for conservation action
C Third priority species for conservation action
X Species which have not been sighted for several years but may still exist
I Species about which little information exists but which are considered threatened

O Species which are threatened in NZ but are secure in other parts of their range outside NZ
M Species of cultural importance to Maori that are rare or localised
* No ranking

CONSERVANCY RANK: (SPECIES OF PARTICULAR SIGNIFICANCE IN THE WANGANUI CONSERVANCY IN DECREASING ORDER OF PRIORITY)	
Priority 1	Species whose national population is centred in the Wanganui Conservancy.
Priority 2	Species which have a stronghold in the Wanganui Conservancy in addition to one or two localities outside the Conservancy.
Priority 3	Species which are represented in the Wanganui Conservancy but have significantly larger population bases in other parts of New Zealand.
Priority 4	Species which have a distribution limit within, or important breeding grounds within, or make seasonal use of, this Conservancy.
Note: Ranking on this table will be subject to ongoing review	

Figure 21

Habitat Types



Forest - Exotic

- Indigenous

Tussockland / Scrub

Coastal

Wetland

Alpine

Department of Conservation
Te Papa Atawhai

24 Historic Place Management

Historic places can be defined broadly as identifiable evidence of human history. They include archaeological sites, shipwrecks prior to 1900, historic areas, land, buildings, structures, and anything in or fixed to such land and Wahi Tapu. They may also identify specific events or people important to the history of an area. Wahi Tapu are addressed separately in Section 18.

Of the array of historic places administered by the Department within the Conservancy, 40 are actively managed. They include 20 historic reserves in Taranaki, many of which are prehistoric Maori sites and/or Maori or European fortifications from the New Zealand Wars. Egmont National Park contains many Maori and European historic sites, including a number of buildings such as the North Egmont Camphouse which was associated with early recreational use of the park. Whanganui National Park has a long history of Maori settlement along the banks of the Whanganui River and its tributaries, and plentiful reminders of more recent European use of the river and land. Actively managed places include the well-known Bridge to Nowhere; a symbol of failed post World War I farming and the small steamboat 'Ongarue', now displayed at Pipiriki.

Cross Reference
See Sec 12.5.10

Section 6 of the Conservation Act 1987 gives the Department authority to manage historic places on areas that it administers and to advocate for historic places generally. On other land where the owners agree, the Department is able to manage historic places through the Reserves Act provisions.

The New Zealand Historic Places Trust administers the Historic Places Act 1993, and is the lead agency for the protection of historic places on land other than that administered by the Department.

Figure 23 shows the distribution of recorded archaeological sites within the Conservancy and their relationship to historic places actively managed by the Department. The concentration of archaeological sites along the coast and up river valleys is clearly illustrated. Few sites are located on land administered by the Department.

24.1 Objectives

(i) To identify, conserve and, where appropriate, provide visitor services for historic places on land administered by the Department.

(ii) To co-operate with other agencies in the survey of historic places where this is compatible with the Department's priorities.

(iii) To provide legal protection to historic places in certain circumstances.

(iv) To advocate the conservation of historic resources generally, in co-operation with other agencies.

24.2 Explanation

(a) Historic Resources Strategy

The Conservancy Historic Resources Strategy specifies and prioritises projects to be undertaken in the next five to ten years and provides a link between the CMS and annual business planning. It includes a regularly updated register of actively managed places. It is consistent with the national Historic Heritage Strategy.

The Historic Resources Strategy includes:

- **Protection plan**

The Department is unaware of many historic places on land that it administers within the Conservancy. To remedy this, basic information and a record of the location of these places will be collated in a protection plan using existing information sources e.g. New Zealand Archaeological Association records. Special interest groups and individuals may be able to inform the Department of other important places on land it administers, and Tangata Whenua may wish to give a broad indication of the location of Wahi Tapu. Any information about Wahi Tapu would be included in an appropriate manner.

Cross Reference
See Sec 18

Knowledge of the presence of historic places on land administered by the Department will help prevent damage to such places from uninformed management actions.

The significance of historic places identified by the protection plan will be initially assessed using Historic Places Act criteria and appropriate Tangata Whenua input. If appropriate, those places assessed as significant can be scheduled for active management.

Any place over 30 years old will be protected until an initial significance assessment is completed. Places under 30 years old will not be included in the protection plan, as they do not meet Historic Places Trust registration criteria.

Modification of historic places on land administered by the Department will be subject to a modification approval procedure contained within the Historic Resource Strategy, and an authority from the Historic Places Trust where required.

The Department is bound by the Historic Places Act which gives legal protection to all archaeological sites predating 1900.

- **Archaeological Resource Statement**

An archaeological resource statement is being prepared to identify areas of high priority for archaeological site survey on land of all tenure within the Conservancy.

There is inadequate knowledge of the distribution of archaeological sites. Archaeological survey of land administered by the Department has priority. In order to improve the knowledge of site distribution on land not administered by the Department, the Conservancy may work with the Historic Places Trust and district councils.

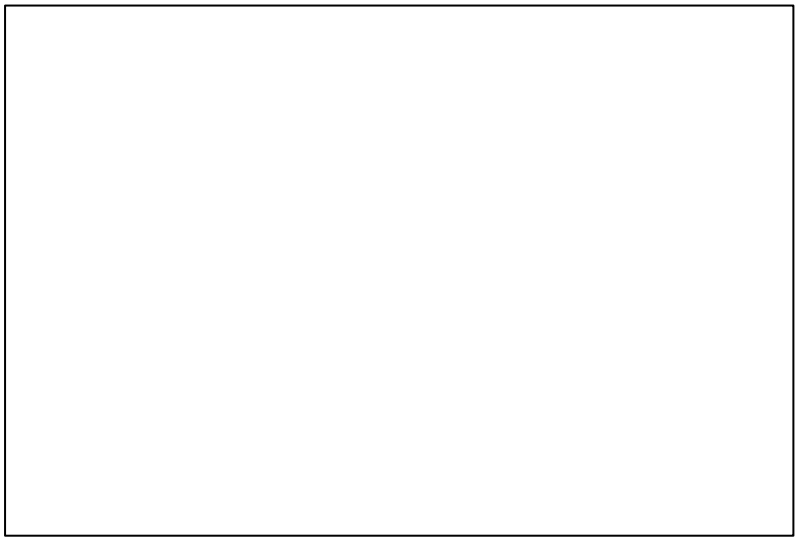
- **Actively managed places**

Actively managed places meet the criterion of having a special statutory status e.g. historic reserve under the Reserves Act or have proposed or past business plan expenditure. They are listed in Figure 22.

The decision to actively manage an historic place is based on a formal assessment of significance using Historic Places Act criteria, appropriate Tangata Whenua input and funding levels.

A conservation plan is prepared for each actively managed historic place. A conservation plan is a specialised plan for the restoration and management of an historic place, and is distinct from conservation management plans referred to elsewhere in this CMS. 'Conservation' in this sense means the processes of caring for a place so as to safeguard its cultural heritage value. This definition is taken from the ICOMOS New Zealand Charter for the Conservation of Places of Cultural Heritage Value 1993. All conservation plans prepared by the Department conform to this Charter.

Plans will be prepared in priority order according to the significance of the place and the urgency of threats it faces. Remedial work will be scheduled in business plans at the earliest opportunity.



The Camphouse at North Egmont (Egmont National Park) is a rare survivor of a mid nineteenth century building made of galvanised wrought iron.

Urgent remedial work may be carried out without following the normal planning procedures on an historic place of apparent high significance which is under immediate threat.

Scientific research and the preparation of conservation plans for some structures or sites may be completed by outside specialists, with assistance from the Department.

Some places may cease to be actively managed in favour of places of higher significance identified through the protection plan.

Visitor services such as interpretation, tracks and signs may be provided at places where they do not conflict with cultural significance or management requirements.

An Historic Places Trust registration proposal will be prepared for each actively managed historic place, including Wahi Tapu, where Tangata Whenua agreement is obtained.

- **Written histories**

A comprehensive history will be written for each major land area administered by the Department and thematic studies will be prepared for historic themes relevant to management requirements.

- **Protection of historic places on land not administered by the Department**

The Department is able to give legal protection to historic places using the provisions of the Reserves Act 1977 or Conservation Act 1987. This includes the acceptance of gifts, purchase, exchange, convenants or protected private land agreements and management agreements. These provisions, which are used infrequently, may be used when a place of regional or national importance is closely related in locality or theme to historic places that the Department administers. The New Zealand Historic Places

Trust is the lead agency for the protection of historic resources on land not administered by the Department.

(b) Advocacy

Under the Conservation Act 1987, the Department is able to advocate the conservation of historic resources generally. This can include raising public awareness of historic places, or the contribution of information to other agencies involved in historic place management.

The Taranaki, and parts of the Manawatu, Wanganui, and Waikato District Committees of the New Zealand Historic Places Trust fall within the Conservancy. (See Figure 34). The Department and the Trust share information and work together on matters of common interest.

The Department is represented at many of the Historic Places Trust Committee meetings.

(c) Places special to Maori

Cross Reference
See Sec 18

There are many places of significance to Maori on land administered by the Department. The Department has an obligation to give effect to the principles of the Treaty of Waitangi, and will acknowledge the recommendations of the Waitangi Tribunal. Tangata Whenua will be consulted over the Department's proposed management of places with known Wahi Tapu, and other places of cultural importance. A variety of co-operative arrangements for the management of specific places could be initiated. These could range from consultation, to vesting of land in Tangata Whenua under the provisions of the Reserves Act 1977.

(d) Monuments and plaques

Monuments and plaques are often used to commemorate a person or event who or which is special to a particular area. Their provision, however, needs to be carefully managed to avoid a proliferation of such memorials. They will therefore only be considered in circumstances where the historical association of the site, individual or event is thought to be of exceptional significance. Small plaques will be favoured in preference to free standing monuments.

(e) Priorities

Priority within the Conservancy will be given to the preparation of significance assessments and conservation plans for actively managed places. Those places requiring urgent remedial work will have first priority. Preparation of the protection plan and historic place advocacy will be ongoing. Archaeological site survey and legal protection will be undertaken when funding permits.

24.3 Implementation

(i) The Department will implement the Historic Resources Strategy for the Conservancy.

(ii) Actively managed historic places will be identified in national park management plans and any conservation management plans to be prepared.

(iii) Volunteers will be encouraged and sponsorship sought as an alternative to internal funding where a suitable project is available.

(iv) Assistance may be given to outside researchers whose work would benefit the Department's management of historic resources.

(v) Awareness of historic places will be increased among Conservancy staff and the public.

(vi) The Department may contribute toward the development of Heritage Trail information where it includes an historic place on land administered by the Department.

(vii) The Department may protect historic places through the provisions of the Reserves Act 1977, Conservation Act 1987 and the Resource Management Act 1991.

Cross Reference
See Sec 44.1

(viii) The Department will advocate the protection of historic places through input to district and regional plans, policy statements, resource consents where they affect land administered by the Department, and by continued liaison with the New Zealand Historic Places Trust.

(ix) There will be consultation with appropriate Tangata Whenua about the proposed management of Maori historic sites or Taonga. Co-operative management arrangements will be encouraged and the terms mutually agreed upon by the Department and Tangata Whenua.

See Sec. 18

(x) The Department will acknowledge Treaty of Waitangi Tribunal recommendations in future management of its historic resources.

(xi) Free standing monuments to commemorate a person or event will generally not be permitted on land administered by the Department. Exceptions may be made to cater for persons or events of national or international significance, who or which, are strongly associated with a particular area.

(xii) Small plaques may be erected on park facilities as memorials to people or events strongly associated with the history of a particular place. They may also be used to record the history of the place.

24.4 Outcomes

- To achieve full protection and appropriate management for all historic places located on land administered by the Department.
- In co-operation with other agencies, to have achieved greater knowledge and protection of historic resources outside land administered by the Department.

FIGURE 22: SUMMARY OF ACTIVELY MANAGED HISTORIC PLACES - WANGANUI CONSERVANCY

ACTIVELY MANAGED HISTORIC PLACE	CONSULT WITH TANGATA WHENUA	CONSERVATION PLAN	VISITOR FACILITIES	INTERPRETATION	PRIORITY FOR ACTION
RANGITIKEI ECOLOGICAL DISTRICT					
Bruce Park Memorials	X	required	X	required	low
RC Bruce Memorials	X	required	X	X	low
Mangaweka Power Station	X	required	O	O	low
MATEMATEAONGA ECOLOGICAL DISTRICT					
Bridge to Nowhere	X	required	X	maintain	high
Colonial House	X	O	O	O	low
Downes Hut	X	required	O	O	low
Kaukore Millwheel and Water Race	X	X	O	maintain	low
Kawana Flour Mill	required	O	O	upgrade	low
'Ongarue' Riverboat	X	required	X	O	high
Waitaha Pa	required	required	X	O	low
Whanganui River Road Culvert	X	X	X	required	low
Mangapurua House Sites	X	required	X	X	low
Marae Kowhai Niu Poles	required	O	X	required	med
TAUMARUNUI ECOLOGICAL DISTRICT					
Aukopae Road Tunnel	X	required	X	O	low
EGMONT ECOLOGICAL DISTRICT					
Boars Head Mine	X	X	X	required	med
North Egmont Camphouse	X	O	upgrade	O	high
Rahiri Cottage	X	required	X	required	med
Dawson Falls Power Station	X	required	X	required	low
Waipuku Quarry Complex	X	required	required	O	low
Awa-te-take Historic Reserve	required	required	X	X	med
Mahoetahi Historic Reserve	required	required	X	O	med
Ngangana Pa	required	required	X	X	med

FIGURE 22: SUMMARY OF ACTIVELY MANAGED HISTORIC PLACES (CONTINUED)

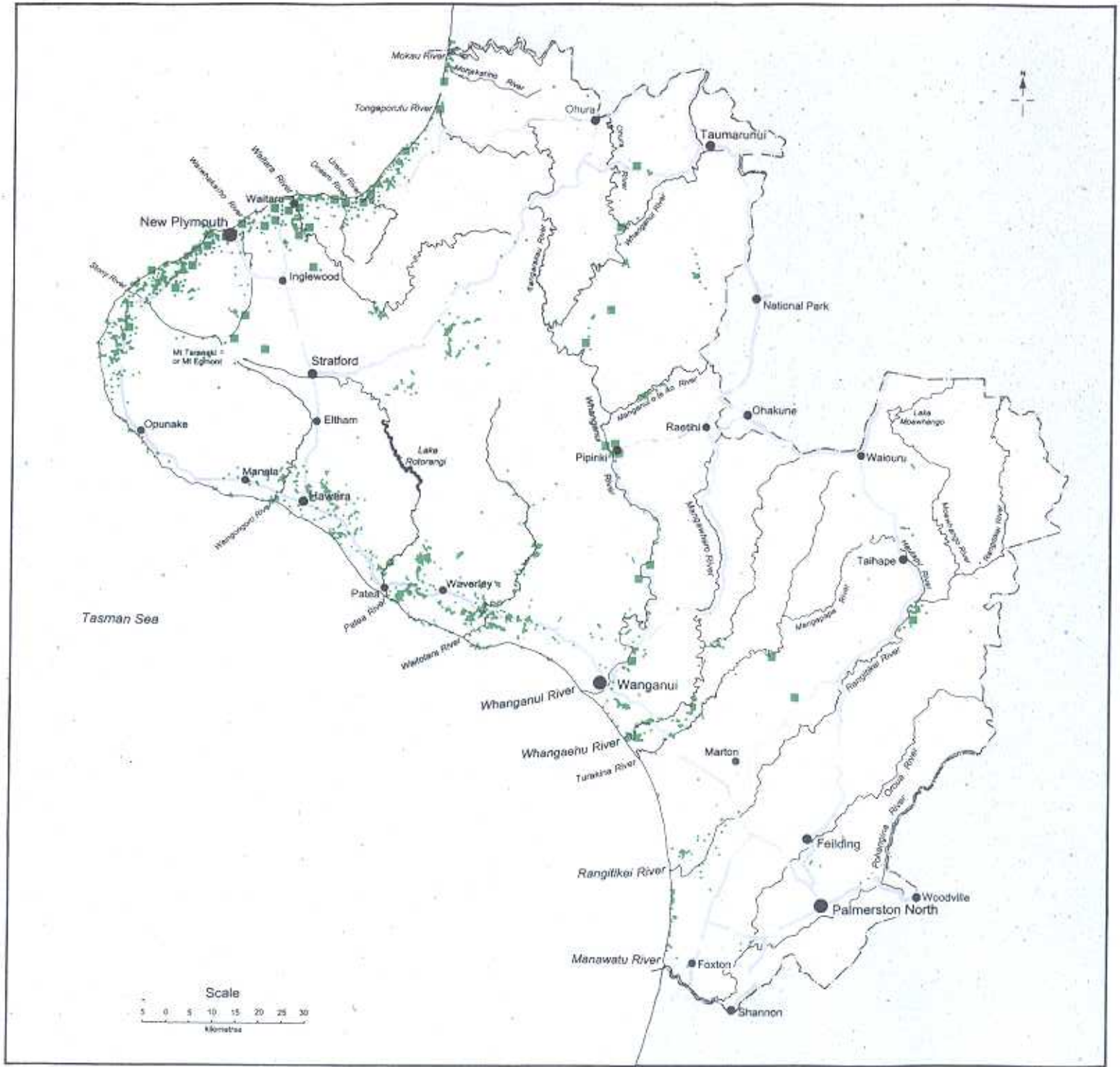
ACTIVELY MANAGED HISTORIC PLACE	CONSULT WITH TANGATA WHENUA	CONSERVATION PLAN	VISITOR FACILITIES	INTERPRETATION	PRIORITY FOR ACTION
EGMONT ECOLOGICAL DISTRICT (continued)					
Omata Stockade Historic Reserve	required	O	O	O	med
Pararoa Pa (Katere Scenic Reserve)	required	required	X	X	med
Pukerangiora Pa Historic Reserve	required	required	O	upgrade	med
Puketakauere Historic Reserve	required	required	O	O	med
Puketarata-Parihamore Historic Reserve	required	required	O	O	med
Sentry Hill Redoubt Historic Reserve	required	required	X	X	med
Tapuinikau Pa Historic Reserve	required	required	required	required	med
Tarataimaka Pa Historic Reserve	required	required	required	required	med
Taumata Historic Reserve	required	required	X	upgrade	med
Te Koru Pa Historic Reserve	required	required	upgrade	upgrade	med
Te Rau o te Huia Historic Reserve	required	required	required	X	med
Whatarangi Pa (Makara Scenic Reserve)	required	required	X	X	med
NORTH EGMONT ECOLOGICAL DISTRICT					
Kawau Pa Historic Reserve	required	required	X	required	med
Okoki Pa Historic Reserve	required	required	O	required	med
Pou Tehia Historic Reserve	required	required	O	X	med
Pukearuhe Historic Reserve	required	required	required	required	med
Pukemiro Historic Reserve	required	required	X	X	med
Te Urenui Pa Historic Reserve	required	O	O	X	med

X not required O completed

PRIORITY: High:1-3 years Medium:3-5 years Low:5-10 years

Figure 23

Historic Place Distribution



Recorded Archaeological Sites

Historic Place Actively Managed by the Department

Land Administered by the Department

25. Landscape And Geological Site Protection

25.1 LANDSCAPE

The landscape character of Wanganui Conservancy arises from distinctive landforms and native vegetation, and the human impacts on these. Mount Taranaki/Egmont, including its ring plain, is a landscape of international significance. The landscape character of the remainder of the Conservancy is arguably less dramatic and may not make such a strong impression as famous scenic areas of New Zealand. It is, nonetheless, important because of its rich diversity.

The Conservancy is characterised by small-scale riparian landscapes from the mountains to the sea. These special landscapes are extremely vulnerable to degradation but are capable of considerable enhancement.

Other features of great importance are:

- the raised marine terraces of the Manawatu Plains district extending from the eastern Rangitikei and east of Palmerston North to west of Hawera; river terraces, especially the outstanding Rangitikei River terraces from Vinegar Hill to Mangaweka, which have been recorded in paintings and photographs

Cross Reference
See Sec 9.5.4

See Sec 7.5.4

- the sand landforms of the Foxton district
- the North Taranaki coast (from Mount Messenger to Awakino) that forms part of the North Taranaki district and includes the outstanding Tongaporutu and Mokau River estuaries

See Sec 13.5.5

See Sec 10.5.5

- Mt Aorangi, and the Moawhango tussocklands with its broad basins and deep river gorges

See Sec 8.5.5

- The Manawatu Gorge.

Section 6(b) of the Resource Management Act 1991 identifies the protection of outstanding natural features and landscapes as a matter of national importance. From the Department's point of view, landscape protection is essentially an advocacy issue requiring public involvement and support, particularly where private land is involved.

The landscape is substantially modified by human activities over much of the Conservancy. Only Egmont National Park, the inland Wanganui-Manawatu, Mt Aorangi and the Moawhango tussocklands and areas of North Taranaki, have significant natural landscapes remaining. Landscape protection in this context is therefore a matter of enhancement and addition. Some of the modified landscapes of parts of the Conservancy are very attractive.

Within the Conservancy, there are many cultural and land use pressures that challenge the protection and enhancement of the natural values of the landscape. Figure 24 identifies the protection and enhancement measures which are desirable for major threatened landscapes in the Conservancy.

The definition of a landscape's character centres on recognising its intrinsic values, whether natural or introduced, positive or negative. From the Department's

perspective, the focus should be on how much of a landscape's natural character remains and the extent to which this can be enhanced through sympathetic land management. Much of this involves advocacy over private land.

FIGURE 24: SUMMARY OF THREATENED LANDSCAPES REQUIRING PROTECTION AND ENHANCEMENT - WANGANUI CONSERVANCY

AREA	INTRINSIC, NATURAL AND OTHER VALUES-THREATS	APPROACH	PRIORITY
North Taranaki	Papa cliffs climaxing in coastal estuaries; outstanding broadleaf and hard beech forests- Threats include widespread forestry and riparian/coastal degradation and insensitive coastal subdivision.	Landscape advocacy and education rather than statutory advocacy - except via submissions to regional and district plans as opportunities arise.	Moderate
Taranaki Ring Plain	Riparian forest remnants linking Egmont National Park with the coast; landform profiles; distinctive radial drainage patterns of the rivers identified by riparian margins in a pastoral overlay - threats of this character are widespread riparian forest invasion by exotic plants, deliberate replacement of indigenous species with exotic shelter trees and the clearing of riparian margins for grazing. Other threats include riparian earthworks.	Statutory input into consents; public awareness. Input into regional plans prepared by Taranaki Regional Council. Input into resource consents according to S. 6(a and b) of the Resource Management Act, Input into district plans.	Very High
Foxton / Himatangi Dune Systems	High inland dunes of national significance; interdune lakes and wetlands - landform is best appreciated in a pastoral/wetland environment - increasing use for forestry threatens the integrity of this landform unless carefully placed to be sensitive to the dune structure. Mixed land uses are the best option to protect this integrity.	Regional policy statement input, public awareness, a sustainable land use advocacy which would foster the mixed land use concept which can protect and enhance this landscape. Input into district plans.	Very High
Wanganui Coastal Terraces	Raised gravel sediments and conglomerate beds with tenuous to high coastal dunes - threats include mining, insensitive coastal subdivision, overgrazing, drainage of associated wetlands and landform modification so as to obliterate outcropping sedimentary strata and rolling dunes (a feature of these areas - especially the Whitiau Scientific Reserve). Sheep grazing or nature conservation would offer some protection.	Input into the regional plans. Submissions on new residential subdivision in accordance with S. 6(a) and 6(b) of the Resource Management Act. Input into district plans.	Very High

FIGURE 24: SUMMARY OF THREATENED LANDSCAPES REQUIRING PROTECTION AND ENHANCEMENT - WANGANUI CONSERVANCY (CONTINUED)

AREA	INTRINSIC, NATURAL AND OTHER VALUES-THREATS	APPROACH	PRIORITY
Manawatu Plains/ Rangitikei River Terraces	Raised terraces in the context of steep papa cliffs - linking riparian forest remnants; uplifting marine terraces plain - threatened by locally intensive horticulture on the fertile terraces.	Landscape advocacy and education, submissions on resource consents for new land use (e.g. forestry and rural-residential subdivision); landscape enhancement through revegetation.	Moderate
Riparian Areas in General	Deep papa/sandstone gorges and cliffs - rarer large scale river meanders with a forest landscape - mostly protected but threats include hydroelectric schemes and forestry.	Conservation protection measures - water conservation orders where justified and where development threatens	Moderate - high
Mount Aorangi Moawhango Tussocklands	Sweeping uncluttered tussock grasslands, and native forests along rivers and elevated sites.	Advocate landscape protection/controls on land uses. Protection of native forests, especially on highly visible sites.	Very High

25.1.1 Objectives

(i) To recognise the intrinsic natural character of landscapes within the Conservancy.

(ii) To ensure the protection of landscape values when considering any development proposed for land administered by the Department.

(iii) To promote land uses which can mitigate threats and enhance the intrinsic landscape character.

25.1.2 Explanation

The above objectives aim for a practical and acceptable level of protection for the positive values and character that the landscape offers. They are particularly applicable to landscapes that are vulnerable to further modification and where natural features might be adversely affected by development. Landscape protection is a matter of resolving conflicting resource management concerns. These may range from absolute protection to unrestricted development. Landscape protection aims at resolving conflicts in a workable conservation framework.

The Conservancy also needs to consider landscape protection and management on land it administers. Generally, the Department's management of this land is compatible with the protection of the intrinsic natural values of the landscape under its legislative brief. However, one issue of importance is the management of recreation and tourism concessions and the development of facilities on land administered by the Department. Design guidelines will be prepared for such developments which require minimum environmental impact and a high standard of visual design for buildings and structures.

Within the Conservancy, much attention has been focused on non-recreation concessions for such activities as communication installations, mining and energy applications. Landscape impacts of such developments are assessed on a case by case basis according to specific landscape management and protection issues.

25.1.3 Implementation

(i) *Statutory landscape advocacy will be used when dealing with:*

- *regional plans - especially in terms of coastal subdivision, mining and land stabilisation policy*
- *district plans - especially in terms of the protection of river margins, natural features and controls over coastal development*
- *riparian protection and enhancement under both the Conservation Act (S. 26) and the Resource Management Act (S. 6(a) and 200-230)*
- *indigenous forest protection under the Forests Amendment Act 1993 - to link riparian areas with larger natural ecosystems.*

Cross Reference
See Sec 44.1

(ii) *The Department's role in landscape protection will be promoted in association with other conservation programmes.*

(iii) *The unique and special landscape character of the Conservancy will be promoted as a guide to what might be reinstated and incorporated in the current diversity of land uses.*

(iv) *The Department will work with educational professionals in developing programmes for landscape education in both primary and secondary schools.*

(v) *Landscape guidelines will be prepared for the assessment of development proposals on land administered by the Department, including developments by concessionaires.*

25.1.4 Outcome

- Important landscape features are protected

25.2 PROTECTION OF GEOLOGICAL SITES AND FEATURES

The Conservancy has a variety of geological sites and features. Most of the Conservancy is young by geological standards. Its oldest rocks are in the north-east, where hard sandstones ('greywacke') poke through younger sediments in the upper Rangitikei and Moawhango catchments. Greywacke gravels also pour into the Conservancy via rivers which emerge from the Ruahine Ranges.

Apart from volcanic rocks and landforms which dominate the western parts of Taranaki (Egmont Ecological District), and landforms based on wind-blown sands on the Wanganui-Manawatu coast (Foxton Ecological District), most of the Conservancy is made up of relatively young sedimentary rocks. Some are soft mudstones ('papa'),

which erode easily and result in the steep V-shaped valleys and razor-back ridges of Matemateaonga and North Taranaki Districts, to the harder sandstones and limestones of the Rangitikei District which erode more slowly and result in less angular hill country divided by deep gorges fringed by river terraces and cliffs.

Between the Taranaki volcanoes and the Ruahine Ranges is one of New Zealand's largest, clear examples of uplifted marine terraces. These result from steady slow rising of the land and fluctuating sea levels. The youngest, and therefore lowest lying and least eroded, flat surfaces lie near the coast. Progressively older terraces rise away from the coast like a series of giant patio steps, but they become more dissected and are less easily recognised as terraces further inland.

Together, these features provide evidence of the geological history of the Conservancy, the development of its landforms and evolution of its animal and plant life. Ecological districts are used as a subdivision of the Conservancy in this CMS, and they reflect the distinctive geology and landforms of each district.

Cross Reference
See Sec 6

The protection of the best examples of geological sites and features is important for education, research, scientific value, aesthetic appreciation and recreation. To date, many geological features in the Conservancy have had less than adequate protection.

Important known sites are listed in a national inventory prepared by the Joint Earth Science Societies' Working Group on Geopreservation. The inventory consists of a database of specific sites with individual descriptions and assessments of importance.[47, 48]

Ninety five geological sites and features are listed for the Conservancy of which nine have been assessed to be of international importance and 39 of national importance, the balance are of regional importance. Four sites have been assessed as highly vulnerable to human damage or destruction.

The inventory is described by the Societies as a first attempt which cannot be regarded as complete. Important sites may have been overlooked and the assessed importance and vulnerability of some sites could change as more information becomes available. A significant proportion of the geological sites and features in the Conservancy are located on land not administered by the Department. Management of the inventory is overseen by the Department of Conservation.

Sites identified in the geopreservation inventory as being important at a national or international scale, or being highly vulnerable to destruction, or vulnerable to partial destruction by human activity are listed in Appendix 7. Further information on the listed sites should be obtained from the Joint Earth Science Societies' Geopreservation Inventories, copies of which are held by the Department.

25.2.1 Objectives

(i) To protect and maintain the best representative examples of the broad diversity of geological sites and features located on land administered by the Department within the Conservancy.

(ii) To manage those sites identified by the geopreservation inventory and which are located on land administered by the Department in order to encourage and enhance public

awareness , both through direct physical access and also by the provision of information, where this is consistent with the long term preservation of the site.

25.2.2 Explanation

The Department aims to protect significant geological sites and features for general study and appreciation, now and in the future. This can be achieved through protective management of features on land administered by the Department and also by assisting with their protection elsewhere. This will involve supporting conservation efforts of community groups, encouraging protection by voluntary means, and advocating site protection through statutory advocacy under the Resource Management Act. The type of protection warranted will depend upon the importance, vulnerability and ownership of the particular feature.

Cross Reference
See Sec 44.1

Human activities can threaten the natural character or continued existence of important sites. Earthworks, quarrying, reclamations, dams, marinas and swamp drainage all have the potential to damage or destroy important geological sites. Stabilising and planting of sand dunes have substantially destroyed many active dune areas, particularly in the Foxton Ecological District. Visitors to fragile sites may cause irreparable trampling damage or vandalism.

Many larger or more remote geological sites and features currently require little or no additional legal protection, and may require very little active management. However, some sites with no legal protected status which could be under some threat in future years, should be identified in regional and district plans and possibly considered for covenanting. The existing protected status for some sites may need to be reviewed and upgraded.

Many of the smaller or more fragile sites may require passive or active management. Controlled entry, walkways and fences, grazing by sheep or periodic vegetation clearance may be needed. If development cannot be prevented on important sites, careful management will be required to reduce the impacts.

The sub-fossil remains of totara trees at Waitotara Estuary are about 1100 years old.

25.2.3 Implementation

(i) Develop and implement programmes to ensure the protection and preservation of important or vulnerable geological sites and features on land administered by the Department.

(ii) Promote the protection of important or representative geological sites and features on other land in the Conservancy . The Department will advocate, encourage and support their integrated and protective management by:

- *providing local authorities with information about significant geological sites and features for inclusion in regional and district plans*

- *advocate legal methods for the protection of significant geological sites and features under the Reserves Act 1977, the Conservation Act 1987 and the Resource Management Act 1991*
- *use statutory advocacy opportunities under the Resource Management Act 1991 to comment on and, where necessary, oppose activities which could have an adverse effect on the scientific, aesthetic, cultural or community values of significant geological sites and features.*

Cross Reference
See Sec 44.1

(iii) Give priority to seeking the preservation and protection of those sites identified in the geopreservation inventory as being important at a national or international level, or being highly vulnerable to destruction, or vulnerable to partial destruction, by human activity (Refer to Appendix 7 which lists geological sites and features of importance within the Conservancy).

(iv) Assist in the further development and updating of the geopreservation inventory through the dissemination of new information and the identification of new sites.

25.2.4 Outcome

- The best representative examples of geological sites and features within the Conservancy will be appropriately protected.

26 Information Base

26.1 RESEARCH

Cross Reference See Sec. 26.2

Research is an endeavour to discover new information by the application of scientific method and is often needed by the Department to answer problems in ecological management. Survey and monitoring may be a part of a research study, and may need to continue when the research has ended. Problems with national implications are generally researched by the Department's Science, Technology and Information Services Division or by researchers contracted to the division. For local problems, the Conservancy's own staff undertake some research, or let small short term contracts to outside researchers.

The broad areas in which the Conservancy currently has the greatest need for research are for:

- animal and weed control methods that are more cost effective and impact upon target species only
- techniques which staff can use to monitor the benefits of animal and weed control
- improved knowledge of the ecology of threatened species which can be used by managers to enhance species' survival prospects
- information on marine ecosystems which can be used for the Department's advocacy roles (including identifying potential sites for marine reserves)
- methods to measure the needs, satisfaction and impacts of visitors on land administered by the Department.

26.1.1 Objectives

(i) To support conservation managers with scientific research results that are relevant to management questions and needs.

(ii) To produce a better basic understanding of the natural world and human impacts upon it, with particular reference to Wanganui Conservancy.

26.1.2 Explanation

Each year the Conservancy is able to submit to the Department's Science, Technology and Information Services Division a list of problems for which research might supply answers. These are considered and ranked by national specialist panels, then submitted to a Science Board for funding. The Board generally funds only those projects where new methodologies are needed or where a new field of information is required.

The Conservancy's annual business plan contains a list of research topics which is updated each year, and from which priority topics are selected each year for submission to Science, Technology and Information Services Division. The business plan list includes a number of small or non-urgent research topics which may never be submitted for outside funding. One of the main reasons for listing these lower priority

topics is that the Conservancy is often approached by universities for topics that would be useful and suitable for student theses or other projects.

The Department occasionally receives requests from research agencies and individuals to conduct scientific research on land administered by the Department. Such research can often be relevant to the Department's own management requirements and will be encouraged in these instances. A concession or other authorisation will normally be required prior to commencing such research.

Cross Reference
See Sec. 34.11

Figure 25 provides a list of topics showing the Conservancy's current priorities for new research. It should be noted that research on many high priority topics of previous years is already being undertaken, and these do not appear in the list.

26.1.3 Implementation

(i) To maintain a database of Conservancy research needs, in priority order.

(ii) To obtain and disseminate answers for conservation management, through new research or the results of past research investigations.

(iii) To maintain links between the Conservancy, the Department's Science, Technology and Information Services Division, and other researchers and research agencies, including universities.

(iv) To ensure that all scientific research conducted on land administered by the Department, where such research is not funded or contracted by the Department, has a concession or other appropriate authorisation.

(v) To ensure that all research on land and species for which the Department is responsible is undertaken with regard to Departmental policies and protocols.

(vi) To budget staff time and operating funds to conduct or assist with priority research programmes.

26.1.4 Outcome

- Adequate knowledge of the Conservancy's natural, historic and recreation values is available to managers to enable effective management.

FIGURE 25: RESEARCH PRIORITIES FOR WANGANUI CONSERVANCY

TOPIC	PRIORITY	KEY QUESTIONS
FLORA		
Dactylanthus taylorii	***#	~ relative significance of possums and rats as flower predators ~ pollination of plants in possum and rat exclosures ~ establishment of seedlings from plants in exclosures ~ benefits to plants outside exclosures of possum and/or rat control
Myosotis "glauca" unnamed species in *M.pygmaea* group	***	~ enhancement of wild population ~ taxonomic relationships with South Island populations and with other members of *M. pygmaea* complex

TOPIC	PRIORITY	KEY QUESTIONS
FLORA (continued)		
Pimelea "Turakina" (possibly unnamed taxon related to *P.prostrata* or *P. urvilleana)*	***#	~ management in situ (damp sand flats, seriously degraded by weeds etc.) ~ taxonomic status
Sebaea ovata	***S#	~ methods for establishing new populations in dune hollows
Mistletoes	**S#	~ benefits of local and widespread possum control to non-protected plants ~ cost/benefits of protecting individual plants
Rorippa divaricata	**S	~ management in the wild
Eleocharis neozelandica	**S	~ population enhancement methods
Ranunculus recens	**	~ taxonomic status of inland (Moawhango) and coastal (Manaia) "forms" ~ prospects for enhancing wild populations with captive-raised seedlings ~ managment of *Hieracium* threat in Moawhango
Euphorbia glauca	*S#	~ impacts of grazing (livestock, possums, etc.) ~ genetic differences in wild populations
Mazus novaezeelandiae	*S	~ optimal management regime to maintain populations in grazed sites (i.e. grazing or non grazing)
Lepidium oleraceum	*#	~ critical comparison of Sugar Loaf Island plants with those in other parts of New Zealand.
Scandia rosifolia	*S	~ analyse success of transplanted population at Maitahi Scenic Reserve near Cape Egmont ~ taxonomic significance of broad-leaved coastal forms at Maitahi and Ohawe
Teucridium parvifolium	*S	~ genetic differences between populations in Conservancy ~ enhancement of small wild populations (e.g. at Bulls, Feilding)
Pimelea aridula agg	*	~ taxonomic status of various populations, including Moawhango
FAUNA		
Bat species	***#	~ status and distribution of long and short-tailed bats ~ vulnerability of bats to 1080 and other pest control chemicals
Striped skink (*Oligosoma striatum)*	***#	~ survey methodologies ~ management in wild
Brown kiwi	***S#	~ significance of survey techniques (primarily call rates) as a measure of kiwi distribution and numbers ~ possible impacts of using poison baits other than standard 1080 manufactured pellets
1080 and raptors	***#	~ are higher food chain predators (e.g. raptors) at risk to 1080 poison operations?

TOPIC	PRIORITY	KEY QUESTIONS
FAUNA (continued)		
Gold-striped gecko (*Hoplodactylus chrysosireticus)*	**	~ methods for management in wild
Invertebrates of dunes	**S	~ habitat requirements including host plant specificity ~ recognition manual ~ management of very local or threatened species
Kereru (NZ pigeon)	**S#	~ significance of spring concentrations of kereru (potential value for measuring long-term population changes) ~ methods for reducing incidental death, (e.g. flying into windows)
Mainland petrel nesting colonies	*S#	~ benefits of predator control and revegetation to petrel nesting success
Freshwater fish	**S#	~ benefits of enhancement of inter-tidal breeding habitat
Powelliphanta sp (unnamed Egmont species)	**#	~ taxonomic status ~ impacts of 1080 (or other possum control measures)
Tara taranaki (giant amphipod	***#	~ vulnerability to 1080 and other pest control chemicals ~ impact of mammalian predators
Small-scaled skink (*Oligosoma microlepis)*	*	~ methods for management in wild ~ impacts of land use around habitat
PLANT COMMUNITIES		
Coastal native turf management	**S#	~ how to best manage RAPs and other sites on cliff tops between Waverley and Warea (near Cape Egmont) (e.g. grazing/non-grazing) to maintain indigenous biodiversity
Revegetation of modified wetlands of dunes	**S	~ plant establishment in presence of browsers, especially sambar deer ~ weed management methods that preserve indigenous biodiversity
Montane bogs	**#	~ impacts of grazing on: ~ plant communities ~ threatened native species ~ weed entry
Lake edge management (hill country and dune lakes)	***S	~ impacts of stock grazing on edge vegetation and wildlife use on in-lake values ~ cost/benefits of lake-edge fencing ~ minimum effective width of riparian strips
Management of lowland divaricating shrub communities	**	~ what management regime (e.g. grazing, herbicides) provides optimal regeneration of divaricating shrub species in grazed forest/scrub remnants?
Mangaohane Plateau wetlands (Reporoa Bog, Makirikiri Tarns	**	~ current status of notable plants and impacts of weeds and current land uses
Lake-edge beech forest and manuka sudd	*S	~ origins of and future trends in lake-edge black beech forest and floating manuka scrub (sudd) at top Moumahaki lake, Waverley

FIGURE 25: RESEARCH PRIORITIES FOR WANGANUI CONSERVANCY (CONTINUED)

TOPIC	PRIORITY	KEY QUESTIONS
WEEDS		
Woody weed impacts in native forest remnants	***S#	~ do woody weeds reduce indigenous biodiversity?
Woody weed control targeting herbicide use	***#	~ refining prototype loppers and gel/herbicide for application to - weeds
Boneseed (*Chysanthemoides monilifera*	***S#	~ analysis of threats to indigenous vegetation nationally (lessons for Wanganui Conservancy)
Spartina anglica	***#	~ improved control methods, including assessment of impacts of herbicides such as "Gallant" on estuarine fauna
Heather (*Calluna vulgaris*)	***#	~ methods for control, including chemicals and biological control
Prioritising control of adventive shrubs and trees that invade indigenous forest remnants	**#	~ how to rank woody weeds in priority for control
Silver wattle (*Racosperma dealbatum*)	**S	~ Manganui o te Ao River populations: their dynamics in terms of invasion of native plant communities, long-term viability ~ methods for control, incl. future of native plant regen. in areas of where wattles are controlled ~ effects on soil and water of silver wattles incl. possible impacts of tannins on invertebrates in blue duck habitat
Banana passionfruit (*Passiflora mollissima)*	***S	~ practicality and benefits of control
Cathedral bells (*Cobaea scandens)*	**#	~ control methods
Evergreen buckthorn (*Rhamnus alaternus)*	**S#	~ control methods
Wandering willie (*Tradescantia fluminensis)*	**	~ optimal methods for control in forest (including value of grazing of dense *Tradescantia* before spraying)
Old man's beard	**#	~ field testing of (a) pruning loppers which cut and apply herbicide simultaneously, and (b) alternative herbicides ~other agents for biological control ~ assessment of the achievements of the ongoing old man's beard publicity campaign (initiated by Wanganui Conservancy in 1988)
Carex demissa at Ahukawakawa bog	*S	~ experimental methods of control of this adventive sedge, a recent (c. 1985) invader of montane bogs.
Bryonia dioica (white bryony)	*S	~ rate of spread and impacts on native vegetation at Makino SR (the only NZ location)
Pampas grass	**	~ spread and impacts in coastal and lowland parts of North Taranaki
Ivy	**S	~ age at which fruiting starts in different parts of the Conservancy

FIGURE 25: RESEARCH PRIORITIES FOR WANGANUI CONSERVANCY (CONTINUED)

TOPIC	PRIORITY	KEY QUESTIONS
WILD ANIMALS		
Monitoring benefits forest of animal control	**#	~ simple field techniques for assessing the state of and changes in productivity and biodiversity, relative to browsing animal control
Goats	***	~ cost/benefits of goat control in Whanganui National Park (and other areas where only low levels of control are possible because of financial constraints) ~ practicality of goat control by dropping poisoned fresh plant baits into remote areas
Sambar deer	**S	~ impacts on native biodiversity in dunes (forest remnants, scrub, herbaceous vegetation)
Hares	*	~ benefits of control in alpine and montane areas, including Egmont National Park and Moawhango Ecological District
Possums	**#	~ What is the most effective strategy, after knockdown,to achieve the objectives of possum control operations? ~ honey production in hives, as a measure of the presumed benefits of possum control (an indirect measure of tree flowering) ~ more efficient bait stations and longer-life baits ~ the need for more objective, repeatable measures of forest tree health before and after possum control ~ what is the effective radius of bulk bait, bait-stations used on either the forest/pasture margins or entirely within forest? ~ cost/benefits of electric fencing isolated forest remnants to exclude possums ~ cost effectiveness of control in small reserves
COASTAL/MARINE		
Representativeness of coastal/marine systems	**#	~ the extent, importance and monitoring of subtidal reefs in North Taranaki. ~ how to survey open sandy coasts and analyse the data in order to identify representative area(s) for potential marine reserves?
Impacts of vehicles on intertidal sand beach faunas	**#	~ do vehicles reduce the biodiversity of sand beach fauna?
USES		
Facilities Use Pass	***	~ public perceptions
Treated timber	*#	~ impacts of tanalised and other treated timbers on water and soil, invertebrates, and flora in relation to bridges, boardwalks, steps etc in natural areas.
Recreational boating and its imacts on lake fauna	**S	~ do powered or sailing boats adversely affect lake fauna, birds in particular, e.g. dabchick, scaup, bittern?
Costs/benefits of creating a North Taranaki Conservation Park	**	~ what conservation benefits would result from the creation of a North Taranaki Conservation Park?
Summer Nature Programme	**S	~ cost/benefit analysis of value to DoC's operations

FIGURE 25: RESEARCH PRIORITIES FOR WANGANUI CONSERVANCY (CONTINUED)

TOPIC	PRIORITY	KEY QUESTIONS
USES (continued)		
Sustainable taking of native plants and animals for lawful traditional uses	**S#	~ which species can be taken without impacting on the long term sustainability of the population ~ what are the preferred techniques of taking species sustainably

Conservancy Priority Rating

*** Urgent

** Highly Desirable

* Desirable

S May be suitable for student research

Research currently underway within this topic

(Note: priorities identified are those set as at 1 August 1996)

26.2 SURVEY AND MONITORING

Survey is a single measurement or assessment of condition at a defined place in a defined time span. Monitoring is repeated surveys by standard or directly comparable methods at identical or comparable places; it is a tool to detect change in condition, over time, that may or may not be the result of some management action.

Cross Reference
See Sec 26.1

Survey and monitoring activities are often linked to research. Before survey or monitoring activities can be undertaken, research may be required or the outcome of a survey or of monitoring may highlight research needs. Survey and or monitoring is often an integral part of a research study and monitoring for management purposes often continues once the specific research ends.

Surveying vegetation is important to monitor changes.
See Sec. 39.1

Information is the key to good management. It is essential for priority setting and in order to make sound management decisions both within the Department and in negotiations with other parties. The Department requires information for all its functions, but gives particular attention to improving its knowledge of species distribution and to understanding natural systems, as it is in these areas that irreversible loss of natural values may occur. The second priority is information gathering on historic resources, especially where places are threatened with disturbance. Thirdly, the Department collects social information, particularly on visitors to the areas that it administers and on the impact of these visitors.

Priority for survey in the past has, by necessity, been given to the survey of land in private ownership (PNAP) because of the need to be able to identify important natural areas that may be faced with the immediate threat of destruction through

development. Many of the survey data have not been collected in a manner that would provide a baseline for monitoring. The highest priority for survey work undertaken, to date, on land administered by the Department has been in the area of threatened species and the most significant monitoring undertaken has been to measure the effectiveness of management activities such as pest control.

For many areas administered by the Department there is little or no baseline information available. In general, there is almost a complete absence of recent information about the trends occurring on the majority of the land areas administered by the Department. This is especially true of the extensive forest tracts in and around Whanganui National Park and of the North Taranaki Conservation Areas. As a result, changes occurring in these areas are often observed late in their progression, when they are of sufficient magnitude to be readily visible (e.g. dead tree crowns and lack of understorey).

The focus of animal control activities in Egmont National Park has led to a network of permanent monitoring plots and consequently a better ability to interpret the changes occurring in those ecosystems. Even there, however, preferred monitoring intervals have not always been followed due to the low priority and high costs associated with remeasurement.

Lack of information is a problem also in the smaller reserves of the Manawatu and Rangitikei. However, in these areas specialist interest groups outside the Department have made, and are making, significant contributions to information gathering through survey and, in some instances, ongoing monitoring.

Conservancies are now required to develop survey and monitoring strategies to guide further work in this area. Even this task requires a large amount of information gathering and sorting, a task which has been significantly advanced through preparation of the CMS Land Inventory contained in Volume 2. Given the complexity of the task, development of the strategy will be done gradually, but when complete, the strategy will provide guidance on the priority for expenditure of any resources that can be allocated to this area. It is recognised that for some time yet the Department will be required to make decisions based on inadequate information.

26.2.1 Objectives

(i) To identify the indigenous ecosystems, habitats and species found within the Conservancy, record their status and identify any existing or potential threats.

(ii) Integrate the monitoring outputs from all functional areas.

(iii) Identify key ecological processes.

(iv) Identify historic places on areas administered by the Department, and any threats to them.

(v) Provide 'early warning' information that can be used to prevent the degradation of important sites.

26.2.2 Explanation

The Department's information needs can be broadly split into three types:

- Inventory and baseline information, both on and off land administered by the

Department, for ecosystems, communities and species. They would cover precisely what occurs where, the conservation status of species and any identified threats. Inventory and baseline information on land administered by the Department could include Maori historic and cultural data, if this were acceptable to Tangata Whenua.

Cross Reference
See Sec 18

- Operational and performance monitoring to assess the effect of management operations to ensure that conservation objectives are met. Knowing that operational specifications have been met is essential information, but no guarantee that conservation objectives have also been met. They need to be assessed as well.
- Trend monitoring to provide early recognition of decline or "non-natural" change that may be occurring. As the Conservancy has such large and remote areas for which it has management responsibilities, some system of keeping regular watch is desirable to detect changes which could lead to degradation of those areas. Early detection of changes could allow ameliorating action to be taken.

26.2.3 Implementation

(i) As opportunities and resources allow, carry out survey and monitoring in accordance with priorities identified in Figure 26 and the survey and monitoring strategy to be prepared for the Conservancy.

(ii) Development of a survey and monitoring strategy.

(iii) Develop and maintain a sound database of information.

(iv) Ensure that projects to manage natural, historic and cultural resources include monitoring to measure operational effectiveness and the degree to which conservation objectives are being met.

(v) Develop a broad scale monitoring programme e.g. airborne video monitoring, to provide early warning systems to detect deterioration of major areas administered by the Department.

(vi) Where possible, co-operate with other agencies, such as regional councils, to develop a holistic view of the state of the natural environment.

(vii) Encourage and facilitate specialist interest groups e.g. botanical and ornithological groups to conduct surveys and monitoring events in their field of expertise.

(viii) All survey and monitoring work carried out on land administered by the Department must meet appropriate approval and permit requirements, including those of the Animal Protection (Code of Ethical Conduct) Regulations 1987.

(ix) As far as practical, all survey and monitoring work will cause minimum damage and disturbance to land, water and protected species.

26.2.4 Outcomes

- Priorities for survey and monitoring are established.
- Management decisions are based on the best available data.

- A database of information that identifies indigenous ecosytems, habitats and species found within the Conservancy is developed and added to as further information is gathered.
- Degradation of major ecosytems is recognised.
- Early detection of newly introduced insects or diseases associated with indigenous tree species.

FIGURE 26: SURVEY AND MONITORING PRIORITIES - WANGANUI CONSERVANCY

RESOURCE	PRIORITY
THREATENED SPECIES	
Identify vital habitat for threatened species found outside of intensively managed areas	1
Monitor blue duck populations in Egmont National Park and Manganui o te Ao River	1
Monitor populations of short and long-tailed bats	1
Survey and monitor threatened indigenous plants throughout Conservancy	1
Monitor NZ fur seal population at Sugar Loaf Islands	2
Monitor NZ falcon in Taranaki and Wanganui	2
Monitor mainland grey-faced and fluttering shearwater sites on Taranaki coast	1
Survey to locate populations of striped skink	1
Survey to identify further populations of small-scaled skink in the upper Rangitikei River areas	2
Monitor selected small-scaled skink populations	1
Monitor kereru on Parapara Highway (SH No.4)	1
Survey to locate Powelliphanta "Waitotara"	2
Monitor biannually NI kokako in north Taranaki forests	2
Monitor NI brown kiwi populations in Waitotara and Whitecliffs Conservation Areas and in Aotuhia area	1
Monitor NI brown kiwi in other locations	2
Identify threats to Tara taranaki (giant amphipod) in Egmont National Park	1
FRESHWATER	
Survey for brown mudfish in Stratford, Wanganui and Palmerston North Field Centre areas	1
Survey for other threatened native freshwater fish species in all field centres	2
Monitor selected brown mudfish populations	1
Monitor the effects of fencing on galaxiid spawning habitat in North Taranaki and Manawatu	1
Identify and survey riparian areas and wetland zones which are key to maintaining and enhancing the habitat for the native fishery	1

FIGURE 26: SURVEY AND MONITORING PRIORITIES (CONTINUED)

RESOURCE	PRIORITY
COMMUNITIES	
Survey of Taumarunui Ecological District for PNAP	1
Survey of Tongariro Ecological District for PNAP	1
Survey of Manawatu Gorge - North Ecological District for PNAP	3
Survey of Manawatu Gorge - South Ecological District for PNAP	2
Survey of Ruahine Ecological District for PNAP	2
Identify for intensive management, areas with high contributions to biodiversity	1
Monitor intensively managed areas for ecosystem response	1
Monitor short turf communities on South Taranaki coast for response to weeds, removal of grazing	1
Monitor condition of tussocklands and wetlands with wild horses both before and after 1997	1
Monitor existing permanent plots/exclosures throughout Conservancy	2
Monitor progress of revegetation projects	2
Monitor invertebrates at selected sites	2
Monitor grazing impacts on land leased by the Department	2
Monitor erosion and its recovery on Tahurangi Road, Egmont National Park	1
Monitor representative areas in each ecological district for early indication of gross deterioration	3
MARINE RESERVES AND COASTAL	
Monitor proposed marine reserve in North Taranaki	1
Monitor marine habitats and species of Sugar Loaf Islands Marine Protected Area	1
Identify and monitor important marine habitats	2
RECREATION IMPACTS	
Monitor impacts associated with the Manganui skifield concession	1
Monitor visitor use and impacts on Northern Summit Route, Egmont National Park	2
Monitor impacts in other high visitor use areas in Egmont National Park	2
Monitor visitor use and impacts on Matemateaonga Walkway and Kaiwhakauka-MangapuruaTrack	3
Monitor visitor use and impacts on campsites and short walks managed as part of the Whanganui Journey opportunity	1
Monitor success of the “carry-out rubbish” policy in the two national parks	2
Repeat visitor surveys Whanganui Journey and Egmont National Park	2

FIGURE 26: SURVEY AND MONITORING PRIORITIES (CONTINUED)

RESOURCE	PRIORITY
ANIMAL AND WEED THREATS	
Monitor exotic animals and indigenous species before, during and post control operations	1
Monitor animal impacts on vegetation of representative susceptible areas not receiving animal control	1
Monitor outer Sugar Loaf Islands for plant and animal pest invasion	1
Survey and monitor old man's beard reinvasion of Rangitikei reserves	1
Monitor impacts of spartina control in Manawatu Estuary	2
Monitor impacts of potential problem weeds	2
Monitor impact of hares in montane and alpine tussocklands	3
Survey indigenous forest areas in conjunction with MOF for introduced insects, diseases and other forest health irregularities	1
PUBLIC AWARENESS	
Monitor responses to programmes (including summer nature) or campaigns	2
Monitor public perceptions gained through media	3
Monitor Conservancy's media profile	3
Survey client groups to assess Conservancy adequacy in meeting their needs	3
ARCHAEOLOGY	
Survey and monitor important places identified as requiring survey through the HO Archaeological Resource Statement	2

PRIORITY: 1. High
2. Moderate
3. Low

26.3 INFORMATION MANAGEMENT

One of the Department's goals is to have a sound information base for effective conservation management in the Conservancy. Information requirements for effective management are immense. The Department needs to know which natural and historic resources are under threat and why. In many cases, management may have to proceed with only an interpretation of available information rather than a comprehensive knowledge of the resources. Up-to-date information about natural and historic resources can improve the confidence with which the Conservancy can make management decisions and is also fundamental to the Department's statutory advocacy and public awareness activities.

26.3.1 Objectives

(i) Provide and improve information management systems so that all information necessary for the functioning of the Department is gathered, stored and easily accessible.

(ii) Share information on natural, historic and recreation values with territorial authorities, Tangata Whenua and other organisations involved in conservation of these values.

26.3.2 Explanation

Traditionally, most resource information held in the Conservancy has been stored as hard copy in publications, files, maps and photographs. Increasing use of computer databases is being made at both national and Conservancy level, allowing more efficient sorting and retrieval of information.

The Department has copies of national databases including Wetlands of Ecological and Representative Importance (WERI) and Sites of Scientific and Wildlife Importance (SSWI) and has access to the database of archaeological sites and the National Land Register.

Cross Reference
See Sec 25.2

In addition, the Conservancy maintains its own land information inventory contained in Volume Two of this CMS. This inventory, which contains in excess of 760 entries, records a range of information for all land areas administered by the Department, and for other areas of land where the Department has a management role. The inventory is based on current known information. Information gaps exist and these will be filled over time. An updated land inventory will be maintained on a computer database.

The Department proposes to establish a Geographic Information System for the Conservancy which will allow greater integration of spatial information. Establishment of the system and training will be ongoing.

The Conservancy has a library with a wide range of reference and specialist technical publications. Direct access to other conservancy libraries and to the Head Office library complements the service available. Other important information sources held in the Conservancy include:

- a catalogued collection of photographic slides, prints and videos
- a collection of topographic and cadastral maps and aerial photographs of the Conservancy
- a full set of statutes, regulations and gazettes
- a filing system of correspondence, internal information and media reports.

In addition to these sources, staff members also maintain personal collections of books, slides and other information sources which can be utilised.

(a) Information on Maori values

The identification of Maori historic and cultural values on land administered by the Department is inadequate at present. The Department needs to work closely with Tangata Whenua to establish agreement on what these values are, how they should be recorded and the extent to which such information can be made available to the Department and to the public.

See Sec 18

26.3.3 Implementation

Cross Reference
See Sec 20.6

(i) Maintain national databases such as the National Land Register, species and sites databases.

(ii) Regularly update the Conservancy Land Inventory contained in Volume Two of this CMS and make the inventory available on a computer-based database.

(iii) Establish and maintain a Geographic Information System for the Conservancy.

(iv) Maintain a catalogued collection of photographic slides, prints and videos relevant to the Conservancy.

(v) Maintain an efficient filing system for the Conservancy.

(vi) Maintain an efficient Conservancy office library.

(vii) Maintain a set of statutes, regulations , gazettes and interpretive material relevant to the responsibilities of the Department.

(viii) Establish an information sharing process with Tangata Whenua for Wahi Tapu and other sites of significance to Tangata Whenua.

See Sec 18

(ix) Requests from Tangata Whenua to maintain the confidentiality of information on sites of cultural or historic significance will be honoured by the Department.

(x) Investigate information sharing opportunities and make available information on natural and historic resources to territorial authorities, Tangata Whenua and other organisations involved in the conservation of these resources.

(xi) Electronic copies of databases, new management planning documents and other related information held on computer based systems will be made available for public use where this is considered to be appropriate and will assist conservation management.

26.3.4 Outcome

- Conservation management will be enhanced through a sound information base.

27 Restoration

Restoration in its broadest sense includes a wide range of functions and management techniques, many of which are covered elsewhere in this CMS. Its principles and practices are threaded throughout conservation management. Ecological restoration involves active intervention and management to restore or partially restore biotic communities as thriving indigenous ecosystems. The aim is to restore ecosystems to a condition where natural processes occur freely, where New Zealand's plants, birds, animals and insects can persist without threat of extinction, and where people can enjoy the splendour of natural New Zealand.

Restoration is carried out on land administered by the Department where it is possible and desirable to regain natural or historic values that have been severely diminished, or even lost. This may have occurred because of a single event (e.g. a fire) or by more gradual deterioration of ecosystems by plant and animal pests, or as a result of human activity. Restoration initiatives on private land will also be encouraged to restore degraded areas.

The impact of human activity on natural ecosystems of the Conservancy has been dramatic, particularly in respect to the Taranaki ring plain, Manawatu district and the coastal fringe. In the Foxton Ecological District for instance, less than 5% of the original native vegetation remains. Coastal plant communities have been reduced to tiny remnants and many of their component species are now nationally threatened. There have been similar reductions in forest communities in the Manawatu and Egmont Ecological Districts.

By determining the key problems and by putting in place policies and practices which mitigate them, the Department should be able to minimise the number of sites needing restoration.

The need for intervention must be weighed carefully against the ability of the site to recover by itself in a reasonable time and whether resources can be better used elsewhere for greater conservation gains.

Restoration of sites can provide a good opportunity for public involvement and conservation advocacy.

27.1 Objectives

(i) To restore degraded areas of land administered by the Department to a condition where indigenous natural processes continue as free from human and exotic influence as possible.

(ii) To pursue the restoration of selected areas of high natural, historic or amenity value, where unassisted restoration is unlikely to occur in an acceptable period, and to consider the need for restoration following natural catastrophes.

(iii) To encourage local communities and landowners to undertake restoration of ecosystems on private land, particularly where this will assist in linking fragmented areas of land administered by the Department.

27.2 Explanation

Priority areas for restoration will be those with species, communities and processes at risk, or where there are significant potential natural and historic values unrepresented elsewhere in the Conservancy and where restoration is possible and practicable. Natural disturbance on a large scale may place an area at particular risk from plant and animal pests. Intervention may be desirable so that the process of recovery can occur.

27.3 Implementation

(i) *Restoration initiatives on private land will be encouraged and the Department may assist on private land with species, communities or processes at risk.*

(ii) *Monitoring and after-care of restored areas will have a high priority. Restoration will not begin if after-care is not possible.*

(iii) *Revegetation programmes on land administered by the Department will use species which are native to the local area and of local genetic stock, wherever possible. Other species, including exotic plants which pose no threat to native ecosystems, may be used for particular short-term management purposes, for which they have an advantage over local species e.g. fast growth, shelter and food sources for birds.*

(iv) *The combination of plants used in restoration programmes will, as far as possible, reflect the combination of the site's original vegetation. Mass planting of hardy or tolerant species may be used where they provide cover on difficult sites in the short term, allowing the introduction of more representative species later.*

(v) *Areas administered by the Department will be identified where restoration, rehabilitation or enhancement may be necessary.*

(vi) *Restoration activities will be integrated with species recovery programmes wherever possible.*

(vii) *Riparian initiatives will be encouraged across landscapes in the Conservancy, whatever the tenure.*

27.4 Outcomes

- The restoration of ecological processes and biotic communities that maintain the biological diversity and ecological integrity of each ecological district within the Conservancy.
- The restoration of key damaged sites to maximise their contribution to the natural environment.
- That the Conservancy is recognised as a source of expertise and advice on wetland, tussock grassland, riparian and coastal community rehabilitation and establishment.
- Provision of new habitat for native (including some threatened) species.

28 Compliance and Law Enforcement

Compliance and law enforcement have roles in most of the Department's responsibilities.

The Department administers or has responsibilities under acts, regulations or bylaws, many of which have offence provisions both on and off land administered by the Department.The types of offences commonly encountered include:

- breaches of the Whitebait Fishing Regulations
- illegal removal of native plants from reserves
- stock trespass on land administered by the Department
- hunting without permits
- lighting fires during a restricted fire season without a fire permit
- illegal taking of protected wildlife
- the erection of buildings without a permit on land administered by the Department
- dumping of rubbish on land administered by the Department.

28.1 Objective

To achieve compliance with the legislation governing protection of natural and historic resources.

28.2 Explanation

The attitude toward law enforcement has, for many years, taken a formal approach of apprehension and prosecution of most offenders. This remains the case in respect of blatant acts of wilful damage and disturbance to natural and historic values. However, compliance through public awareness, rather than rigorous enforcement is preferred.

In the past, a lack of understanding and knowledge of the laws relating to conservation have meant a low rate of compliance and consequently a high rate of enforcement. The Department will endeavour to ensure that the public is made fully aware of conservation law and regulations through public awareness programmes and the training of core staff and honorary warranted officers in compliance work.

(a) Prosecutions

Offences will be addressed on a case by case basis with final recommendation for prosecution, or other action, made by the Conservator in consultation with the Conservancy Solicitor.

(b) Honorary warranted officers

The Conservancy will maintain a number of trained honorary warranted officers who will be available to assist Departmental officers and be capable of dealing with situations they encounter. Honorary warranted officers will receive ongoing professional training in the compliance aspects of the Department's functions.

28.3 Implementation

(i) The public will be made aware of the laws and regulations relating to the protection of all natural and historic resources.

(ii) A trained network of honorary warranted officers will be maintained to assist Department officers in compliance and law enforcement matters.

(iii) Key staff will be given regular training to ensure a high standard of compliance and law enforcement is maintained.

(iv) All reported or detected offences will be investigated immediately and prosecutions taken where necessary.

28.4 Outcome

- Protection from wilful damage or disturbance of the Conservancy's natural and historic resources.

THREAT MANAGEMENT

29 Introduction

Cross Reference
See Sec. 44.1

The protection of natural ecosystems from destruction and degradation caused by fire, introduced animals, invasive plants and pollutants is a high priority within the Conservancy. Accordingly, a considerable amount of effort is directed toward achieving protection of land administered by the Department and in exercising the Department's wider environmental advocacy role.

The risk of fire in the wet temperate forests west of the Whanganui River and throughout Taranaki is relatively low, in all but exceptionally dry periods. Fire is a significantly greater threat however in the dry coastal belt from Hawera to Foxton and through the scrublands, upland forests and native grasslands of the lower Whanganui, Rangitikei and Moawhango districts.

See Appendix 2 for definition of 'State Area'

As a fire authority under the Forest and Rural Fires Act 1977, the Minister of Conservation has responsibility for fire control on State Areas (Crown lands) and for other land lying within the surrounding 1 km fire safety margin. The maintenance of a highly tuned fire response capability within the Department is therefore essential.

Possums occur within all forest habitats of the Conservancy. The majority of these habitats have a tree cover which is highly palatable to possums - namely a high component of rata and kamahi. The future viability of these forest types has already been seriously threatened in parts of the Egmont and Whanganui National Parks. Consistent with nationally ranked priority areas for protection against possums and a commitment to long term funding so that control can be sustained, control measures are undertaken in both parks and in several other large areas administered by the Department within the Conservancy.

Although goats occupy most forest habitats west of the Turakina River, control measures occur over only 25% of these areas. Goat control effort is directed at those areas with highest natural values at risk and where sustained long term control can be achieved.

The natural value of many important areas of land administered by the Department is at risk from invasive plants. The creeper, old man's beard is present through much of the Conservancy, but has had its most severe impact on the remnant forest reserves of the Rangitikei and Manawatu. Control or eradication programmes in these areas are a recognised long term commitment. Other plant pests which are the subject of on-going control include spartina in the important estuarine area at the Manawatu River mouth, ginger on the northern coastal flanks of Egmont National Park and pampas and boxthorn through the unique coastal habitats of the Foxton Ecological District.

As part of the Department's general conservation advocacy work (Section 6(b) of the Conservation Act), the Department liaises closely with district and regional councils and Tangata Whenua on environmental protection issues. The treatment

and discharge of wastewater and the management of landfills are the two areas where the Department has made significant gains for environmental protection or rehabilitation.

30 Fire

The Minister of Conservation is the fire authority for all land administered by the Department along with a 1 km contiguous fire safety margin. The Department is responsible for fire prevention and suppression within this area as defined under Section 2 of the Forest and Rural Fires Act 1977.

In order to carry out the Minister's responsibilities as fire authority, the Department is required to prepare fire action plans, train staff in fire control, notify closed fire seasons, maintain fire weather records and equipment and also comply with the National Rural Fire Authority Rural Fire Management Code of Practice and the Department's Manual of Fire Control Operations.

While the above minimum performance and capability standards must be complied with, the Department's fire control capability is further enhanced by a close planning and operational relationship with other fire authorities jointly involved in regional rural fire committees. Formal 'Memoranda of Understanding' are drawn up to allow co-opting of any other local fire authority in the event that assistance is required for fire fighting. There are three such committees within the Conservancy with membership including district councils, Defence Department, forest owners and the Department.

30.1 Objective

To prevent or minimise fire damage to State Areas and to protect human life, natural and historic values and structural assets within the scope of the Department's fire control responsibilities and capabilities.

30.2 Explanation

The aim of fire management, in priority order, is to minimise the risk of wildfires to life, property, and areas administered by the Department. Fire management activities include strategic fire planning, fire prevention, the control of wildfires and any use of fire for management purposes. The Department's current national policy on fires is to suppress all wildfires which are known to be burning on State Areas or any other areas where the Department has an agreement to carry out fire control. Fire detection and suppression takes priority over other Department activity (except where the other activity is concerned with a danger to life).

Fire control is undertaken in accordance with the Department's Manual of Fire Control Operations, and with the Conservancy's Fire Action Plan, both of which are annually updated. The Fire Action Plan shows what to do when a fire is reported, people to contact, the resources available and sets out the organisational requirements. The Department works closely with the National Rural Fire Authority, a division of the New Zealand Fire Service. It provides guidance to all rural fire authorities on maintaining, training and equipping a reaction force to suppress fires, and it manages a Rural Fire Fighting Fund which allows for the reimbursement of most rural fire suppression costs. All rural fire authorities must meet the National Rural Fire Management Code of Practice if they are to claim on the Rural Fire Fighting Fund.

Chemicals used for controlling fires may impact on species, in particular, indigenous fish. The Department will maintain a readily accessible source of information to assist in reducing the potential side effects of fire control practices.

30.3 Implementation

(i) *The Department will give absolute priority (except where human life is threatened) to the control and suppression of wildfires on State Areas.*

(ii) *Compliance with the Forest and Rural Fires Act, the National Rural Fire Authority Rural Fire Management Code of Practice and the Manual of Fire Control Operations will be a pre-requisite to maintaining a fire response capability.*

(iii) *The maintenance of a close working relationship and formal agreements with other fire authorities and members of Taranaki, Wanganui and Manawatu rural fire co-ordinating committees will be a priority.*

(iv) *Annual training of staff in equipment use, suppression techniques and fire behaviour will take place. Joint training with neighbouring fire authorities will occur where possible.*

(v) *Field staff will be encouraged to promote fire prevention with adjoining landowners and members of the public through day-to-day or more formal contacts.*

(vi) *Fire equipment at field centres will be maintained in a state of immediate readiness.*

(vii) *Radio communications will be maintained to provide an appropriate level of support capability for fire control purposes.*

(viii) *Fire weather index systems will be maintained and records collated throughout the fire season to determine state of alert and prohibited fire season requirements. Prohibited fire seasons may be declared over periods of extremely high danger.*

(ix) *Fire permits will be issued where appropriate for all fires to be lit within the fire safety margin adjoining State Areas.*

(x) *Throughout the fire season, a round-the-clock fire duty and standby systems will operate to facilitate a rapid response capability by Departmental staff.*

(xi) *With appropriate safeguards and the Conservator's approval, fire may be used as a management tool on land administered by the Department.*

(xii) *Visitors to land administered by the Department will be encouraged to use gas, liquid or solid fuel cookers, or alternatively to use enclosed permanent fireplaces provided by the Department rather than using open air fireplaces for cooking.*

(xiii) *Information to assist in reducing the potential side effects of fire control practices will be provided to staff.*

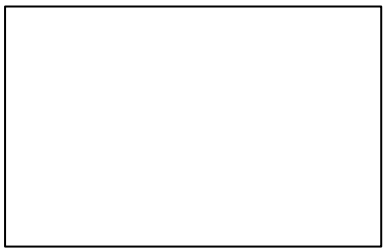
30.4 Outcomes

- A fire response capability and fire alert system which sees all fires occurring within the Department's area of responsibility extinguished quickly and efficiently with the minimum possible loss of natural and historic values. This will include a similar response to fires caused by lightning or other natural means.
- Co-operation from adjoining landowners and members of the public in protecting natural and historic values from fires.
- All controlled burns lit within fire safety margins to be covered by a fire permit and burn plan where appropriate.
- Maintenance of good levels of co-operation with other fire authorities.

31 Animal Threats

31.1 CONTROL AND MANAGEMENT

The broad grouping 'animal threats' incorporates a wide range of animals, mostly introduced into New Zealand, either deliberately or accidentally. They are regarded as threats because of their detrimental impacts. The distribution of animal threats within the Conservancy is shown on Figure 28. This shows that possums and goats are widespread and that other animal threats are common in parts of the Conservancy.



Possums have a devastating affect on numerous native species of animals and plants.

Wild animals and other animal threats are having severe impacts on most of the natural areas and values managed or protected by the Department in the Conservancy. Currently, sustained goat control programmes are in place over approximately 25% of the land administered by the Department that is infested, possum control programmes over approximately 25%, deer are spreading unchecked into large areas of Taranaki and Whanganui that were, until recently, free of these animals. Many kilometres of boundaries are poorly or not fenced at all to exclude domestic livestock. Rats, cats, mustelids and mice are widespread and uncontrolled.

Animals classified as threats are those which have a significant detrimental affect on natural values, such as native plants and animals, the natural communities and ecosystems of which those native plants and animals are part of and the soil and water systems that support them. Such threats include goats, possums, deer, rats and stoats. Other animals may be pests principally because they are a nuisance or threat to humans who are using or enjoying the same ecosystems (e.g. wasps, giardia) or if they threaten the long term survival of managed ecosystems such as farms and forests that sustain human existence e.g. rabbits, goats.

Animals on land administered by the Department may also be classified as threats or pests by other persons or organisations for different reasons, e.g. possums because of their role in the spread of bovine tuberculosis. Conversely, animals that are threats in the conservation sense may be a valued resource for other people, e.g. goats and deer.

The legal rationale for animal control is contained within three Acts which govern the Department's land management role. These are the National Parks, Reserves and Conservation Acts and, to some extent, the Wildlife Act. The General Policy for National Parks 1983,[30] adopted by the New Zealand Conservation Authority in 1983, provides guidance on the objectives of animal control in national parks.

The legal status of most animal threats is specified either by the Wild Animal Control Act 1977 or the Wildlife Act 1953. The Biosecurity Act 1993 allows any organism (plant, disease, disease carrier or animal other than a human being) to be defined as a pest and managed through regional or national pest management strategies.

The framework for the conduct of animal threat control is contained primarily within the Wild Animal Control Act 1977 for wild animals (e.g. deer, goats and possums) and the Biosecurity Act 1993 for animals that are not classified as wild animals e.g. rabbits.

The development of national policy and guidelines for the control of animal threats is occurring on a species by species basis. Wasps, thar and possum control plans and draft goat and deer control plans have been prepared.[18, 25] Other national control plans will be prepared.

Within the Conservancy, a 'Wild Animal Management Plan'[21] provides the framework for decisions on resource allocation for animal pest control. The control of possums and goats is undertaken in accordance with the national goat and possum plans which dictate resource allocations for their control. Animal control priorities for the Conservancy, which have been derived from these plans, are identified in Figure 27.

Other agencies have or are preparing pest management strategies which impinge on land administered by the Department. These include plans for the control of Bovine tuberculosis, exotic diseases (e.g. foot and mouth), new pests (e.g. Asian gypsy moth) and regional pest management strategies prepared by regional councils.

National and regional pest management strategies may require the Department to contribute toward the cost to implement the strategy where the Crown agrees to be bound by the strategy.

Cross Reference
See Sec 42.1

Gaining public support for animal control programmes is important in order to ensure that they can proceed as planned, without significant opposition.

31.1.1 Objectives

(i) To reduce the impact of animal threats to a level that does not threaten the continued existence of native species of plants and animals, natural processes within ecosystems and the sustainable use and enjoyment of ecosystems by the public.

(ii) To gain community acceptance of and support for the need for animal control.

31.1.2 Explanation

Animal control can be either to:

- keep animals out of areas where they are currently absent, or
- control animals where they are already present.

Preventing introductions and spread to new areas is the highest priority. Where species already exist the options for control are:

- eradication
- sustained control at a level that protects the values under threat
- do nothing.

Eradication is a desirable aim if it can be achieved, but it is limited either to islands or to mainland island-type situations such as effectively fenced peninsulas or where natural barriers such as large rivers prevent re-invasion or where the animal does not occur in the surrounding area. All target animals must be able to be removed with no chance of re-invasion. Although costs may be high in the short term, eradication is a cheaper and more effective option in the long term.

Elsewhere, reduction of an animal population to a density that will benefit the values being protected is the best that can be achieved. To obtain the maximum benefit, efforts should concentrate in the areas of highest natural value and achievable goals must be set. In many areas the only option within the limits of resources and current technology is to do nothing.

Targeting a single animal species may not always give the most benefit. Protecting canopy trees by possum control is of little value if their regeneration on the forest floor is prevented by domestic stock or goats. Often the greatest benefits are achieved when a range of species is targeted in the same area.

The indirect effects of animal control also need to be considered. For example, removal of large browsers may lead to an increase in weeds, or removal of one species may lead to an increase in another species, such as an increase in rat numbers after removal of cats.

31.1.3 Implementation

(i) Priority areas for animal control will be those with native species, communities and ecosystems at risk. Highest priority will be given to those areas where the native species or community is nationally rare or threatened.

(ii) Priority will also be given to control of animals, with significant likely detrimental conservation impacts, that are newly recognised within the Conservancy or which threaten to extend their existing range.

(iii) A priority list will be the basis for the 'Conservancy Wild Animal Management Plan'. The list will reflect national priorities where national guidelines, control plans and policies have been developed. Such lists will be revised as new information becomes available.

(iv) Where possible, the Department will co-ordinate with other pest control agencies to maximise the outcomes of animal control programmes and to prevent the spread of new or existing animal threats.

(v) Where necessary, the Department will propose regional pest management strategies for the control or eradication of particular species.

(vi) Where the animal is a nuisance to humans, local control will be targeted at areas where that nuisance is greatest. Wasp control will be undertaken primarily in high use recreation areas in accordance with the national wasp control plan.

(vii) The Department will consult and co-ordinate with regional councils to ensure that natural, historic or recreation values are considered during the preparation of regional pest (animal) management strategies and the Department's obligations under these are clearly defined.

(viii) The Department will contribute to regional animal pest management strategies to the degree agreed by Government.

(ix) The Department will endeavour to meet obligations as a good neighbour where it can do this without jeopardising its own animal control priorities.

(x) The Department will consult with adjoining landowners and landowners representatives such as Federated Farmers in order to inform them of the need for animal control programmes.

(xi) The public will be informed of the reasons for animal control programmes.

31.1.4 Outcomes

- Priority values are retained and enhanced by a reduction in competition and predation from animal pests.
- As far as possible, no new animal threat species will become established and existing population boundaries will be retained or reduced.
- Regional animal management strategies reflect natural value protection requirements.
- Animal control operations are supported by the community.
- The Department is regarded as a good neighbour by adjacent land owners.

FIGURE 27: ANIMAL CONTROL PRIORITIES IN WANGANUI CONSERVANCY

LOCATION	AREA (HA)	OBJECTIVE	GOAT CONTROL (N= NO GOATS, * = UNDERWAY @ = PLANNED P = PRESENT BUT NO CONTROL PLANNED)	POSSUM CONTROL (*= UNDERWAY, @ = PLANNED # = TB CONTROL AREA)	OTHER LARGE ANIMALS
Egmont National Park	34,000	Protect endemic plant and animal species and local vegetation types	100% *	100% *	Pigs, eradication underway
Whitecliffs Conservation Area	1,800	Protect best west coast NI coastal vegetation sequence	100% *	83% *	Pigs, stock trespass
Blue Rata Scenic Reserve	330	Protect rata forest	N	100% *	Nil
Hihitahi Sanctuary surrounding areas	3,300	Protect rare kaikawaka/ totara forest	N (some on fringes being monitored)	100% * & @	Stock trespass, and red and sika deer
Titirangi, Ngaurukehu and Paengaroa Scenic Reserves	900	Protect rare forest type	N	100% *	Occ. deer
Taranaki coastal reserves	230	Protect remant coastal forests	N	100% *	Occ. stock
Mokau River reserves	2,500	Protect outstanding forest sequence	100% *	20% *	Occ. stock
Himitangi Scientific Reserve	20	Protect rare forest/ soil type	N	100% *	
Manawatu Gorge Scenic Reserve	600	Protect rare beetle/ plants and local vegetation type	100% *	100% *	Occ. stock and deer

FIGURE 27: ANIMAL CONTROL PRIORITIES IN WANGANUI CONSERVANCY (CONTINUED)

LOCATION	AREA (HA)	OBJECTIVE	GOAT CONTROL (N= NO GOATS, * = UNDERWAY @ = PLANNED P = PRESENT BUT NO CONTROL PLANNED)	POSSUM CONTROL (*= UNDERWAY, @ = PLANNED # = TB CONTROL AREA)	OTHER LARGE ANIMALS
Mangaweka Scenic Reserve	70	Protect Dactylanthus and mistletoe	N	100% *	
Moki and Makino Conservation Areas	10,600	Protect representative area of vegetation, kokako, kiwi habitat	22% *	22% *	stock, occ. deer
Omatane Scenic Reserve	10	Protect significant totara forest	N	100% #	
Tangitu Conservation Area and adj. areas	700	Protect coastal vegetation type	P	100% @	Occ. stock
Taramoukou Conservation Area	1,500	Protect local vegetation types	40% *	40% *	Stock
Tarata Conservation Area	100	Protect kohekohe forest	P	100% *	Stock
Waitaanga Conservation Area	15,000	Protect mistletoes, Dactylanthus, local vegetation, kaka, kiwi, falcon & short-tailed bat	100% *	80% * 20% #	Stock, occ. deer
Whanganui National Park	74,000	Protect large area of lowland forest, kiwi, kaka, falcon, bats etc.	16% *	20% * 20% @	Stock, pigs, deer
Moki Scenic Reserve	2	Protect kohekohe forest	P	100% @	Stock
Hunua Conservation Area	600	Protect diverse podocarp hardwood forest	100% *	100% *	Stock
Nihinihi Conservation Area	1,000	Protect diverse podocarp/hardwood forest, kiwi	100% *	100% *	Stock
Rotokahu Scenic Reserve and adj. areas	2,000	Protect rare forest type, kiwi	P	30% *	Stock, pigs, deer
Tangarakau Scenic Reserve and adj. areas	4,000	Protect kiwi and other threatened species habitat	P	100% *	Stock, pigs
Round Bush Scenic Reserve	40	Protect rare forest	N	100% *	Occ. deer
Turakina Valley reserves	300	Protect representative remnants	*	60% *	Stock
Manawatu/Rangitikei reserves	800	Protect representative remnants	N	100% *	Stock

31.2 CONTROL METHODS

Control methods include shooting, trapping, poisoning and biological control. Shooting is used mainly for the larger animals and trapping for the smaller animals. Poisons are generally used for small animals such as possums and rodents. A wide range of techniques and baits are used to apply poisons, each customised to the target animals. For large and difficult areas, the most cost-effective operations will often use aircraft to drop the bait.

In some cases, a more effective approach is through indirect methods. For example, large animals can sometimes be controlled through fencing an area. This is restricted to relatively small areas for practical and financial reasons and works best for small, lowland reserves and covenanted private land open to grazing by stock. Sometimes shifting the value under threat (e.g. ground birds) may be the only choice.

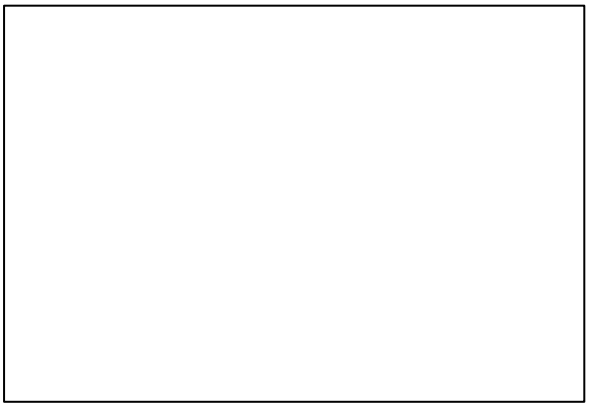
31.2.1 Objectives

(i) To maximise the benefits of investment in animal pest control.

(ii) To select animal pest control methods that are cost effective and not detrimental to the long term survival of native species.

31.2.2 Explanation

Animal control is expensive. Sustained goat control costs $4-$5 per hectare per annum; possum control about $16 per hectare for knockdown programmes that must be repeated periodically; and fencing to exclude stock around $8-$9 per metre (based on 1996 average costs). It is, therefore, essential that the objectives of animal control programmes are clear, the programmes are sustainable (so that investment in control is not wasted) and that resources are committed only to programmes with priority objectives. These programmes also need to be primarily targeted to achieving positive conservation outputs rather than just meeting some other aim such as providing employment.



Spreading 1080 possum poison by helicopter is currently the cheapest and most effective control option in rugged country.

Available technology and financial limitations will always restrict what animal control methods can be used. For example, current ground based possum control methods are too costly and difficult to carry out to allow the effective coverage of huge forested areas such as all of Whanganui National Park. A combination of different methods often gives the best results. Improvements in techniques and other options such as biological control will be closely followed and used where appropriate.

Poisons are most effective for some smaller animals but special care is required in their use. The use of poisons will be governed by relevant legislation, policies developed by the Department, regional policy statements and Government directives. In all situations, animal welfare issues must be considered and only approved techniques will be used.

Control methods may also have some potential hazards for non target native animals. Any cost/benefit assessment of alternative control methods must consider such hazards.

31.2.3 Implementation

(i) For each animal control programme, clear objectives will be defined and cost effective techniques selected. Programmes will not commence unless they are able to be sustained or the objectives achieved within a definite period (e.g. fencing).

(ii) Animal control proposals, including biological control, will be evaluated for potential hazards to the survival of native species, that they do not pose undue risk to the environment or public safety, to ensure that they are ethically acceptable and are carried out in accordance with any relevant legislation. Animal control programmes carried out by other agencies on land administered by the Department will be similarly evaluated.

(iii) The Department will consult with regional and district councils to promote planning rules that reflect the practical requirements of animal control programmes.

(iv) Where necessary, resource consents or a certificate of compliance under the Resource Management Act will be sought before animal control operations are undertaken.

(v) All animal control programmes will be required to comply with other legislation such as the Biosecurity Act 1993, Pesticides Act 1979 and Regulations before they are commenced.

(vi) Public awareness campaigns will be written into animal control programmes.

31.2.4 Outcomes

- Animal control programmes remain at least at 1996/97 levels, or increase.
- Animal control programmes are cost effective and are conducted in accordance with legislation and approved practices.
- The long term survival of any native plants or animals or communities is enhanced or has not been affected by any control methods.
- The community is supportive of the Department's animal control methods.

31.3 RECREATIONAL AND COMMERCIAL HUNTING

Recreational hunters are recognised as providing an important contribution to the control of deer and pigs in easily accessible areas. Most recreational hunting is carried out within a day's walk or less of road-ends or other vehicle access points. In these areas recreational hunters can keep targeted animals down to acceptable numbers. Hunting competitions and organised hunts can often increase local hunting interest, as occurred with the goat hunting competitions in Egmont National Park.

Under the Conservation, National Parks, Reserves and Wild Animal Control Acts, permits are required for hunting and wild animal recovery by helicopter. Hunting guides require a concession. The Conservation Act also requires that when issuing hunting permits, regard is had to the safety of members of the public.

Cross Reference
See Sec 35

31.3.1 Objectives

(i) To enhance the protection of desired natural values by encouraging recreational and commercial hunters to complement official animal control programmes.

(ii) To control recreational and commercial hunting activities where necessary to protect public safety and/or to fairly allocate limited opportunities.

(iii) To control recreational and commercial hunting activities where necessary to protect native species that may be at risk.

31.3.2 Explanation

Recreational hunting, which may include recreational game bird hunting, can potentially, be responsible for a significant harvest of some wild animal species. However this harvest alone may not be sufficient to protect any desired natural values unless the harvest is sustained and reduces the target populations to a level that reduces its impact on the natural values.

Commercial hunters, including possum trappers, can contribute to the control of animal threats, but their effectiveness is limited by fluctuations in the market for animals or animal products and the Department cannot rely on the continued presence of commercial hunters.

The effectiveness of recreational or commercial hunting in protecting natural values in priority areas needs to be monitored. The Department may need to carry out animal control if recreational or commercial hunting does not achieve acceptable levels of control in priority areas.

For public safety, or other management reasons, parts of Whanganui National Park need to be closed to recreational or commercial hunting during periods of high use, particularly during the summer months. These include the river trench and walkways within the park.

In order to ensure that native birds and animals are not placed at risk or that animals being hunted are not wounded by unsuitable weapons, control may be placed on the type of weapon that can be used by recreational or commercial hunters.

Recreational hunting of sambar deer is allowed under licence during part of the months of August and September. A ballot system is used to allocate the opportunities available to hunt this species on land administered by the Department. The Department entered into a contract with the Sambar Deer Management Foundation Inc. in 1995 to provide the necessary administration of the licence system.

Goats are difficult to control in large areas of rugged country.

31.3.3 Implementation

(i) Recreational and commercial hunting of introduced animals will be regarded as valid activities on land administered by the Department and will be fostered and encouraged where they do not conflict with other responsibilities and objectives of the Department or jeopardise official animal control programmes.

(ii) Recreational hunting of species where there are limited or restricted opportunities, e.g. sambar deer, will be controlled by mechanisms such as ballot. Where feasible and practicable, the Department will enter into contract arrangements with interest groups to provide any necessary implementation of such systems.

(iii) The Department will liaise with recreational and commercial hunting organisations in order to improve conservation outcomes.

(iv) Unless specifically authorised by the Conservator or the Conservator's representative, recreational and commercial hunters will not be permitted to take smooth bore or rim fire firearms onto land administered by the Department for the purpose of game bird, small animal hunting or other approved purposes. Hunting bows and arrows will be required to comply with 'special permit conditions for bow hunting on Crown land', published in the New Zealand Bowhunting Manual, 1987.[45]

31.3.4 Outcome

- Recreational and commercial hunting will complement official animal control work undertaken in the Conservancy, and where possible, recreational and commercial hunters will effectively control some species in some areas to levels that protect desired natural values.

31.4 MONITORING OF CONTROL OPERATIONS

Monitoring is required to test the success of animal control programmes, but assessing animal numbers is only useful if it can be linked directly to the values to be protected. Monitoring techniques include use of vegetation plots, exclosure plots and monitoring of specific plant or animal populations. Direct monitoring of animal numbers includes trapping and mapping. Indirect monitoring of animal populations is undertaken by using data such as kill records, pellet counts and browser indices.

This exclosure plot shows the regrowth that occurs when grazing animals are excluded.

Direct monitoring of the values being protected by animal control is the most reliable technique, but it becomes increasingly more difficult and expensive when dealing with a range of values over large areas. It is particularly difficult for less easily defined values

such as general forest health. This requires a detailed understanding of how these ecosystems would develop naturally without animal threats.

The results from monitoring at all levels will feed back and help define the animal control prioritization process.

31.4.1 Objectives

(i) To understand the nature of impacts of animal threats on land administered by the Department.

(ii) Assess the effects of control programmes on the populations of those animals and their impacts.

(iii) Assess the effectiveness of control operations in maintaining or enhancing desired natural outcomes.

31.4.2 Explanation

Cross Reference
See Sec 26.2

Little broad-scale animal or vegetation monitoring is carried out because of its high cost and the Department's limited resources. Current monitoring is confined to assessment of pest numbers through kill records and direct monitoring of selected native plant and animal species. Attempts are being made to address this through development of less labour-intensive techniques, beginning with a national review of techniques and requirements. All animal control programmes are audited annually to assess effectiveness, determine cost efficiency and to set ongoing priorities.

31.4.3 Implementation

(i) All animal control programmes will be monitored to record the effects and to measure the degree to which objectives have been met.

(ii) A programme will be established to monitor the impact of animal threats in areas which are not included in animal control programmes.

31.4.4 Outcome

- Establishment of a database comparing operational costs versus benefits for each sustained control programme.

31.5 FARMING, HOLDING AND LIBERATING

Under the Wild Animal Control Act 1977, permits are required for capturing, conveying or releasing any wild animal. Permits may also be required to hold any wild animal, including for farming or display purposes in certain areas.

Other relevant legislation includes: the Deer Farming Notice No. 3, 1980 and the Noxious Animals in Captivity Regulations 1969 relating to the holding of wild animals; the Wildlife (Farming of Unprotected Wildlife Regulations 1985); the Fencing Act 1978, the Biosecurity Act 1993 and the Conservation Amendment (No. 3) Act 1994.

31.5.1 Objective

To prevent the establishment of new animal pests within the Conservancy or the spread of unwanted species into areas that are free of them.

31.5.2 Explanation

(a) Farming

The introduction of animals that could become threats is not favoured. The Department has a direct legislative role in some cases, for example through the Wild Animal Control Act that prohibits farming of specified animals outside their designated feral or (for deer) other approved range.

Monitoring of deer and goat farms and liaison with land managers adjacent to important areas administered by the Department, particularly where those animals are not present, is essential to minimise chances of liberation. Problems occur mainly with goat farms as fencing is often inadequate and/or poorly maintained. The Department will pursue with the local authorities the creation of a buffer zone around Egmont National Park to prevent the escape of goats, and other wild animals into the park to complement the existing buffer zone for deer.

(b) Liberations

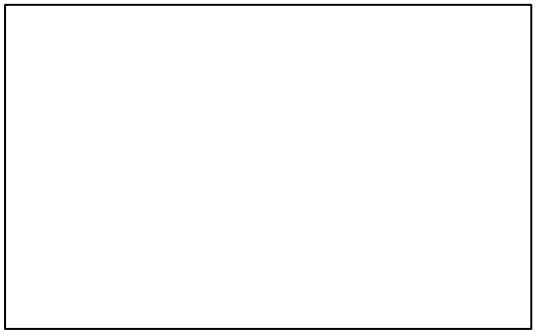
Liberations may be deliberate, such as the release of wild animals or gamebirds for increased hunting potential, or dumping of unwanted pets. Unintentional liberations occur through inadequate security or accidents.

Such liberations are illegal unless authorised. Authorised liberations may occur for purposes such as enhancing control programmes or scientific study.

The risks from accidents or deliberate dumping of animals can be reduced by increasing public awareness of the potential disasterous effects on native plants, animals or habitats and the spread of TB.

Fish and game councils may carry out game management on land administered by the Department. Sports fish or gamebirds may also be released to improve stock for hunting and fishing, provided their release is not in conflict with the land status or natural and historic values. Applications to introduce new sports species to areas where they are not present are dealt with on a case-by-case basis in terms of section 26ZM of the Conservation Act, but are generally not supported.

Domestic stock damage sand binding vegetation along the coast, resulting in sand blow-outs.



(c) Domestic stock

Problems can occur when farm stock stray from adjoining farmland onto land administered by the Department. Where stock stray, or farmed wild animals are released or escape, statutory procedures are available to ensure their removal. Where the problem arises through inadequate or no fencing, the Department may negotiate with the adjacent owner to improve the fencing. Most Acts governing the management of land by the Department specify that it is an offence to allow stock to trespass onto that land. There is a considerable amount of fencing

required to ensure areas administered by the Department are not subject to stock trespass. A strategic approach to the allocation of limited resources available for new fencing will be developed

31.5.3 Implementation

(i) High priority will be given to preventing the establishment of new unwanted species within the Conservancy and the spread of less widely distributed species. This will be achieved through advocacy, publicity, the investigation of reports and sightings, targeted eradication programmes and strict enforcement of security provisions for properties holding potential pest species in captivity, particularly in areas where that species is not already feral.

(ii) A buffer zone will be promoted around Egmont National Park to prevent the escape of goats and other wild animals into the park.

(iii) The liberation of wild animals and other potential pest species will be opposed unless that liberation is legally authorised for a defined management purpose or for research e.g. 'judas goats', capture and recapture programmes to monitor operational effectiveness, biological control etc.

(iv) Straying livestock will be dealt with in terms of Section 36 of the Conservation Act, or similar provisions of other Acts.

(v) Publicity and public awareness programmes will be used to highlight the impact of domestic stock on natural or historic values.

(vi) A strategic plan for the allocation of fencing resources will be developed. Fencing priorities will be determined in accordance with section 31.1.3 (i), (ii) and (iii).

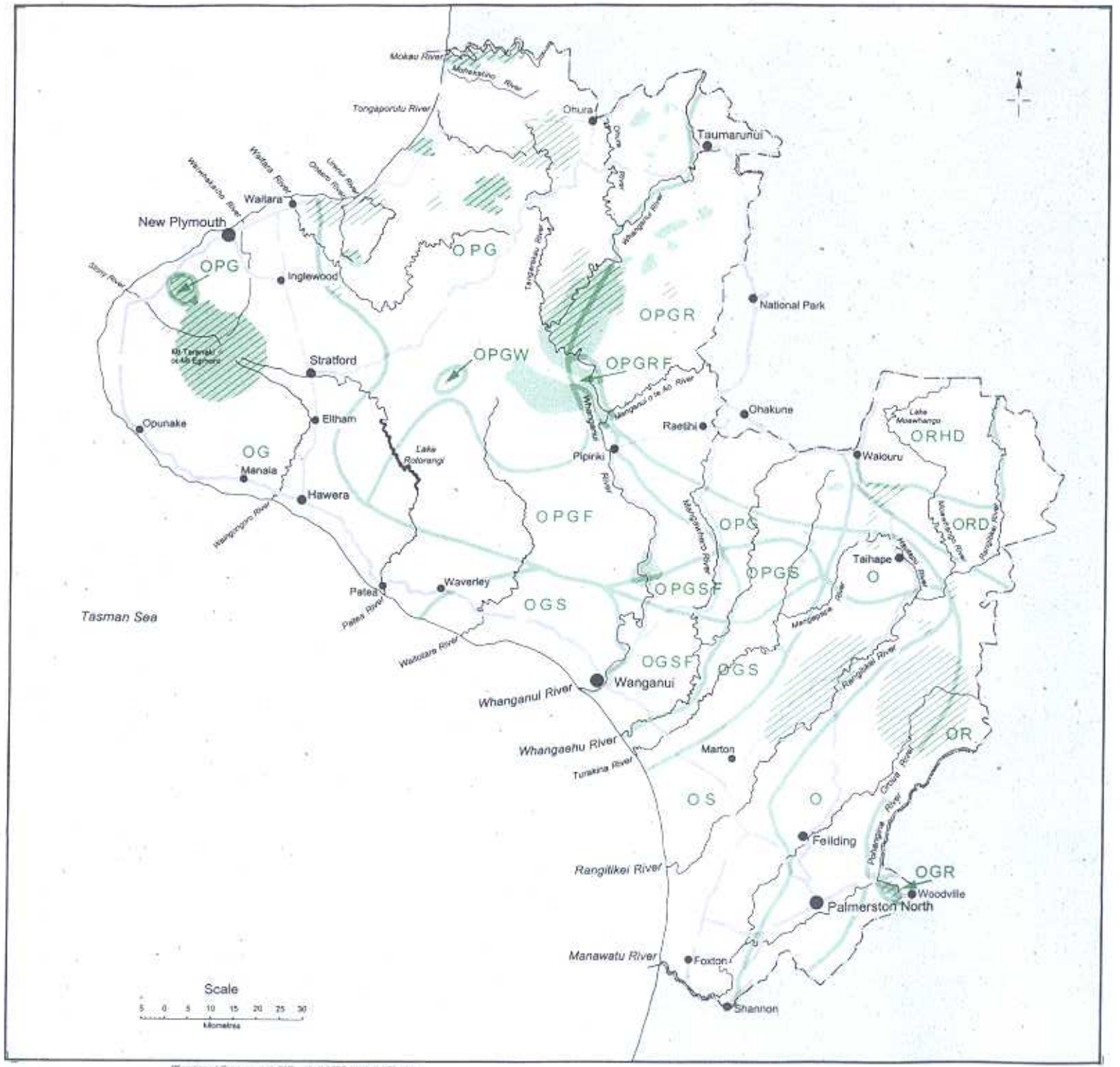
(vii) Where feasible, land exchanges, boundary adjustments and land aquisitions will be used to reduce the complexity of fencing requirements.

31.5.4 Outcomes

- As far as possible, no new animal threats will become established in the Conservancy.
- The incidence of escaped or illegally liberated animals entering land administered by the Department will be reduced or eliminated.

Figure 28

Animal Threats



Possum	O
Pig	P
Goat	G
Red Deer	R
Sambar	S
Horse	H
Wallaby	W
Fallow Deer	F
Sika Deer	D
Targeted area for control	
- goat	
- possum	

Department of Conservation
Te Papa Atawhai

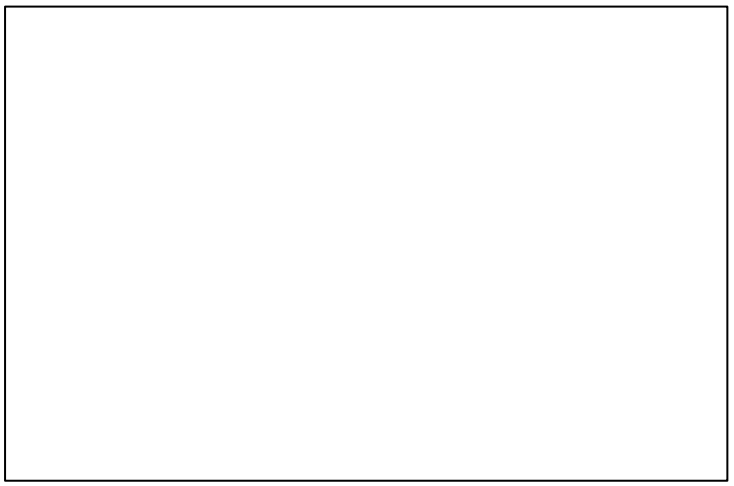
32 Weeds

32.1 CONTROL AND MANAGEMENT

Many species of plants introduced to New Zealand, either deliberately or accidentally, have already modified, or have the potential to modify natural ecosystems.

The severity of impact of weeds is generally a function of the type of habitat in which they occur. The vine old man's beard for example, is a serious problem in lowland forest remnants, overtopping and destroying the forest. Spartina grass can cover the mudflats of estuaries and the ground hugging mouse-eared hawkweed *(Hieracium pilosella)* can obliterate low-growing native species in montane grasslands.

The 'weediness' of a plant species may also vary according to climatic and other environmental variables and thus a plant that is a problem weed in one part of the country may be only a minor component of the flora in another. Similarly, weeds that are significant pests for other land managers may not be a major conservation pest because of the differing objectives of the land management.



Old man's beard smothers bush under a mass of fast-growing vines.

Weed control problems are enormous because of the small fragmented nature of many lowland reserves which are particularly susceptible to weed invasion. There are however relatively few weed problems in the large intact areas of forest in the Conservancy, but tussock grasslands are subject to invasion by mouse-eared hawkweed, heather and wilding pines.

The Department's major weed control programme in the Conservancy is the old man's beard in the Rangitikei, Manawatu and Wanganui areas and a few other species such as wild ginger that can significantly alter natural areas.

Many of the weed problems both on and off land administered by the Department, are of such a large scale that they are generally not able to be tackled. Management therefore aims for eradication or sustained control to meet specific objectives and is generally small scale and very localised.

Cross Reference See Sec 26.2

Monitoring weeds in natural communities will allow an evaluation of the rate at which changes are occurring and help set priorities on a species by species as well as a community by community basis. Where weed control programmes are in place, monitoring is essential to ensure the long-term success or even viability of the programme.

32.1.1 Objectives

(i) To reduce the impact of weeds to a level that does not threaten the continued existence of native plant species, animals, natural processes within ecosystems, important archaeological and historic sites or important landscapes .

(ii) To prevent the establishment of new weed species that threaten values on land administered by the Department or the spread of species into areas that are currently free of them.

(iii) To identify and understand the impact of weeds on land administered by the Department and to document the impact of control programmes on those weeds.

(iv) To raise public awareness of the impact of weeds on native ecosystems.

32.1.2 Explanation

The National Parks , Conservation and Reserves Acts require the protection of natural values from the impact of plant pests, with the National Parks Act requiring the extermination of introduced plants, as far as possible.

The Biosecurity Act 1993, has replaced the Noxious Plants Act but, in common with the previous Act, contains provisions for the control of plant pests over land of all tenure (including land owned by the Crown). Pest management strategies established under the Act can require the Department to control plant pests for reasons other than those related to conservation, provided the Crown agrees to be bound by the strategies.

While the best outcome would be to manage all natural areas in a state free of all weeds, this is an option that is neither practically nor financially feasible. Priorities must therefore be set for weed control that maximise the benefits from any expenditure. Such priorities must take into account the value of the area being managed as well as the potential of the weed to modify the area. The current (1997) priorities for weed control for the Conservancy are identified in Figure 29.

Monitoring of resource management control programmes will be essential to ensure that the outcome of such programmes can be assessed against their cost. Monitoring will provide the necessary information to assess the degree to which the objectives set for the specific programme are being attained.

32.1.3 Implementation

(i) Priority for weed control will be afforded to those species with the potential to dominate or destroy areas administered by the Department and the values they contain.

(ii) Priority for weed control programmes will be given to those areas containing species, communities, ecosystems, archaeological sites, historic sites or important landscapes at risk. Highest priority will be given to those areas where species are nationally threatened. Where possible, a representative number of areas in each ecological district will be kept free of plant pests.

(iii) The Department will prepare a weed control plan, based around a priority list, to ensure that available resources are correctly allocated.

(iv) For individual weed control programmes, clear objectives will be defined, cost effective techniques will be selected and programmes will not start unless they are able to be sustained or the objectives achieved within a finite period (e.g. eradication of spartina from an estuary).

(v) 'Noxious weed' control requirements will be assessed at the beginning of each financial year and sufficient resources allocated to meet statutory obligations. The Department will contribute to regional plant pest management strategies to the extent agreed to by Government, and will endeavour to meet obligations as a good neighbour where it can do this without jeopardising its own weed control priorities.

(vi) The prevention of the establishment of new species within the Conservancy and the prevention of the spread of less widely distributed species will be given high priority by the investigation of reports, staff training and targeted eradication programmes.

(vii) The Department will consult and co-ordinate with regional councils to ensure that natural and historic values are considered during the preparation of regional pest (weed) management strategies and that the Department's obligations under such strategies are clearly defined.

(viii) The Department will publicise plant species that are or could be hazardous to natural values and encourage public participation in eradication. Where possible, such publicity programmes will be conducted in conjunction with other plant pest control agencies.

(ix) Where necessary, the Department may propose regional pest management strategies for the control or eradication of particular plant species.

(x) All weed control programmes will be monitored to measure the degree to which objectives have been met.

(xi) The weed status of land administered by the Department will be documented and the impact of those weeds will be evaluated.

32.1.4 Outcomes

- Priority natural and historic values are retained.
- Noxious weed control obligations are met.
- New weed species that threaten natural and historic values do not become established on land administered by the Department.
- Regional pest management plans reflect natural and historic value protection requirements.
- Public awareness of the threat posed by plant pests is increased.
- The Department is regarded as a good neighbour by adjacent landowners.

32.2 CONTROL METHODS

Weed control in areas administered by the Department is generally an expensive and time consuming activity, as not only do the weeds have to be successfully removed but the habitat itself must not be destroyed in the process. Weed control programmes must also be sustainable as there are few opportunities to completely eradicate the problem and a constant source of new seed is often available from land areas not administered by the Department.

Control programmes must, therefore, have clear objectives and because resources are limited, should be undertaken only where there is a high conservation priority or a legal requirement.

Weed control methods are potentially hazardous to the communities and species being protected and thus control options must be carefully considered and the hazard weighed against projected benefits.

Regional and district plans prepared under the Resource Management Act may contain provisions which control the use of herbicides in particular areas, e.g. river beds. Where this occurs, it may be necessary to apply for resource consents or certificates of compliance under the Act where the use of herbicides is proposed on land administered by the Department.

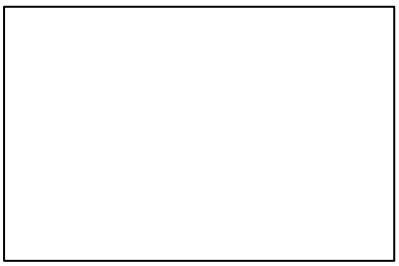
Chemical control is generally the most effective method of plant pest control. Sprays must be used efficiently, both for cost-saving reasons and to eliminate off-site effects on non-target species and environmental values.

Use of chemicals must comply with legislative controls and requirements in relation to poisons and toxic substances under the various Acts controlling them.

32.2.1 Objective

To select cost effective weed control methods that do not result in destruction of the communities or species being protected and which do not have persistent effects on the environment.

32.2.2 Explanation



Finding methods to control new weeds is a challenge. Evergreen buckthorn is a new and potentially serious weed of forest edges in the Conservancy.

Suitability of chemicals must be assessed on a site-by-site basis. For example, intensive aerial spraying may be more detrimental to the ecosystem than the continued presence of the pest. Alternatives to chemicals are continually assessed and used where appropriate and cost-effective.

Preventative methods including greater public awareness to halt the introduction of plant pests into areas where they are not already present, will generally provide the best results.

32.2.3 Implementation

(i) Weed control proposals will be evaluated for potential hazards to the area or values being protected.

(ii) Sprays will be used only where necessary and where alternatives are not appropriate. The public will be consulted where concerns arise. Preference will be given to biodegradable and non-residual chemicals wherever feasible.

(iii) The Department will consult with regional and district councils to ensure that planning rules reflect the practical requirements of weed control programmes in natural areas.

(iv) Where necessary, a resource consent or a certificate of compliance under the Resource Management Act will be sought prior to weed control operations. Where consents are required under other legislation, these will also be obtained prior to weed control operations commencing.

(v) The Department will consider, and where appropriate, promote preventative measures to reduce the risk of plant pest invasion.

(vi) Alternatives to chemical control will be tested and, where practicable, adopted.

(vii) Volunteers may be used, where appropriate, for labour-intensive plant pest control projects.

32.2.4 Outcomes

- All plant pest control undertaken within the Conservancy will be effective and impacts on values being protected will be minor.
- All weed control programmes are environmentally acceptable and are conducted in accordance with legislation and approved practices.

FIGURE 29: WEED CONTROL PRIORITIES - WANGANUI CONSERVANCY

PRIORITY	AREA
STATUTORY PRIORITIES	
Old man's beard	General
Broom	Rangitikei River margins
Gorse	Rangitikei River margins
Ragwort	Egmont National Park
Barberry	Taumarunui reserves
Other species as required	All areas
HIGH CONSERVATION PRIORITIES	
Old man's beard	All areas
Boxthorn pampas	Coastal reserves on sand country Whitiau Scientific and Scenic Reserves Hawken's Lagoon Conservation Area Whitecliffs and other North Taranaki coastal reserves
Spartina	Manawatu Estuary
Willows / Alders	Whanganui River Manawatu coastal wetlands North Taranaki wetlands
"Woody" forest weeds. e.g. cherry laurel	Paengaroa Scenic Reserve
Ginger	Egmont National Park

FIGURE 29: WEED CONTROL PRIORITIES - WANGANUI CONSERVANCY (CONTINUED)

PRIORITY	AREA
HIGH CONSERVATION PRIORITIES (continued)	
Ivy	Paengaroa Scenic Reserve
Monitoring and control of species with high problem potential	All areas

(As at April 1997)

33 Natural Hazards

Cross Reference See Appendix 2 for definition of 'Natural Hazards'

Natural hazards are defined in the Resource Management Act as any natural occurrences which adversely affect human life, property or other aspects of the environment. Examples of hazards are earthquake, hurricane, tsunami, landslip and flooding. The responsibilities for planning for natural hazards under the Resource Management Act lie mainly with regional and district councils.

See Sec 39.2

The Department will need to work with these authorities to identify areas of land administered by the Department which are at particular risk from natural hazards and develop protection measures. Management planning for areas administered by the Department will also need to take account of natural hazards and include measures to protect public safety and buildings where specific hazards are identified.

Natural hazards are natural events, and unless human life, property, or other aspects of the environment are threatened, actions to prevent adverse impacts will not normally be taken.

33.1 Objectives

(i) To take measures to protect public safety and facilities from natural hazards on land administered by the Department.

(ii) To ensure that measures are promoted in regional and district plans which avoid or mitigate the effects of natural hazards both on land administered by the Department and other important natural areas.

33.2 Explanation

Some areas of the Conservancy are at risk from natural hazards, though exposure to individual events varies. The major hazards are earthquakes, storm waves, volcanic activity, flooding, landslips and avalanches. Because there is a lack of specific information, the effects of natural hazards on areas administered by the Department are difficult to define. Land instability (including erosion and landslip) affects the hill country in the northern part of the Conservancy, where there are extensive areas of land administered by the Department. Because of their geological characteristics, parts of the Whanganui River catchment are prone to landslip, flooding and sedimentation, which could have impacts on Whanganui National Park. The coastal environment is particularly susceptible to land instability, while erosion is a threat to natural vegetation in coastal dune areas.

The potential impact of these hazards on areas administered by the Department needs to be identified and measures taken to mitigate hazards. However, many hazards occur as a result of natural processes which cannot be controlled, and in some cases damage to natural areas will be inevitable, though some action could be taken to salvage plant communities or wildlife.

Another potential hazard is the possibility of a volcanic eruption on Mt Taranaki / Egmont which could pose a threat to visitors and facilities in Egmont National Park. Mt Taranaki/Egmont last erupted about 200 years ago, and deposits around the base of the volcano record intermittent volcanic activity at this site for the last 130,000 years.

There is no evidence to suggest that the mountain has finally become extinct. It is regarded as a dormant volcano, and is one of a number of volcanoes in New Zealand where future eruptions are to be expected.

Potential danger to life and property from a further eruption of Mt Taranaki / Egmont can be classified as:

- hazards from "ground-hugging" flows, principally lava flows, pyroclastic flows and lateral blasts, landslides, lahars (or volcanic mud and debris flows) and associated floods
- hazards associated with the spread of materials through the air, mainly particles of ash, stones and pumice which are collectively called tephra, and the danger from volcanic gases which may be toxic.

Hazards in the first category would have direct impacts on Egmont National Park. Hazards from airborne material would extend a much greater distance from the mountain.

Cross Reference See Sec 34.10.3 (xii)

The Department will work with territorial authorities and the Taranaki Regional Council to investigate the need for flood and volcanic hazard warning systems, where there is a clear requirement to protect public safety or facilities both within and outside the park. The Department will also investigate the need for flood hazard warning systems elsewhere in the Conservancy, where hazards to public safety or facilites are identified.

33.3 Implementation

(i) Identify all land of high natural and historic value which is at risk from natural hazards.

(ii) Identify specific measures which could be taken on land administered by the Department to protect public safety or facilities from natural hazards.

(iii) Work with territorial authorities and regional councils to define areas at risk from natural hazards, and co-ordinate and assist with their actions.

(iv) Ensure new buildings and facilities are not located in hazard-prone areas.

(v) Natural hazard events will not be interfered with where these are not likely to impact on public safety, facilities or areas of exceptionally high natural or historic values. (Naturally occuring fires may be an exception to this).

See Sec 30

33.4 Outcome

- Where there is a risk of natural hazards occurring, public safety will be protected as far as possible.

USE MANAGEMENT

34 Introduction

Land administered by the Department has the potential for uses not directly associated with conservation. Examples can include grazing, pipelines, power lines and mining. Members of the public or corporate bodies may apply for specific authority called a concession to use land administered by the Department. This can be for commercial or non commercial purposes. The Department itself may seek to establish a particular use (e.g. grazing) as a management tool.

The ability to assess a request for such an authority is covered by legislation, relevant management plans and this Conservation Management Strategy. Consultation with conservation boards, Tangata Whenua and the public may form part of the process. A use may be authorised by a lease, licence, easement or permit, depending on the nature of the activity.

Applicants for concessions must:

- describe the proposed activity
- identify the places where the activity will be carried out, and if possible, the status of the land
- describe the potential effects of the proposed activity and any action that will be taken to avoid, remedy or mitigate any adverse effects
- indicate the type of concession wanted
- provide details of the proposed duration of the concession and the reasons for that duration
- provide relevant information about the applicant, including information about the applicant's ability to carry out the activity.

An application for a lease or licence must be publicly notified. An application for a permit or easement needs to be notified only if the Minister of Conservation considers it appropriate to do so.

In considering an application, the Minister is required to have regard to a number of statutory criteria. These include:

- the nature of the activity and any associated structure or facility
- the effects of the activity, structure or facility
- any measures that can be reasonably and practicably undertaken to avoid, remedy or mitigate any adverse effects of the activity
- any relevant environmental impact assessment
- any relevant oral or written submissions received as a result of the public process
- any relevant information which may be withheld under the Official Information or Privacy Acts.

An application will be declined if:

- the activity is contrary to the provisions of the Act or the purposes for which the land is held
- there is insufficient or inadequate information to assess the effects of the intended activity, including any effects of the proposed methods to avoid, remedy or mitigate adverse effects
- if there are no adequate methods for remedying, avoiding or mitigating the adverse effects of the activity.

Where the activity relates to a structure or facility, a concession cannot be granted if the Minister considers the activity could reasonably be undertaken in another location, including other land administered by the Department where the effects would be significantly less.

If an application does not comply with or is inconsistent with the provisions of the Conservation Act 1987, this Conservation Management Strategy or any relevant conservation management plan, the Minister may within 20 working days after receipt of the application, decline it.

The impacts of uses can vary widely as can their commercial nature. This means that each application must be assessed on its merits. Existing and proposed uses range from low impact ones, such as apiary sites, to high impact uses such as telecommunication sites. Therefore, while all uses have some impact, they may be approved where they assist management (e.g. grazing), support conservation goals (e.g. education lodges) or where natural and historic values are not compromised.

While the first consideration in assessing a proposal is its effect on values being protected, the effect on other uses (including recreation) also has to be considered.

The primary direction will be to allow non conservation use of land and resources administered by the Department only to the extent that it is consistent with the protection of natural and historic values and the status of the land concerned.

The Department is required to maintain a record of all concession applications, public notifications and decisions on applications and to make these records available for public inspection.

In assessing a use application, an evaluation of its potential effects is essential. Should the results of an environmental impact assessment identify effects that are unacceptable, then the proposal will be declined. Any such study will also address social impacts. These can be positive (e.g. employment) or negative (e.g. loss of recreation opportunity).

Other considerations include:

- **The cumulative impact of these uses.** For instance one hill top with communication facilities may be unobtrusive, but several hill tops with similar facilities may have a much greater impact.
- **Exclusive use**. In general, the provisions of the Commerce Act 1986 discourage monopolies, including exclusive use. Such use will only be adopted as policy where multiple use (e.g. more than one business being carried out in the same area) would have an adverse effect on the environment or where it is necessary to protect inherent values. It may also apply to specific buildings and structures. Where a use

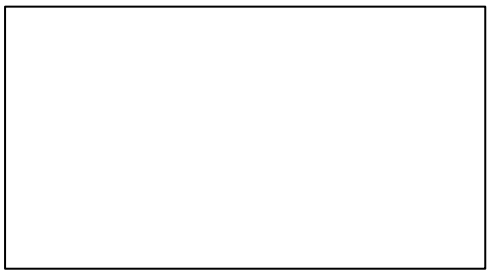
is appropriate (e.g. grazing for management) competition for the use may be promoted through measures such as tendering.

- **Term of use.** This can be crucial to the viability of a proposal, particularly where there is a large investment. Maximum time periods are prescribed in the Conservation Act. Generally a lease, or licence or easement can be up to 30 years and a permit five years. Minimum length terms will generally be sought - though the amount of capital outlay will be taken into account. Where long term uses are sought, the provision of review periods will serve to protect the public interest.
- **Revenue**. Market related rentals may be set. In assessing the market rental, consideration is required to be given to a variety of circumstances, including the nature of the activity, the effects of the activity and any relevant contractural provisions. Independent valuation will be considered in such instances. Reviews at least every three years are required.

  The Conservation Act allows for concessions to be varied for a number of reasons, including unforseeable significant adverse effects.

The following section addresses activities associated with non recreation uses. There are many similar issues between these activities. Recreation concessions are addressed in Section 35. The two sections should be read together.

34.1 TRADITIONAL MAORI USES



This utu piharau (lamprey) trap is still in use on the Whanganui River.

The natural resources of New Zealand, particularly the native plants and animals, have traditionally formed an important cultural and spiritual part of the Maori way of life.

Since the arrival of humans, some species have been depleted and some have become extinct. To halt this decline in native species, various legislation was established to help protect them.

The Department must consider all non-commercial requests for the traditional taking or use of protected animals and plants by Tangata Whenua.

34.1.1 Objective

To allow the taking of materials for traditional purposes where it has approval from Tangata Whenua, is lawful and does not significantly impact on the population of that species or other natural or historic values.

34.1.2 Explanation

Legislation for the protection of species and the day-to-day management of these species necessarily reflects the need to ensure New Zealand's natural resources are maintained for the benefit of all New Zealanders.

Cross Reference See Sec. 4.1

Native plants and animals also have a significant spiritual and cultural role in the Maori way of life. Many of the old ways cannot be pursued today, especially where they might involve the use of threatened species. The use has to be balanced against the vulnerability of the species.

The taking of abundant species for traditional purposes will be allowed where their use is sustainable and within the constraints of the law. A written authority will be required for the taking of plants. As a priority, the Department will promote research into the sustainable use of native species.

Cross Reference
See Sec. 26.1, Fig 25

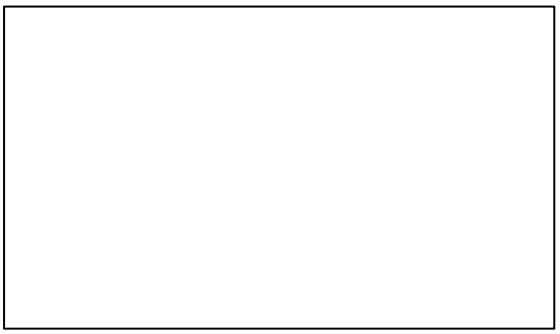
(a) Birds and marine mammals

See Sec 22.2.2(b)

The Conservancy receives a number of applications for the traditional use of feathers, whalebone and teeth. Each application is considered in consultation with Tangata Whenua and, if approved, is on the basis that it has Tangata Whenua support and the end use of the feathers, whalebone and teeth are for traditional purposes.

The scarcity of most native land birds means the taking of rare or threatened birds may compromise their long term viability and will not be permitted, apart from the legal hunting of game birds e.g. paradise shelduck.

(b) Plants



The dune plant pingao is much prized for traditional Maori crafts.

There is a resurgence of interest in the use of native plants and timber for traditional purposes and medicines. Important plants for traditional use include pingao, kiekie, kakaho and harakeke. Totara is particularly sought for carving. A wide range of species are utilised for medicines including kawakawa, koromiko and harakeke.

The Conservancy is a stronghold for the much sought after pingao. This plant is now difficult to obtain in many districts, putting additional pressure on the resource in this Conservancy. Most pingao occurs on land not administered by the Department.

Some legislation, especially the Reserves Act 1977 and the National Parks Act 1980, are very restrictive in their ability to provide for Maori traditional use of plants. A set of procedures on sustainable Maori traditional use of native plants is being developed at a national level to guide the taking of native plants on land administered by the Department.

Wherever possible, the Department will assist Tangata Whenua with the planting of traditionally useful plants on private land to reduce the need for plants to be gathered from land administered by the Department.

(c) Minerals

Many minerals are of traditional and spiritual significance to Tangata Whenua. Ochre, used as a dye, has been collected for hundreds of years from places such as the Kokowai Stream in Egmont National Park.

34.1.3 Implementation

(i) Prohibit the taking of any native non-game animals protected by the Wildlife Act.

(ii) All applications for the traditional use of native plants and marine mammals will be considered on a case by case basis within the constraints of existing or future legalisation, national policy and guidelines.

See Sec 22.2.2(b)

(iii) Feathers of dead native birds received by the Department may be placed on permanent loan to Tangata Whenua for use in traditional crafts.

(iv) Where any conflict arises between traditional taking and natural values, consultation will be undertaken with Tangata Whenua, conservation boards and other groups.

(v) The Department will encourage and provide advice to Tangata Whenua in the establishment of marae nurseries to provide plants for traditional purposes.

(vi) The Department will promote research into the sustainable taking of native plants and animals for traditional uses.

(vii) Whenever possible, applicants for native plant materials will be redirected to sources on private land.

(viii) The Department will develop, in consultation with Tangata Whenua, protocols for the gathering and distribution of plant materials and whalebone for traditional purposes.

(ix) The Department will develop, in consultation with Tangata Whenua, protocols for the gathering of significant minerals for traditional purposes.

34.1.4 Outcomes

- The protection of native species from unauthorised taking and protection against over exploitation of species where the taking is permitted.
- Tangata Whenua are able to meet some of their traditional requirements by the sustainable use of natural resources.

34.2 BEEKEEPING

A commercial supply of nectar and pollen is available from some of the flowering plants on land administered by the Department . Currently only four beehive sites on land administered by the Department are formally licensed, although there are a number of beehives located elsewhere. Interest from beekeepers focuses mainly on regenerating land when the manuka/kanuka is flowering, but interest has also been shown in flowering kamahi.

34.2.1 Objective

To permit beekeeping on land administered by the Department where the presence of hives does not conflict with natural, historic or recreation values.

34.2.2 Explanation

Bees, beehives and beekeeping activities may have an adverse effect on sensitive ecosystems, rare or endangered plants and animals, conservation management practices or recreational enjoyment. Competition by introduced bees with native birds

and insects for the nectar or pollen of native plants may have the potential to upset the natural ecological balance.

National guidelines issued in 1991 recognised that honey production and wintering-over beehives are generally compatible with the values for which the land is administered. Beehive production may provide a means of monitoring the health of flowering plants and the response of plants, such as kamahi, to possum control.

34.2.3 Implementation

(i) *In conjunction with other commercial use management, owners of unlicensed hives on land administered by the Department will be identified and required to apply for a beehive licence.*

(ii) *In assessing applications, in addition to the matters referred to in the Section 34 Introduction, the Department will need to be satisfied that:*

- *there is no significant risk to rare or endangered plants and animals*
- *beekeeping practices pose no increased risk of weed invasion or fire*
- *management practices such as weed and animal control will not be inhibited*
- *new access tracks will not be required.*

(iii) *Beehives will only be licensed in areas at least 100 metres from road-ends, carparks, walking tracks, public toilets, tramping huts, lookout points and other areas heavily used by the public.*

(iv) *Where evidence shows any adverse effect on native plants or animals, the licence will be revoked and the hives removed at the owner's expense, where this is permitted in the licence.*

(v) *Where licences are issued, the cost of processing the application, along with an annual fee will be charged. The annual fee will also take into account any benefits obtained where the hives are used as a means of monitoring ecosystem health.*

34.2.4 Outcome

- Sustainable production of specialist honey from the Conservancy's flowering native plants will be possible without an impact on natural and historic values or visitor enjoyment.

34.3 GRAZING

Of all the commercial uses of land administered by the Department within the Conservancy, grazing comprises the single largest use. Approximately 2,500 ha are now grazed under 117 leases or licences. Most of these licences were originally issued

by the departments managing the land prior to the establishment of the Department of Conservation in 1987. Five are Land Act special leases with perpetual rights of renewal. The major licences are for river flat areas alongside the Manawatu and Pohangina Rivers or on abandoned farmland surrounding the Whanganui National Park. In addition, there are many areas, including marginal strips which are grazed without any lease, licence or management agreement.

A draft national policy produced by the Department in 1991 forms the basis for the administration of grazing licences.

34.3.1 Objectives

(i) To grant new grazing licences and re-issue existing licences where grazing is not inconsistent with the natural, historic or recreation values of an area, maintains protection of cultural sites, or is required for other specific management purposes.

(ii) To ensure wherever practicable that all areas grazed, which are suited to grazing, are appropriately licensed.

34.3.2 Explanation

Because grazing has severe effects on native plant regeneration and has other site impacts, it is permitted only on land which is already modified or entirely in grass. Some 180 licences in existence in 1986 have been reviewed. Where the natural values were under threat, or the land was likely to revert to native vegetation cover, the licence has been cancelled, or reduced to cover the grassed area only. The remaining grazing licences are often in small, discrete units with limited natural value, and fenced off from the adjoining national park, reserve or conservation area.

The value of grazed land to the public is usually related to recreation, enabling access to adjoining land administered by the Department, or for the increased visibility of historic sites. Some 50 licences, covering 1190 ha, have current or future potential value for public access and enjoyment, and others act as a buffer to land with natural and historic values. Eleven historic reserves are entirely or partially in pasture. Grazing protects the sites from becoming overgrown or disturbed by the roots of invading trees, and allows clearer visibility of archaeological features. Stock type is restricted to sheep or young cattle to minimise damage.

Grazing can have benefits by reducing the fire risk and suppressing weeds. It can also provide a significant revenue source to fund high priority conservation activities.

A licence can be cancelled, or not renewed, for breach of conditions or where important natural or historic values become at risk, as provided for in the licences. As this may have serious implications for the licensee who has built a farming practice around the use of this land, each cancellation is treated on a case-by-case basis, and is normally phased out over a reasonable period.

Cultivation of areas under grazing can lead to degradation of natural and historic values and so is generally permitted only under special circumstances. It may be appropriate where the land is held under a long-term licence to help recreation objectives or is too small for disposal.

Cross Reference
See Sec 20.4

Licensed grazing is preferable to disposal where the area:

- is necessary to retain public access or to provide facilities
- has potential for revegetation in the future
- has high costs for fencing along the boundaries
- has other management problems reduced by grazing
- is currently grazed without any controls
- is impractical for disposal.

In other instances, exchange or disposal is the preferred long term option.

(a) Public use

Grazing occurs on recreation reserves, marginal strips, conservation areas adjoining the Manawatu and Mokau Rivers, and some scenic reserves such as Everett Park. The grassed open space is kept tidy by grazing for picnicking, duckshooting and can make access for fishing and whitebaiting easier. This also saves mowing costs. Public access is maintained through conditions on grazing licences.

(b) Hunter access

Recreational hunters are allowed access to grazing licence areas for hunting, subject to the approval from licensees. Licensees are expected to allow reasonable requests for hunting access. Where the public hunting interest is seriously affected, a review of the grazing licence may be desirable, and may result in the cancellation of the licence to enable recreational hunting to occur.

(c) Revegetation

Fertile river terraces licensed for grazing may have once supported lowland forest of biological importance. Retention of this land in public ownership may provide an opportunity for forest restoration in the future. This will be considered before disposal of the land. In many instances, revegetation will not succeed unless fencing, and goat and possum control are carried out first. These areas are not high priorities for fencing or animal control. The cost of revegetating small and often remote areas cannot be justified at this time. Small areas near schools or communities may be made available for revegetation, where plant materials can be provided through private sponsorship schemes.

See Sec 27

(d) Fencing and retirement

The fringes of Whanganui National Park and many reserves and conservation areas were farmed for many years prior to the establishment of the Department of Conservation. Marginal strips reserved from sale for public access under Section 58 of the Land Act 1948 were normally cleared and grazed with the adjoining farmland. The passage of the Conservation Amendment Act in 1991 required these areas to be managed for specific purposes, including their natural values and for public access. Many of these areas are unfenced and domestic stock trespass is common.

See Sec 31.1

The cost to fence legal boundaries is often prohibitive. Where natural and historic values are not at significant risk, fencing takes a low priority. Although grazing such

land requires a licence, or management agreement, little stock control is possible. Damage to adjoining bush can, however, be limited by restricting the grazing to sheep only.

As finance becomes available for fencing, the highest priority marginal strips will be fenced and allowed to regenerate.

(e) Weeds and fire

Many areas that are currently grazed would eventually return to native vegetation if grazing ceased . A number of licences have been cancelled for that reason. Continued grazing may be justified in some instances for the suppression of weeds and a reduction in fire danger. Once programmed animal control is in place, and there is a reasonable prospect for revegetation to occur, the area could be retired.

(f) Unlicensed uses

The occupiers of grazed areas without a licence are being progressively identified and licensed or the grazing terminated, where practicable. In many cases, the grazing will continue until the boundary between freehold land and the area administered by the Department is fenced. As with revegetation, most of these areas have a low fencing priority.

Many areas are too small to justify the cost of licensing and enforcement, and will remain grazed.

(g) Local exchanges

Some licensees of land which has little natural value may wish to exchange private land in native forest for the land in a grazing licence. Such exchanges may provide a considerable conservation gain, particularly where the land has been identified as a Recommended Area for Protection. Any exchange involves a public process. Because exchanges take time to complete, long term cross leasing can provide protection until the exchange is complete.

(h) Disposal

Cross Reference
See Sec 20.4

Disposal of grazed areas involves a lengthy process where costs incurred for survey, legal transactions and the public process can often exceed the value of the land concerned, particularly for small areas. In these circumstances, a long term licence until disposal is able to be practicably completed will reduce administration costs to the Department. Where disposal is to occur, it will follow the procedures set out in Section 20.4.

(i) Duration of grazing licences

Licences may be issued for up to 30 years under Section 17z of the Conservation Act. In exceptional circumstances that period may be increased to 60 years.

In normal circumstances, a maximum licence term of 10 years for licences covering areas entirely in grass will generally be allowed, and a five year term for all others. Longer terms will be considered where this achieves the permanent protection of private land with high natural or historic values. All licences will carry a condition allowing the licence to be terminated at short notice, should the land be required for

another purpose by the Department or grazier use of land is in breach of conservation safeguards built into the licence document. If the regeneration in grazed areas improves to a level warranting retirement from grazing, this will be done at the regular review of the licence.

(j) Priorities

Priorities for the review of grazing licences over land administered by the Department are:

- to retire land with significant natural values from grazing
- to identify land with high natural, historic or recreation value which can be exchanged for grazed areas (e.g. RAPs)
- to bring grazing rentals up to market value to provide the maximum contribution to additional priority conservation work
- to licence all grazing of land administered by the Department
- to review the protected status of all grassed areas which have no potential recreational value.

34.3.3 Implementation

(i) Restoration and maintenance of natural and historic values will take precedence when considering a grazing licence.

(ii) Areas for new licences, licence renewals or unlicensed uses will be assessed fully to decide whether grazing is the most appropriate use of the land and whether additional special conditions are necessary.

(iii) All new licences will be advertised in the appropriate local newspapers.

(iv) Existing grazing licence areas will be monitored regularly to ensure that conditions are met and natural and historic values are protected.

(v) Licences will normally be for a maximum of five years and will specifically provide for public access on foot, stocking limitations and clauses to prevent damage to native vegetation.

(vi) Adequate provision will be made for recreational hunting access.

(vii) Where vehicle passage across an area grazed under licence is significant for access to other areas administered by the Department, this access will remain available to the public.

(viii) Market rentals will be charged for all new licences. The rent will be reviewed at not greater than three year intervals.

(ix) In the case of an expired licence, grazing rights will be publicly tendered if the incumbent licensee is unwilling or unable to accept a market rental.

(x) Where a licensee is prepared to undertake work of benefit to the Department such as fencing, rentals may be reduced from the market rate.

(xi) Land suitable for grazing may be exchanged for private land of greater natural and historic value, or leased for terms longer than five years in exchange for protection of private land.

(xii) All licences will have a finite term and carry a number of standard conditions to protect the land , including a prohibition of:

- *spraying, burning, cutting or crushing native vegetation*
- *damage to natural, scenic, historic, archaeological, biological, geological, or scientific features on the land*
- *erection of buildings*
- *exclusive possession or exclusive rights to or over the land.*

(xiii) In addition to the standard conditions identified under (xii) above, all licences will include the following requirements, where appropriate:

- *weeds and animal threats are controlled and the land kept tidy*
- *the public have access on foot over the land*
- *the land be fenced to the satisfaction of the Department*
- *the licensee abide by the provisions, including reviews or amendments of any Management Plan or Conservation Management Strategy for the land*
- *stock numbers and types be kept within set limits.*

(xiv) Grazed land identified for disposal will be processed in accordance with the criteria set out in Sec. 20.4.

34.3.4 Outcome

- The long-term retention of grazing lands only where a direct conservation management benefit is obtained.

34.4 EXOTIC FORESTS

Introduced vegetation in national parks, and on certain classifications of reserve land (nature, scientific and scenic) is, as far as possible, required to be exterminated. This may, however, not be practical in all situations. Stands of exotic forest on land administered by the Department will have priority for removal where the forest poses an immediate threat to natural or historic values or where revenue from it is justified.

Most stands in the Conservancy are of limited value because they are small and often isolated. They include abandoned homestead sites, two small plantation areas in Egmont National Park and small areas of wilding pines. The Department of Justice has rights over 377 ha. for a prison labour forestry scheme in the Waitaanga Conservation Area. There are also leases over a 12 ha block of Douglas Fir/Redwood near Taumarunui and 0.8 ha of exotic forest in a grazing licence in North Taranaki.

34.4.1 Objectives

(i) To remove stands of exotic forest where they threaten natural, historic or recreation values, or where it is commercially viable.

(ii) To retain those stands of exotic trees where they have proven historic significance.

(iii) To maximise the revenue from current stands of exotic forest where this can be achieved without creating an adverse effect on natural, historic or recreation values.

34.4.2 Explanation

The removal of all exotic forest is not generally practical or a priority action for the Department. Attention will instead be directed to those stands which impact on natural or historic values, such as aggressive species which invade native vegetation, or where there is a threat to archaeological features.

Commercially viable stands will receive priority for removal, with the Department seeking to maximise revenue from the removal of those stands. While exotic forest management is not a core function of the Department, some management may be required to ensure the best value for existing trees when they are to be removed for commercial reasons.

As a responsible small forest owner, the Department must be aware of forest health problems that may jeopardise nearby private forests. Consequently, management of stands may also require liaison with forest health agencies and owners of nearby private forest.

Once trees are removed from a site, slope stability and invading weeds such as gorse and blackberry may be a further problem. Part of any removal action must include follow up management of the site to minimise erosion and to ensure long term native regeneration potential is maximised.

The timber market is highly unpredictable and requires expert advice to realise the best timber values. The key is to make the most of the opportunities the market offers. For example, to delay felling for another year will rarely result in any significant loss in the crop or its value, but high prices may not last.

Leases over all or part of recreation reserves for exotic tree production are not usual but opportunities may arise where it is desirable for the Department, or an administering body. This would occur only where the reserve is not being used for recreation, is unlikely to be required for such and where tree production would not adversely affect any natural or historic values. Additional revenue earned could then be directed toward conservation efforts elsewhere.

Cross Reference
See Sec 11.7.5 (iii)

Some stands of introduced trees, such as in the Mangapurua Valley, have historic significance. Where these values have been identified, the stands will be retained.

34.4.3 Implementation

(i) Identify and carry out any required management on exotic forest stands suitable for commercial removal.

(ii) Remove exotic forest stands where they pose an immediate threat to natural and historic values on land administered by the Department.

(iii) Actively restore logged areas on land administered by the Department to minimise erosion and (with the exception of archaeological sites) to maximise native revegetation potential.

(iv) Maintain forest health through liaison with forest health agencies.

(v) Seek expert advice to ensure timber values are maximised at harvest.

34.4.4 Outcome

- The removal of commercial stands of exotic forests, along with those stands which threaten natural and historic values and the restoration of logged areas to native vegetation.

34.5 COMMERCIAL EASEMENTS

The most common easements over land administered by the Department are for access, or for the right to convey water, gas, oil, sewerage, telephone services or electricity. Public work easements such as community water supply and sewage are covered in Section 34.8.

Easements may be granted where:

- a legitimate need for the grant exists and cannot be satisfied by:
  - using land which is not administered by the Department or
  - using other land administered by the Department where the potential adverse effects would be significantly less.
- natural and historic values are not adversely affected
- it does not significantly restrict existing public use.

An easement cannot be granted if a lease, licence or permit would be more appropriate.

The Department may also negotiate easements over private land on the Crown's behalf. This may occur for instance where the Department seeks access over private land or when creating a public walking track.

Public notification of an easement application may be required where the proposal is likely to significantly affect public use.

34.5.1 Objective

To ensure easements over land administered by the Department are not contrary to the provisions of the Act under which the land is held or the purpose for which the land is held.

34.5.2 Explanation

Areas administered by the Department are usually rural, can be large in area and contain major water catchments. Because these areas sometimes enclose private land, there will be a demand for easements. Often the Department administers land on both sides of a river or stream in the form of marginal strips, reserves or conservation areas. The Department has a responsibility to consider all easement applications over these areas and ensure that resulting decisions are soundly based. If the proposed easement is contrary to the provisions of the Act under which the land is held, or the purposes for which the land is held, then it cannot be granted.

A number of legally established easements already pass through land administered by the Department. Examples include natural gas pipeline easements through the Whitiau Scientific Reserve and the Whitecliffs Conservation Area; established under the provisions of the Petroleum Act, a drainage easement through the Makerua Swamp Wildlife Management Reserve and an easement through the Taihape Scenic Reserve for the relocated Taihape sewage main. Future mangement will need to ensure that activities within easements do not impact on adjoining natural, historic or recreation values. Natural Gas Corporation pipeline easements and TransPower NZ Ltd transmission lines are identified on the CMS Volume 2 maps

When setting conditions on an easement, the Department seeks to minimise impacts on the natural and historic values and existing users. Many applicants do not consider these values and negotiations are then required to satisfy both parties. In cases of vehicle access, formation standards must be set and the responsibility for maintaining the access will rest with the applicant.

Rentals will be required for the granting of an easement. The rental will be fixed at a market value, and a mandatory review undertaken at least every three years. The rental may be reduced or waived under certain circumstances, including a non-commercial public benefit associated with the easement (Section 17 x (f), Conservation Act 1987). Independent valuers may be used in certain cases.

34.5.3 Implementation

(i) Easements will only be permitted where;

- *they are not contrary to the provisions of the Act under which the land is held or the purpose for which the land is held and*
- *no practicable alternative exists on private land or other land administered by the Department where the potential adverse effects would be significantly less.*

(ii) Easement conditions will safeguard natural, historic or recreation values of the area.

(iii) Any construction work on land administered by the Department, as a result of an approved easement, will be subject to performance conditions and the deposit of a performance bond to guarantee compliance with conditions.

(iv) Easements to local authorities for buried non-commercial utility services may be granted for the reasonably foreseeable duration of that service. Annual rentals may be reduced or waived. A compensation payment may, however, be required where such

easements adversely effect natural, historic or recreation values of land administered by the Department. Such easements will also be reviewed at not less than three yearly intervals and terminated if no longer required.

(v) All other easements will be for a term of up to 30 years or in exceptional circumstances, up to 60 years, and will be subject to the payment of a market rental or royalty.

(vi) Existing easements will be managed to ensure that as far as practicable, activities within the easement are compatible with the natural, historic or recreation values in the vicinity.

(vii) All actual and reasonable costs associated with the processing of an easement will be borne by the applicant.

34.5.4 Outcome

- Easements granted over land administered by the Department will not be contrary to the provisions of the Act under which the land is held or the purpose for which the land is held.

34.6 PETROLEUM, MINERAL MINING AND QUARRYING

All of the country's oil and gas production currently comes from the Taranaki region in the Egmont and North Taranaki ecological districts and adjacent areas offshore.

Most of the land administered by the Department west from Waverley and extending to the Mokau River (including Egmont National Park), and the Foxton ecological district, are currently under petroleum prospecting licences or permits. Approximately half the Conservancy offshore area, extending to the 20 km limit, is also covered.

Oil and gas have often been seen as 'strategic' minerals, and their development and production considered to be 'in the national interest'. The known world reserves for conventional oil are, however, at their highest in the history of oil production, and **sufficient to meet estimated demand until the middle of the next century**. New Zealand reserves are less bountiful and production is forecast to decline in the next decade.

Although no petroleum related development has occurred on land administered by the Department, offshore drilling and onshore seismic surveys have been carried out , most recently in the Taramoukou Conservation Area in 1993.

Currently, there are no mineral mining activities being undertaken on land administered by the Department within the Conservancy. Coal mining was carried out in the Mokau River, Waitaanga Conservation Area and Tangarakau Scenic Reserve from the mid 19th century until the 1950s. Ironsands were mined at Waverley, and there has been extraction of gravel and rock in the past, most recently adjacent to the Waitara River.

A shellrock mining licence was recently granted in the Nukumaru Recreation Reserve near Waverley. Investigations are also underway into reopening the Tatu underground coal mine south of Ohura.

As both mineral and petroleum mining are governed by the Crown Minerals Act 1991, applications follow essentially the same procedures.

34.6.1 Objectives

(i) To ensure that any proposed mining operations are properly assessed to enable any potential adverse effects to be avoided, remedied or mitigated and to ensure adequate compensation.

(ii) To ensure that any proposed prospecting, exploration activities or mining operations have minimal adverse effects on the natural, historic or recreation values of the areas administered by the Department.

34.6.2 Explanation

Cross Reference See Sec. 12.5.11(b)

Petroleum prospecting would normally be expected to have less impact on the environment than mineral prospecting, since it usually involves the use of remote and seismic testing equipment to evaluate the potential for oil. If a deposit is located, it can often be accessed by directional drilling from outside areas administered by the Department.

Any future coal mining development will depend on a new market for the coal being established or existing markets being expanded. Most markets are currently supplied by Waikato coals.

There is ongoing demand for construction and roadmaking minerals (rock, gravel and sand) from mining and quarrying in the Conservancy. For the foreseeable future, these minerals can continue to be adequately supplied from private land. It is unlikely that there will be any additional pressure from mining interests to extend operatons beyond these areas.

Areas administered by the Department are open to applications for petroleum and mineral prospecting, exploration and mining activities. Any permanent closure of these areas would require a joint recommendation by the Ministers of Conservation and Energy under Section 62 by the Crown Minerals Act, or special legislation. The Sugar Loaf Islands Marine Protected Area was closed to petroleum and mineral mining with the passage of its own Act in 1991. The existing prospecting licence will, however, be allowed to run its course. Egmont National Park is also excluded from future petroleum prospecting, exploration and mining activity through the recently approved Minerals Programme for Petroleum.

Where a company or an individual seeks an exploration or mining permit, it must also apply for a land access arrangement from the appropriate landowner and/or occupier. In the case of areas administered by the Department, this is the Minister of Conservation. The Minister can either permit with conditions or deny access for mining operations for land held or managed under the Conservation Act, the National Parks Act, the Reserves Act or any other Act specified in the First Schedule to the Conservation Act.

In considering a request for access, the Minister must have regard to:

- the objectives of the Act under which the land is administered
- the purpose for which the land is held
- any policy statement or management plan related to the land
- safeguards against any potential adverse effects of the work
- such other matters as the Minister considers relevant.

The access arrangements are agreed to, and enforced, under the Crown Minerals Act, which has no requirement for a public process. Advice on the impact of a proposal on public use of the area may however be sought. Associated Resource Management Act consents considering the social and environmental effects of the proposal will also be required. Access arrangements can be consented to subject to conditions, or declined outright.

Mining is considered inappropriate in areas of high public use and/or high scenic, scientific, natural or cultural value, due to the potential effects of mining on these values. Effects created by prospecting and exploration and some mining may, however be acceptable elsewhere, if impacts can be avoided or mitigated to within acceptable environmental levels.

Cross Reference See Sec. 44.1

The Department may also become involved, through its advocacy role, in resource consent applications for petroleum and mineral mining activities on private land.

34.6.3 Implementation

(i) In recommending or declining access for petroleum prospecting and exploration, consideration will be given to the need to protect natural, historic, cultural and recreation values and regard will be had to the purposes for which the particular area of land is held.

(ii) Prospecting and exploration proposals will be assessed on their merits. New roads or tracks, and vehicle access off existing tracks will generally not be permitted.

(iii) Applicants will be required to demonstrate that mining and associated infrastructure impacts will be minimal, and the natural, historic, cultural or recreation values of the area will not be compromised (e.g. underground mining or mining using hand-held, non-motorised methods may be acceptable).

(iv) On any application, particular regard will be had to the following matters:

- *whether the effects of the activity can be avoided, remedied or mitigated*
- *whether the restoration proposed is adequate and can be achieved*
- *whether there is adequate financial protection by way of insurance or a bond to ensure compliance with conditions and remedial action*
- *the adequacy of compensation offered for access to the land for prospecting, exploration or mining.*

(v) Clearance of vegetation will generally not be permitted unless full restoration of native vegetation is possible in a short time frame.

(vi) Controls will be imposed to prevent the introduction of weeds and pests.

(vii) Restoration methods will emphasise appropriate ground preparation and weed and pest control to accelerate natural succession rather than sowing or planting.

(viii) All actual and reasonable costs incurred by the Department in processing and monitoring applications will be recovered.

(ix) Any access arrangement will include a provision that the Department may make submissions on any associated resource consent applications, and may modify the access arrangements as a result of any resource consents granted.

(x) Environmental performance standards for mining and quarrying will be promoted in policies and plans developed by territorial authorities.

(xi) Resource consent applications involving mining and quarrying will be monitored.

34.6.4 Outcome

- Significant natural, historic, cultural or recreation values of the Conservancy are protected from adverse impacts of petroleum and mineral mining activities.

34.7 PRIVATE BACHES, RECREATION AND COMMUNITY RECREATION BUILDINGS

The only baches on land directly administered by the Department in the Conservancy are licensed as part of grazing licences. In addition there are 179 baches on recreation reserves controlled and managed by or vested in the New Plymouth District Council (Tongaporutu, Urenui, Onaero and William Corbett Domains), South Taranaki District Council (Kaupokonui Domain) and several on an unformed legal road alongside the Mohakatino River estuary.

Cross Reference
See Sec. 13.5.11

There are also many buildings and structures located on recreation reserves which are associated with recreational activities such as golf, rugby and other outdoor sports. A number of local purpose reserves also support community facilities such as playcentres, libraries and scout dens.

A draft national policy covering private baches on land administered by the Department was prepared in 1990. The policy aims to phase out use of this land for private accommodation, and to make the areas available for public use and enjoyment. The policy precludes the construction of new baches and allows for existing baches to continue only where the baches have historic value, and the natural, historic and recreation values of the area are not affected. The presence of private accommodation also conflicts with the public open space provisions of the Reserves Act relating to recreation reserves.

34.7.1 Objectives

(i) To restrict the use of land administered by the Department for private or commercial buildings.

(ii) To limit the impact of currently leased buildings and structures to the minimum practicable.

(iii) To rationalise the private use of Crown-owned recreation reserve land.

(iv) To permit the erection of buildings associated with sport or community activities on reserves where this is consistent with the purpose of the reserve.

34.7.2 Explanation

Normally, there is no reason why private buildings should be situated on land administered by the Department. Exceptions exist in the case of inherited occupancies, recreational club buildings on recreation reserves and where land administered by the Department is the only possible site for community facilities.

The presence of baches has both positive and negative aspects. The positive aspects can be the distinctive, practical and amateur style of the buildings, representing a phase in the development of New Zealand. They can also be part of the landscape character of some locations. Bach owners generally have an affinity with the environment surrounding their baches. They sometimes contribute to lifesaving and search and rescue operations, and act as observers of marine pollution incidents. The baches also provide a facility (albeit exclusive) for owner and invitees to experience the natural environment.

However, baches can have an adverse effect on the environment, and on other users' enjoyment of the immediate area. The presence of buildings, changes to vegetation and landforms, and the effect of sometimes inadequate rubbish and sewerage disposal detracts from the natural character, particularly where such buildings are located in coastal areas. The public is also often reluctant to make use of areas near baches for recreation. In many cases lease conditions restricting the periods of occupation, size and additions or alterations, and maintenance of baches have not been enforced over the years. This has resulted in the baches becoming a more prominent feature in the coastal landscape.

The Department recognises bach owners' historical use of some areas, but increasing recreational pressure requires the gradual withdrawal of private accommodation from public land.

Where the baches are subject to perpetually renewable leases, (Urenui, Onaero and Kaupokonui Domains), revocation of the reserve status and disposal of the land occupied by the buildings (with an initial offer to the district council concerned) will be pursued. Proceeds may then be used to purchase other areas of high natural, historic or recreation value through the Reserves Trust Account.

Cross Reference
See Sec 13.5.11

In the case of the Tongaporutu Domain, this reserve has current and future public recreational use potential. Any further leasing of this public recreation reserve for private dwellings would clearly be inconsistent with its primary purpose. The conditions on existing lease agreements requiring the removal of baches at the end of the 30 year lease term will therefore be enforced in accordance with Departmental policy.

34.7.3 Implementation

(i) *Generally no new private baches or houses will be permitted on land administered by the Department, unless provided for in a recreation concession.*

(ii) *Baches which are subject to existing lease agreements will be administered in terms of those agreements. The Department will monitor agreements administered by other agencies to ensure compliance with legal requirements. Enforcement of conditions will be pursued, including those requiring the removal of baches at the end of the lease term.*

(iii) *Unauthorised private buildings may be removed, unless they have a 'Category 1' registration under the Historic Places Act 1993. The costs of removal will be recovered from the owner.*

(iv) *Crown recreation reserve land occupied by baches, subject to perpetually renewable leases, may be disposed of after an initial offer to the appropriate district council.*

Cross Reference
See Sec 20.5.1(i)

(v) *Consent for new buildings and structures associated with outdoor recreation or community facilities may be granted where they are consistent with the purpose of the reserve and with this CMS.*

(vi) *The public will be informed of the reasons for any actions in respect of private baches, recreation and community buildings. Owners of buildings will be consulted.*

34.7.4 Outcome

- Buildings and structures appropriate to the status of the land concerned will be retained.

34.8 PUBLIC WORKS AND ASSOCIATED STRUCTURES

Most works, and the erection of structures formerly regarded as public works, are now carried out by commercial organisations such as Electricorp, power companies or network utilities such as Broadcast Communications Ltd and Telecom. Consent is often sought for buildings, structures, or easements on land administered by the Department. Applications for such concessions are considered against the provisions of sections 34.5, 34.7 and 34.10 of this CMS. The remaining significant public works are water or sewage treatment plants or pipelines, bridges, roads and major highways.

See Secs 34.5, 34.7 and 34.10

While national parks, reserves and conservation areas may have the potential to be used for such works(their availablity is recognised in the Public Works Act), all alternative sites should first be assessed and discounted. The purposes for which land is held and managed by the Department does not include a provision for accommodating public works and structures. Where it is impractical to locate a work elsewhere and there is an identified public good, then proposals can be considered under strict impact assessment criteria.

34.8.1 Objective

To only allow public works and associated structures where:

- ***no other practicable site on private land or on other land administered by the Department exists where the potential adverse effects would be significantly less, and***
- ***the work is not contrary to the provisions of the Act under which the land is held or the purpose for which the land is held.***

34.8.2 Explanation

In some instances, the only available land for public works such as water or sewage plants, pipelines, or roads, may be on land administered by the Department. Proposals for use will be carefully assessed to ensure that there is a justifiable need for the work and that there are no suitable alternative sites on private land.

Generally a full impact assessment will be required to assess the effects of a proposal on the values of the land concerned. Where the activity is contrary to the provisions of the Act under which the land is held or the purpose for which the land is held, the application cannot be granted.

Where land is required for a public work and it is inappropriate for the land to remain in a protected status (e.g. where land is to be used for a sewage treatment plant or a road) then the land must be acquired from the Department and compensation paid.

Where the work can be constructed without undue impact on natural and historic values, the occupation of land will be managed under a formal lease, licence or easement.

Roadworks such as road widening and new alignments may need to encroach on land administered by the Department. Where this work occurs, it may provide picnic areas and improve access to such areas. In each case the public benefit needs to be weighed against the impacts of roading development on natural and historic values.

Routine road maintenance may involve cutting vegetation, weed spraying, and the disposal of spoil from slips into watercourses. Some of these activities may have adverse effects on natural and historic values or arouse public concern even where areas administered by the Department are not affected. Close liaison is required with the roading authority to minimise these problems.

34.8.3 Implementation

(i) *Consent to applications for public works and associated structures may be granted where alternative sites are unavailable and the environmental effect is minimal.*

(ii) *All approved works will be required to adhere to strict construction guidelines aimed at minimising any environmental impact. Full site restoration will generally be a condition of any consent.*

(iii) *Performance bonds will generally be required to ensure that construction is carried out to required standards and conditions.*

(iv) *Where it is inappropriate for land to remain under the Department's administration, (e.g. a road realignment) then it will need to be acquired under the Public Works Act and compensation paid.*

(v) Concessions at fixed terms will be established for those works where the land remains administered by the Department (e.g. sewage/water pipeline easements in recreation reserves).

(vi) Liaison will be maintained with roading authorities over routine road maintenance adjacent to streams, rivers and areas administered by the Department.

34.8.4 Outcome

- Public works and associated structures on land administered by the Department have no significant adverse effects.

34.9 POWER GENERATION

Most hydro proposals would be inconsistent with the objectives of the Acts under which land administered by the Department is held, and would be unable to be approved. The High Court has held in the case of *Buller Electricity Limited v the Attorney-General* that the Conservation Act does not provide for, nor permit, the release of land for power generation, especially for hydro sites.

34.9.1 Objective

Power generation will not be permitted on land or waterways administered by the Department where it is likely to have an adverse effect on natural, historic or recreation values.

34.9.2 Explanation

Hydro investigations have been carried out on several rivers in the Conservancy, including the Whanganui, Rangitikei, Whangaehu and Moawhango. These rivers, along with others in the Conservancy, have high wild, scenic and recreational values, and any future proposals for hydro developments would be closely scrutinised by the Department, and opposed if these values would be compromised. A Water Conservation Order has been applied for over the Whanganui River and orders exist on the middle and upper reaches of the Rangitikei River and the Manganui o te Ao River, a tributary of the Whanganui River.

Cross Reference
See Sec 11.5.4

There may be locations where micro hydro schemes can be installed to serve a single or several small power users, such as homesteads, without a major impact on natural, historic or recreation values.

In the future, other forms of power generation, such as wind power, are likely to become more prevalent. Any proposals to use land or waterways administered by the Department for power generation purposes will be assessed by the Department and each case considered on its merits, and whether it is compatible with the Act under which the land is held or the purpose for which the land is held.

34.9.3 Implementation

Cross Reference
See Sec 44.2

(i) The Department will advocate through statutory and non statutory processes, the protection of land and water with high natural, historic or recreation value from power generation developments by ensuring that any adverse effects on these values are avoided, remedied or mitigated.

(ii) The Department will seek conditions on any power generation proposal to protect natural, historic and recreation values, or alternatively may consider the potential for achieving conservation benefit through compensation or other means as agreed between the parties.

(iii) The Department will seek the protection of important waterways in the Conservancy, by Water Conservation Orders or other means, and/or support other agencies.

(iv) The Department will continue to support the case for the protection of the Whanganui River under a Water Conservation Order.

34.9.4 Outcome

- Water and land administered by the Department which has high natural, historic or recreation value will be safeguarded from significant adverse effects from new power generation.

34.10 TELECOMMUNICATIONS

Much of the high ground suitable for telecommunication sites in the Conservancy is found in Egmont and Whanganui National Parks, reserves or conservation areas.

See Sec 12.5.11(a)

The Conservancy has four major and three minor telecommunication sites. Six of these are in Egmont National Park and the other, a minor television translator site near Ohura. With new communications systems, there is a continuing demand for new sites and additions to current sites.

34.10.1 Objectives

(i) To ensure protection of landforms, landscapes and other natural, historic or recreation values from telecommunication development and provide for new sites only where they:

- ***cannot be established off land administered by the Department or on other land administered by the Department where the potential adverse effects will be significantly less, and***
- ***are not inconsistent with the provisions of the Act under which the land is held or the purposes for which the land is held.***

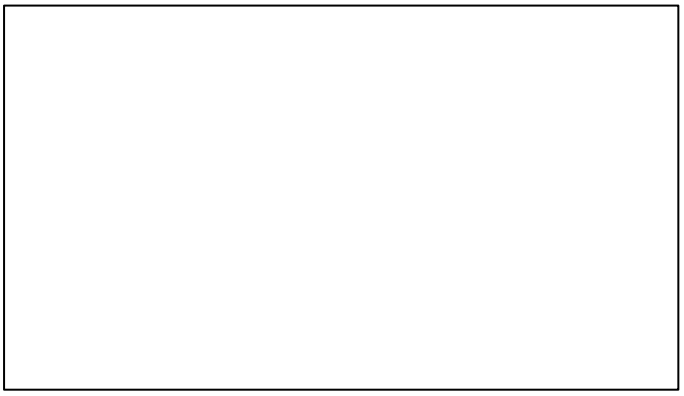
(ii) To allow the development and maintenance of Departmental communication facilities on land administered by the Department where this will enhance field operations and public or staff safety without creating significant effects on natural, historic or recreation values.

34.10.2 Explanation

Mountain tops and ridgelines are prominent, and for this reason, are also attractive for communication installations. The natural lines of a mountain and the sense of isolation enjoyed by recreational users are easily disrupted by structures and associated noise.

(a) Commercial sites

Deregulation of the telecommunications industry has seen the arrival of TV3, Sky TV and Clear Communications. This, and the advent of new technology such as cellular phones, has resulted in greater interest in locating transmission facilities on elevated land administered by the Department.



This telecommunications site has a high visual impact on Mount Taranaki / Egmont.

Advances in satellite and ground-based technology will eventually allow many telecommunication services to be located on lower altitude private land. Until this occurs, there will be a continuing demand for new sites and co-location at existing sites.

It is important to ensure that provision of these and future facilities will not compromise natural, historic or recreation values and that the true environmental costs associated with these activities are met by the operators. The public and commercial benefits these facilities bring are recognised, but must be weighed against the natural values of areas and the landscape in which the hilltop is often a dominant element.

(b) Non-commercial sites

The Department operates and maintains both High Frequency (SSB) and Very High Frequency (E-band) radio telecommunications networks to facilitate field operations and to provide an increased level of safety to staff and members of the public.

The present quality of Departmental radio communications within the Conservancy falls well below the ideal because of frequent atmospheric interference on the SSB band and the limited availability of channels on the E-band. These factors regularly compromise the efficiency of field operations as well as public and staff safety.

With the intention of improving radio communications, the Department obtained licences for 18 channels in the new Emergency Services (ES) band. As new hardware becomes available, the Department will improve radio coverage by siting repeaters in locations which effectively link remote and rugged back country areas to field centre offices. Sites currently being investigated include Pouakai Trig in Egmont National Park, Mt Humphries on the western fringe of Whanganui National Park and Peneta Trig in the south-eastern part of Waitaanga forest.

Departmental repeaters are very modest structures, much less obtrusive or visible than

survey trigs which they often stand beside. They usually involve a pole with a single element aerial attached to the top, a one square metre solar panel array near the base of the pole and a small cabinet which houses the receiver and transmitter.

Proposals for new facilities will be assessed to ensure that they do not create significant impacts on natural, historic or recreation values.

(c) Priorities

The priorities for management of telecommunication sites are:

- to relicense sites with permits that provide finite terms and better protection of natural, historic or recreation values
- to review site rentals to a market value
- to encourage a rationalisation of communication masts on sites to reduce visual impacts
- to encourage a rationalisation of sites to reduce their number.

34.10.3 Implementation

(i) *New telecommunication facilities will generally be permitted only where they will not have a significant adverse effect on natural, historic or recreation values of the area and no other suitable alternative site is available.*

(ii) *All applications for new telecommunication sites or for an extension of existing facilities on land administered by the Department will generally require an environmental impact assessment.*

(iii) *New facilities will be co-sited on existing sites where practicable.*

(iv) *The cultural and spiritual values of a particular site will be taken into account when considering an application and Tangata Whenua will be consulted.*

(v) *Site rentals may be reduced or waived if it is considered that the lessee/licensee is providing a non commercial public benefit including educational, scientific or health services.*

(vi) *All actual and reasonable costs to process applications and licence enforcement for telecommunication sites will be recovered from the applicant, or lessee.*

(vii) *Access to construct and maintain any new facilities will be restricted to foot and helicopter, unless road access already exists or can be provided without affecting natural, historic or recreation values.*

(viii) *No new licence will confer an exclusive occupation of a site.*

(ix) *Any new power lines to a site will be located to cause minimum impact and, where practicable, be laid on the ground. Any new overhead lines will be screened from roads and be clear of views, photographic points and skylines as far as practicable.*

(x) *All sites will be required to be kept in a clean, tidy and well-maintained state.*

(xi) *Where practicable, existing site lessees will be encouraged to use less visible and quieter equipment, and re-locate to other sites if this can reduce the total number of sites.*

(xii) *To allow the installation, maintenance of and upgrading of other non-commercial telecommunication equipment such as Departmental communication systems, flood warning systems, volcanic hazard warning systems and remote area weather stations, where there is a clear benefit to public safety and welfare and Departmental management activities, and can be achieved without significant impact on natural, historic or recreation values.*

Cross Reference See Sec 33.2

34.10.4 Outcome

- To have as few telecommunications sites as possible on land administered by the Department and for these to be managed to minimise environmental impacts.

34.11 COLLECTION OF SPECIMENS/SAMPLES

The Department supports many scientific programmes which require the collection of specimens and samples. Such research can lead to improved knowledge and understanding of species and processes and to improved species and ecosystem management.

Specimens and samples are also collected for educational purposes. This is normally restricted to small quantities of plants for identification purposes and dead animals for display.

34.11.1 Objective

To ensure the appropriate collection, use and distribution of indigenous plants, animals and geological samples, in accordance with the relevant legislation and national guidelines.

34.11.2 Explanation

The prime objective of the Conservation Act is to ensure the protection and preservation of New Zealand's natural and historic resources. The Act provides discretion to allow the taking of plants, animals and geological samples for scientific, educational and conservation management purposes. A concession or other appropriate authorisation will be required in most cases to collect such materials.

Other Acts e.g. National Parks, Reserves and Wildlife Acts, are also important as the purposes for which specimens and samples can be taken differ according to the status of the land. Provisions for the collection of specimens and samples in these Acts are not consistent with each other.

34.11.3 Implementation

(i) Applications for the collection of indigenous plants, animals and geological samples from areas administered by the Department and for the collection of protected species elsewhere will be processed according to legislation and Departmental procedure, taking account of the following criteria:

- *that collection is necessary for protection purposes, or serves a legitimate scientific or educational purpose*
- *alternative sites or species are not available*
- *adverse effects on species and natural ecosystems are avoided or minimised.*

(ii) Concessions or other authorisations issued may include conditions necessary to meet the above objective.

(iii) The public will be encouraged to forward dead species of uncommon indigenous animals they find to the Department.

(iv) The Department will liaise with museums, other institutions and Tangata Whenua about the allocation and storage of dead specimens of protected species, and maintain a Conservancy database of institutions holding dead specimens.

Cross Reference
See Sec 34.1

34.11.4 Outcome

- Improved knowledge and understanding of species, ecosystem functioning and environmental processes by the Department and other organisations without harming the environment.

34.12 MILITARY USE

The size and remoteness of some land administered by the Department makes it attractive for defence training. The Department receives a number of requests for the use of areas it administers, including the Whanganui National Park and the Waitotara Conservation Area. Military exercises have been carried out in these areas for many years.

34.12.1 Objective

To allow military use of land administered by the Department in accordance with the 1990 Defence Training Agreement.

34.12.2 Explanation

Under the Military Manoeuvres Act 1915, the Governor General may proclaim land (including land administered by the Department) to be available for military manoeuvres. Any other intended defence activity, however, requires the approval of the Department.

The Department and New Zealand Defence Force are parties to a Defence Training Agreement (signed 8/3/90) which provides for military training to be carried out, on

State Areas as defined in the Forest and Rural Fires Act 1977, provided certain conditions are met. Departmental approval to carry out military exercises is issued subject to conditions to protect natural and historic resources and visitors.

In return, the New Zealand Defence Force may make available fire fighting assistance to the Department. Further assistance for various projects, including track construction and maintenance, and transportation of Departmental personnel to remote conservation areas by road, air and sea is also often provided.

Military training within the Conservancy may also involve Royal New Zealand Airforce aircraft participating in low level flying in airspace above the Conservancy. Low level flying is undertaken in accordance with the Civil Aviation New Zealand Aeronautical Information Publications which recognise notified wildlife sanctuaries and nature reserves. Prior consent must be obtained from the controlling authority if flying is proposed within restricted airspace.

34.12.3 Implementation

(i) Work co-operatively with the New Zealand Defence Force to manage the effects, if any, of military exercises.

(ii) Requests for military use of areas administered by the Department will be considered on their merits in accordance with the criteria in the agreement.

(iii) Conditions may be applied to reduce impacts on natural and historic resources and on visitors.

(iv) Where areas administered by the Department are subject to a proclamation under the Military Manoeuvres Act 1915, the Department will liaise with the New Zealand Defence Force Headquarters to seek protection of natural and historic resources.

34.12.4 Outcome

- Carefully managed military exercises over land administered by the Department will continue to occur.

34.13 BURIALS AND SCATTERING OF ASHES

Requests are occasionally received for permission to bury people or scatter the ashes of deceased on land administered by the Department, and to erect commemorative monuments to people. A concession will be required for anybody wishing to bury a person on land administered by the Department.

Cross Reference
See Sec 34

The Burial and Cremation Act 1964 provides for the burial of people in special places.

The Department, in some cases, has a direct administrative responsibility for local purpose (cemetery) reserves (now closed to burials). Burial sites are also located elsewhere on land administered by the Department, the more significant of these being urupa on historic reserves and in Whanganui National Park.

34.13.1 Objectives

(i) To generally prohibit the use of land administered by the Department for burials and associated monuments.

(ii) To allow the scattering of ashes where culturally acceptable.

34.13.2 Explanation

The burial of people on land administered by the Department is, in general, considered inappropriate and will not be permitted. Exceptions may be considered where burial in a particular place would be of very special (spiritual) significance or where legislative rights have been granted to Maori. Burials in recognised urupa will be a matter for the Tangata Whenua to determine, in co-operation with the Department.

Cross Reference
See Sec 18

In most cases, where there is merit, some other form of commemoration is generally more appropriate. This is addressed in Section 24.

The Department is responsible for a number of cemetery reserves which are now closed to new burials. The Burial and Cremation Act, however, does provide for immediate relatives to be buried with their kin in closed cemeteries. Such applications for burial will be respected.

The scattering of ashes will generally be permitted. However the granting of consent needs to be done sensitively because areas such as Mount Taranaki/Egmont are spiritually significant to Tangata Whenua. The dispersal of ashes of the deceased could conflict with spiritual values.

34.13.3 Implementation

(i) Requests for the burial of people on land administered by the Department will generally be declined.

(ii) Burials of near relatives in closed cemeteries administered by the Department may be permitted. On other land administered by the Department, burials will be allowed only where they are of very special significance to that particular site.A concession will be required for this purpose.

(iii) The Department will co-operate with Tangata Whenua where the burial of their people is sought in urupa located on land administered by the Department.

(iv) Requests to scatter ashes of deceased over land administered by the Department may be approved where this does not conflict with Maori spiritual values.

34.13.4 Outcome

- All requests to bury people or to scatter the ashes of deceased on land administered by the Department will be dealt with in a culturally sensitive manner.

34.14 COMMERCIAL FILMING AND VIDEO PRODUCTION

The Department receives applications from television and film/video production companies to carry out filming in areas it administers. In Wanganui Conservancy this has normally involved on-location filming for television news or current affairs items, documentaries on the natural features or history of a particular area or television or video features promoting recreational opportunities and tourist attractions. Activity has largely been confined to the two national parks. It is possible, as has happened in other parts of the country, that the Department may also receive applications to produce feature films or commercials and advertisements, using areas administered by the Department as the setting or scenic backdrop.

34.14.1 Objective

To allow on-site commercial filming and videoing where the activity:

- ***cannot be carried out off land administered by the Department or on other land administered by the Department where the potential adverse effects will be significantly less***
- ***is not inconsistent with the provisions of the Act under which the land is held or the purpose for which the land is held.***

34.14.2 Explanation

As a form of commercial activity taking place on land administered by the Department, a concession is required for all on-site filming or video production. This enables the Department to assess the environmental impacts and merits of a proposal, including whether it is consistent with the values and management objectives for a particular area. The subject matter of the film or video production also needs to be considered in terms of whether it is consistent with the purpose for which an area is held. For example, the filming of commercials for certain products may not be appropriate in some areas or where a scenic backdrop is simply required, with no direct association between the subject matter and the place.

A concession fee will be charged for on-site filming or video production. The fee may be waived or reduced for reasons including an element of non commercial public benefit (e.g. a New Zealand television news or current affairs item about a particular area or conservation issue) or the production has an educational or promotional value corresponding with the Department's conservation awareness objectives (e.g. a natural history documentary). The Department's 'Guidelines for Film and Video Concession Fees' (November 1992) provides guidance in this policy area.

Fees will generally be waived for still photography. Although a commercial element may be involved, the activity would be difficult to control and photographs are often used for promotional or educational purposes which may coincide with the Department's conservation awareness objectives.

34.14.3 Implementation

(i) A concession will be required for all commercial filming or videoing on land administered by the Department.

(ii) Give special consideration to the interests of Tangata Whenua in processing applications for film or video permits, where sites of special cultural or spiritual significance are involved.

(iii) Where the subject matter of a film or video production is likely to conflict with the purposes for which the land is held, or may be offensive to Tangata Whenua, or communities of interest or the effects of the activity may be contrary to the purposes for which the land is held, the concession application may be publicly notified.

(iv) Ensure that film or video companies working in areas administered by the Department do not damage the environment, particularly sensitive sites.

(v) Charge concession fees and recover actual and reasonable costs for all filming and videoing applications in areas administered by the Department in accordance with Departmental guidelines. Still photography, New Zealand television news and current affairs programmes will generally have any fees waived. Overseas news teams will be dealt with on a case by case basis.

(vi) Distinguish between the different types of film and video productions and the scale of these productions for deciding the level of the concession fee to be charged.

(vii) Waive or reduce concession fees if the film or video project is consistent with the Department's conservation awareness objectives.

(viii) Require additional authorisation to be obtained if the film or video project involves anything that would normally require consent under legislation administered by the Department. For example, projects involving the handling of protected wildlife, the taking or any other disturbance of plants, rocks or other natural or historic features, entry into a specially protected area where a permit is required or aircraft landings in areas administered by the Department would require additional consents.

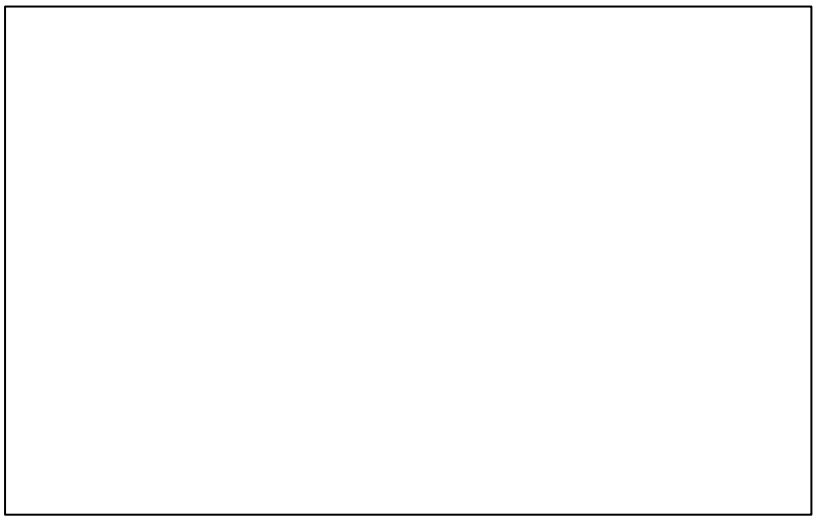
34.14.4 Outcome

- Commercial filming or videoing in areas administered by the Department will be permitted where there is no significant adverse effect on natural and historic values.

35 Commercial Recreation and Tourism Concessions

In general, the legislation under which the Department administers land allows for commercial activities, subject to such activities not being inconsistent with the provisions of the Act under which the land is held or the purposes for which the land is held and do not adversely affect the appreciation and enjoyment of natural and historic values by others.

A concession is an official authorisation to operate in an area administered by the Department. Authorised commercial operators are termed 'concessionaires'. Concessions are not required where a recreation activity is carried out by an individual or group where that activity is not commercially orientated. Concessions may be in the form of a lease, licence or permit and may, depending on the type, be issued for a term up to 30 years (or in exceptional circumstances, 60 years for a lease or licence).



Manganui Skifield, Egmont National Park.

Concessions can extend the range of outdoor recreation opportunities and experiences available to the public. While most activities can be undertaken on an individual or club basis, commercial involvement can often provide advantages for visitors to areas administered by the Department. Ski fields, for example provide specialist facilities, while backcountry guiding operators can assist inexperienced people in obtaining a safe and enjoyable experience. Concessionaires can also assist in interpreting natural and historic features, allowing their clients to gain a better understanding of natural and historic values.

High investment, intensive activity is confined at present to the two tourist lodges and skifield in Egmont National Park. Most commercial activities carried out in the Conservancy are small-scale, of low impact and are infrequent operations.

Current recreation and tourism concessions in the Conservancy can be grouped as follows.

(a) Skifield

Cross Reference
See Sec 12.5.12

The Stratford Mountain Club operates the Manganui Skifield in Egmont National Park under a licence from the Department.

(b) Tourist accommodation

Leases for operation of the Dawson Falls and Stratford Mountain House tourist lodges in Egmont National Park.

(c) Guiding services

A number of concessions have been issued to conduct alpine guiding, mountain craft instruction, guided tramping, hunting, jetboating and canoeing (guided canoe trip and jetboat operators on the Whanganui River carry out overnight camping and/or short guided walks in the adjoining Whanganui National Park).

(d) Aerial transport services

Permits have been issued to commercial helicopter operators to transport recreational hunters and possum trappers into Whanganui National Park, adjoining conservation areas and Hihitahi Sanctuary.

(e) Special sporting events

A licence has been granted to conduct the annual Mountains to Sea Triathlon on land administered by the Department (part of the event is conducted in the adjoining Tongariro/Taupo Conservancy).

(f) Bungy jump support facilities

A licence has been granted for support facilities associated with the Mokai Bridge bungy jump on the Rangitikei River.

35.1 Objectives

(i) To allow for wider visitor enjoyment of areas administered by the Department, by granting concessions for commercial recreation and tourism activities that are compatible with the protection of natural and historic values, are not inconsistent with the provisions of the Act under which the land is held or the purposes for which the land is held and do not adversely affect the appreciation and enjoyment of natural and historic values by others.

(ii) To restrict development of skiing facilities in Egmont National Park to the existing Manganui Skifield Management Area.

35.2 Explanation

An expected increase in the number of international visitors will lead to increased commercial use of land administered by the Department.

Applications for recreation and tourism concessions will need to be carefully assessed in order to ensure the protection of natural and historic values and to avoid any potential adverse impact on the experience of other users. Public safety will be taken into account when considering all recreation and tourism concession applications.

Cross Reference
See Sec. 39.2

Through the granting of appropriate concessions, an extended and enhanced range of high quality visitor services can be provided. Concessionaires can often provide specialist facilities and services more effectively than the Department (e.g. skifields), or complementing those already provided by it e.g. guiding services on walking tracks.

(a) Guiding services

Guided adventure and nature tourism is growing in popularity. The Department recognises guiding as a means of providing an alternative experience to independent recreation. The provision of guiding services makes areas administered by the Department and recreation opportunities accessible to a wider range of people. Guiding operators generally offer enhanced comfort for clients and a high level of safety and environmental protection.

Guiding operations are normally small-scale, of low impact and usually do not require the establishment of substantial fixed structures.

Opportunities exist for forming creative relationships between the Department and concessionaires, especially in interpreting natural and historic values and informing visitors on the benefits of conservation.

For these reasons, the Department generally considers guiding to be an appropriate commercial activity in areas administered by the Department.

(b) Aerial transport services

Cross Reference
See Sec. 37.4

Aircraft, especially helicopters, can provide a ready means of access to remote locations in areas administered by the Department. To minimise the potential impact on other users, aircraft use will be largely restricted to search and rescue purposes and management requirements.

Allowance will generally be made for aerial access for recreational hunters and possum trappers because of their contribution to wild animal control. The Department, therefore generally issues aerial transport concessions for this purpose. Applications for aerial transport concessions for other purposes will be considered on their merits.

Because Egmont National Park is small, recreation concessions involving the use of aircraft in the park (e.g. for heliskiing or sightseeing purposes) will not be permitted.

(c) Skifield development

See Sec. 12.5.12

The Egmont National Park Management Plan (1986) identified Manganui Skifield as the only suitable skifield area in the park. Other areas are considered impracticable for reasons of lack of access, variable snow cover and difficult topography. Development of further ski facilities would also impact on the park's natural character.

The Stratford Mountain Club operates the Manganui Skifield, which has three ski tows, a club lodge, canteen, ancillary buildings and other facilities. The skifield serves mainly local Taranaki residents because the majority of skiers in the Conservancy use the larger fields on Mount Ruapehu.

Skifields require buildings, ski tows and other facilities and activities such as snow grooming. Although all works must have an approved work plan, activities and impacts on the skifield need to be carefully monitored to minimise adverse effects on natural values.

(d) Priorities

- Allow concessions that have minimal effect on natural and historic values and the enjoyment of other users and which provide an extended and enhanced range of appropriate visitor services.

- Ensure that all approved concessions make provision for a high standard of public safety.
- Ensure that concessionaires pay a market rent for their activities on land administered by the Department.
- Monitor approved concessions to ensure compliance with conditions in concession agreements.
- Maintain close liaison with concessionaires and the tourism industry.
- Consult with concessionaires to develop suitable safety and interpretation standards.

35.3 Implementation

(i) *The Department will assess and process applications for commercial recreation and tourism concessions on land it administers, in accordance with Part IIIB of the Conservation Act 1987 and other relevant provisions of the Act under which the land is held.*

(ii) *In assessing the effects of any proposed recreation concession under Section 17U of the Act, consideration will be given to the matters in that section including:*

- *effects on natural and historic values*
- *measures to avoid remedy or mitigate any adverse effects on natural, historic and recreation values*
- *the purpose for which the land is held*
- *the extent to which the proposed activity will enhance public use and enjoyment of the area concerned*
- *the degree to which enhanced public use and enjoyment may justify some loss of natural values*
- *impacts on existing users*
- *the type and quality of the activity offered*
- *visitor safety*
- *availability of alternative locations for proposed facilities or activities either on or off areas administered by the Department.*

Cross Reference
See Sec 39.2

(iii) *All applications for commercial recreation and tourism concessions will be required to demonstrate that appropriate provision will be made to ensure safe recreational experiences for visitors and that any facilities to be provided will comply with all relevant legislation.*

(iv) *Preference may be given to concession applications which would benefit conservation through nature tourism (i.e. concessions which would enhance visitors' appreciation of natural or historic values), wild animal control or education.*

(v) *Applications for a lease or licence must be notified. An application for a permit may be notified if the potential effects of the proposed activity warrant it.*

(vi) *The Department will consult Tangata Whenua about concession applications when it believes that it does not have sufficient information about their interests and concerns, and needs to know this to make an informed decision. Consultation with Tangata Whenua will commence before undertaking any public consultation. If the Department does not intend to consult specifically with Tangata Whenua on an application, it will notify Tangata Whenua of any public advertising.*

(vii) *The Department will consult with the appropriate conservation board on all lease or licence applications and may consult with the appropriate conservation board on permit applications.*

(viii) *Concessions will be monitored to ensure that conditions are adhered to.*

(ix) *Advertising for interest in operating a particular type of commercial activity in specific areas of the Conservancy will be considered if a proven demand is identified for the activity.*

Cross Reference
See Sec 12.5.12

(x) *Any proposal to upgrade or develop additional skiing facilities within the Manganui Skifield Management Area, Egmont National Park, will be subject to a detailed assessment of environmental effects and will require firm evidence of the demand for any new facilities. Expansion of the skifield beyond the existing management area and any new skifield development in other parts of the park will not be permitted.*

(xi) *Monitor the management of Manganui Skifield to minimise adverse effects on natural values.*

(xii) *Liaise with the Stratford Mountain Club to ensure appropriate management of the skifield area and supporting facilities.*

(xiii) *Concessionaires and their clients may use public facilities, such as huts and campsites, on a 'first-come, first-served basis' with other users (unless otherwise determined by the Department) but will not be given exclusive use of any facility unless this is specifically provided for in a conservation management plan (CMP). (Where public use is high, concessionaires may be permitted to provide their own accommodation in the form of relocatable buildings.)*

(xiv) *The Department may display appropriate material from concessionaires at its offices and provide a directory of concessionaires operating on land administered by it.*

(xv) *Concessionaires involved in guiding or similar activities will be required to provide training for their staff in appropriate safety and conservation issues, including interpretation skills and the New Zealand Environmental Care Code. Where able, the Department will assist in this process.*

(xvi) *Liaison will be maintained with local concessionaires, concessionaire associations and the aviation industry in respect of aircraft use in areas administered by the Department.*

(xvii) All reports of unauthorised commercial activities on land administered by the Department will be investigated. Unauthorised operators will be required to either cease operating or to formally apply for a concession. Prosecution action will be taken where necessary.

(xviii) All aircraft landings for recreation purposes on land administered by the Department, which is not a certified aerodrome, will require a concession.

(ixx) Recreation concessions involving the use of aircraft in Egmont National Park will not be permitted.

(xx) The Department reserves the right to grant similar concessions to other operators, as long as this is consistent with maintaining a good quality service, the provisions in this CMS and any CMP and the principles of sound conservation management.

(xxi) The Department may limit the number of concessions issued for a particular activity or a particular area if it considers it is in the interest of conservation management to do so.

(xxii) The Department may charge a market rent for the commercial use of land administered by it. The rent will be reviewed at intervals not exceeding three years. It will reflect the value of the business opportunity presented by the use of a particular site or area.

35.4 Outcomes

- The granting of appropriate concessions that do not have significant adverse effects on natural and historic values, and on the enjoyment of other users, and which are consistent with the purposes for which particular areas are held.
- Monitoring of approved concessions to ensure there is minimal impact on natural and historic values and provision of a safe, high quality service.
- Provision of an extended and enhanced range of appropriate, high quality visitor services.

RECREATION

36 Introduction

Within the Conservancy, various outdoor recreation opportunities are available - canoeing, rafting, skiing, walking, picnicking, tramping, hunting and climbing. They can be carried out in a variety of settings: urban, rural, backcountry or remote areas. Many recreation activities occur on land administered by the Department, particularly in the two national parks. In recent years, the Department has experienced demand for the provision of additional recreation activities such as mountain biking, horse riding and paragliding.

Areas administered by the Department provide an opportunity for outdoor recreation and the chance for people to experience and learn about natural and historic values. For many, recreation on land administered by the Department provides their main link with the natural environment. This link needs to be nurtured by providing appropriate recreation opportunities and maintaining a quality visitor experience.

Various Acts influence the Department's management of recreation. The Conservation Act provides the main direction in focusing the Department's activities foremost on the conservation of natural and historic resources and enables recreation to be fostered, while use for tourism may be allowed.

Visitors to areas administered by the Department may be local residents, travellers from other parts of New Zealand or from overseas. They may visit areas on an individual or private basis, as part of a school or club activity or as part of a commercial tour. Managing recreation is a major part of the Conservancy's work and absorbs about a quarter of the annual budget.

36.1 STRATEGIC PLANNING AND RECREATION MANAGEMENT PRIORITIES

Recreation management must reflect the Department's legislative functions, current policy and funding levels and take into account changing visitor characteristics. Within a limited budget, the Conservancy must prioritise and plan its expenditure on recreation.

A Conservancy Recreation Strategy[23] has been prepared to provide guidance in this major functional area. From the strategy, the following priorities have been identified and incorporated in this CMS.

- Provision of low impact, road end recreation opportunities, catering for a majority of users (primarily day visitors), will have priority over backcountry developments.
- Generally maintain backcountry facilities such as huts and tramping tracks at existing levels. No major new developments will occur in backcountry areas unless the need can be clearly proven and additional funding is made available.

- Collection of more detailed information on visitor use of land administered by the Department through implementation of a visitor monitoring programme, visitor surveys and monitoring of impacts associated with visitor use.
- Priority for the maintenance and upgrading of facilities will be accorded to the highest use tracks, huts and roadends. Work will be carried out to reduce maintenance costs over subsequent years, while also improving visitor safety, the quality of the visitor experience and controlling effects. Although upgrading of facilities will primarily take place in high use roadend areas, some track retention and repair work may still be required in backcountry areas.
- Provide and advocate for improved public access to areas administered by the Department.
- Recognition of the high value recreational resource of rivers in the Conservancy.
- Recognition of the needs of recreational hunting.
- Provide and advocate for more recreation opportunities close to urban centres, particularly in the Palmerston North area.

36.2 ZONING FOR RECREATION OPPORTUNITIES

Providing for a diversity of recreation experience is the basis of Recreation Opportunities Spectrum (ROS) zoning. This provides for a range of opportunity 'classes' (e.g. rural, remote etc.) where a combination of different activities (e.g. tramping and picnicking) in a range of settings leads to different experiences. It allows for orderly development of the full spectrum, from intensive use areas to areas with minimal or no development, but it does not mean that every opportunity class will be catered for if it is inappropriate for an area in terms of effects on natural, historic or recreation values.

Recreation requirements can vary widely. Many visitors are content with using facilities in easily accessible areas (e.g. at roadends), whereas others seek a 'wilderness' experience in remote areas with few or no facilities.

Retaining or restoring areas to 'wilderness' is as important as providing sites for intensive use by day visitors. The provision of facilities, particularly on the fringes of parks, can focus visitors and their impacts at a few locations. This leaves areas with no facilities and low visitor numbers for remote experience.

In essence, the ROS concept assists in planning to overcome increased recreation pressures while still preserving a range of opportunities catering for the needs of different visitors.

Appendix 10 describes the attributes of the five ROS classes used for mapping recreation opportunities in the Conservancy. Figure 30 summaries the ROS classes in the Conservancy, the percentage of the land they comprise and how much of each class falls within land administered by the Department. Figure 31 shows the spatial distribution of the ROS classes across the Conservancy for all land tenures

Of particular note, is that the Conservancy is responsible for managing 55% of the available Backcountry Walk-In opportunity and 94% of the Remote opportunity. The Conservancy therefore has a major role in ensuring the preservation and management of these opportunities.

More emphasis will be given to the provision of quality day use facilities close to urban areas and at road ends in Rural and Backcountry Drive-In ROS settings. Generally, no new development will take place in Backcountry Walk-In or Remote zones; instead the emphasis will be on maintaining the existing facilities and opportunities.

Towards the remote end of the Recreation Opportunity Spectrum there will be fewer facilities and visitors; towards the urban end there will be higher numbers of visitors, higher standards and more intensive facility development.

FIGURE 30: ROS LAND CLASSES IN WANGANUI CONSERVANCY

ROS CLASSES	% OF TOTAL CONSERVANCY LAND AREAS (ALL TENURES)	% OF OPPORTUNITY CLASS ON LAND ADMINISTRATED BY THE DEPARTMENT
URBAN	1.1	0.5
RURAL	67.0	5.0
BACKCOUNTRY DRIVE-IN (INCLUDING FOUR WHEEL DRIVE)	17.8	15.0
BACKCOUNTRY WALK-IN	10.5	55.0
REMOTE	3.6	94.0

36.3 VISITOR RESEARCH AND MONITORING

Good information is vital for effective recreation planning and management. Data on changes in recreational use and visitor demands, perceptions and impacts, all assist in establishing an effective management programme.

Cross Reference
See Sec. 26.2

A visitor monitoring programme has been developed to provide data on the use of key visitor sites. Counters have been installed at visitor centres, on major tracks and access roads. Work will continue toward improving site coverage, monitoring techniques and methods for processing the resulting information.

Specific techniques will also be employed to monitor and assess the impacts of visitor use on the environment at high use or other problem sites e.g. use of photopoints and soil profiles on the Mt. Taranaki/Egmont Northern Summit Route.

Visitor surveys can provide information on social impacts (e.g. perceptions of crowding), visitor requirements and the carrying capacity of facilities such as huts and campsites. Major visitor surveys have been carried out in Egmont and Whanganui National Parks. Further surveys will be carried out on a priority basis.

37 Visitor Access and Use

37.1 VISITOR ACCESS

Freedom of entry to areas administered by the Department is considered a public right and is safeguarded under the provisions of the Conservation Act 1987, the National Parks Act 1980 and the Reserves Act 1977. To protect natural and historic values however, these Acts do provide for restrictions on public access and use e.g. a requirement to obtain a permit before entering a sanctuary area; restrictions on vehicular access or camping in certain areas.

Some areas administered by the Department are surrounded by private land without easy access by public road and in such cases, visitor access may be restricted. The Department will seek to negotiate or promote improved public access in these instances.

37.1.1 Objectives

(i) To maintain and improve free public access to areas administered by the Department.

(ii) To restrict public access and use, when it is necessary to protect natural and historic values, or for public safety.

37.1.2 Explanation

The Department will uphold the principle of free public access to areas under its control. While access itself will be free of charge, fees will be charged for the use of specific facilities such as huts or camping grounds to contribute towards establishment and ongoing maintenance costs, or where use is for commercial purposes.

Walking is the major form of recreation on land administered by the Department.

(a) Restricted entry

Permits will be required to land on the island sanctuaries within the Sugar Loaf Islands Marine Protected Area. This policy is provided for in the Sugar Loaf Islands Marine Protected Area Act 1991, and will continue in order to ensure the protection of the wildlife, rare plants and historic features found on the islands. Permits are also required for entry to Pukepuke Lagoon Conservation Area as part of the requirements of an access agreement with the adjoining landowner. It is possible that a permit entry system may be introduced for other areas administered by the Department (e.g. scientific reserves) to protect natural and historic values. Public consultation will occur where this is proposed.

(b) Management of public access and use

Public access and use may need to be administered in certain areas to protect natural and historic values, to preserve recreation experiences or to allow for enjoyment of the area by other users. This may involve

the introduction of restrictions or other management techniques for controlling visitor impacts.

For example, the use of motorised vehicles within areas administered by the Department may be restricted to formed roads and carparks. Camping may need to be restricted to certain areas (e.g. designated campsites adjacent to the Whanganui River) or even prohibited in some cases. Crowding may occur at some high use sites and steps may need to be taken to preserve the quality of the recreation experience. Recreation use will not be encouraged where the level of use is close to, or has reached the physical or social carrying capacity. Where controls are required, specific regulations or bylaws will be sought by the Department. Where possible, the use of other management techniques will be considered, such as promoting the use of alternative areas or the use of certain areas outside busy periods.

(c) Improved public access

The Conservancy Recreation Strategy identifies a number of access problems in the Conservancy. Practical access for anglers and canoeists is a major problem on the Rangitikei River, while lack of suitable legal access to the north-western Ruahine and northern Tararua Ranges is also an issue. Access to the coast is a problem in Taranaki and in various areas important to recreational hunters.

Significant conservation and recreation benefits could be achieved at minimal cost by adopting a systematic approach to identifying and resolving access problems. Improved access and better promotion will enhance recreation opportunities within the Conservancy.

Improved legal access, particularly in Mangaweka and Palmerston North Field Centre areas is required, especially for hunters and trampers gaining access to parts of the Ruahine and Tararua Forest Parks. Hawke's Bay and Wellington Conservancies administer the two parks and are aware of the access problem. Wanganui Conservancy will support any initiatives by these Conservancies to improve access.

(d) State Highway access

The State Highway network in the Conservancy is administered by Transit New Zealand. State Highways facilitate access to and from many areas administered by the Department, and have a particularly important role in providing access for recreational users. For example, State Highway 1 is the principlal access to a number of 'high profile' reserves in the Rangitikei Ecological District, and State Highway 43 provides access to areas of recreational potential and a number of historic sites. It is important that planning for increased recreation use is integrated with future planning of the State Highway network, through consultation with Transit New Zealand. Areas administered by the Department which rely upon a State Highway for access are identified in the Part G Land Inventory.

Issues which will need to be recognised include the location and design of vehicle accesses from State Highways to adjoining reserves and other recreational areas, providing for pedestrian access, signposting, information centres and off-road parking. It is important that new access points are carefully positioned to avoid conflict with through traffic, and car parks, and information centres are carefully controlled for traffic safety reasons.

Transit New Zealand will be consulted prior to decisions being made to locate recreation activities or facilities adjacent to State Highways. The Department will also consult with local authorities where such activities are located adjacent to rural roads.

37.1.3 Implementation

(i) *Continue to require permits for landing on Moturoa, Motumahanga (Saddleback Island), Waikaranga (Seal Rocks) and Whareumu (Lion Rock) Sanctuary Areas within the Sugar Loaf Islands Marine Protected Area.*

(ii) *Continue to require permits for entry to Pukepuke Lagoon Conservation Area consistent with the requirements of the current access agreement.*

(iii) *Consider the introduction of a permit entry system for other areas managed by the Department, if this is permitted by the legislation covering such areas and if it is considered necessary to control public access in order to protect significant natural or historic values.*

(iv) *Seek appropriate regulations or bylaws to control public access or use of areas administered by the Department, if this is considered necessary for the conservation of natural or historic values in the areas concerned or for public safety.*

(v) *The Department will consult with the public and the relevant conservation board before introducing a permit entry system or seeking regulations or bylaws to control public access or use.*

(vi) *Where possible, consider using other management techniques for controlling visitor impacts as an alternative to restrictions on public access and use. This may include discouraging use where it is close to, or has reached the physical or social carrying capacity. Use of alternative areas may be promoted or use outside busy periods encouraged.*

(vii) *Improve public access to key places by way of easements, rights-of-way and other legally enforceable agreements. Make use of the New Zealand Walkways Act 1990, where appropriate.*

(viii) *Where access is across private land (e.g. to conservation areas or walkways) areas may be temporarily closed for farm management or other purposes in accordance with contractural provisions.*

(ix) *Signpost the rights and obligations of visitors using legal access-ways to areas administered by the Department which cross private land.*

(x) *Provide information to the public on legal access to areas administered by the Department.*

(xi) *Encourage local authorities and Transit New Zealand to maintain formed legal roads which provide access to areas administered by the Department.*

(xii) Consult with Transit New Zealand before decisions are made regarding development of recreation facilities adjacent to State Highways and with local authorities on developments adjacent to rural roads.

(xiii) Ensure that any recreation uses which have the potential to generate additional traffic on State Highways include appropriate provision for access and parking which does not adversely effect highway safety and efficiency.

(xiv) Encourage local authorities to maintain a public right to walk over unformed legal roads which provide access to waterways, the coast and areas administered by the Department.

(xv) Encourage local authorities to maintain and improve public access to rivers, lakes and the coast in accordance with the provisions of the Resource Management Act 1991.

(xvi) Develop a register of 'access problems' in each field centre. This register shall identify the type and extent of the problems, and prioritise work to rectify the problems.

37.1.4 Outcomes

- Public access to and use of areas administered by the Department is restricted only where it is necessary to protect natural, historic and cultural values, or the enjoyment of other users. (e.g. impacts associated with motorised access), or to ensure public and traffic safety.
- Public access to all other areas administered by the Department is improved, thereby providing additional recreation opportunities within the Conservancy.

37.2 DOMESTIC ANIMALS

Domestic animals, which include horses, dogs and pets are often not compatible with the conservation of natural and historic values. Such animals are prohibited in national parks, but are generally allowed in other areas administered by the Department, unless they are specifically prohibited under legislation, regulations or bylaws. Exceptions are made for the presence of animals in certain areas or their use for specific purposes.

Provision exists under the Conservation Act and the National Parks Act for the Department to control dogs on land it administers. The Department may gazette areas which are to be open to dogs and those areas where dog access will be controlled. The Department also has specific powers to deal with unauthorised dogs along with the owners of those dogs.

37.2.1 Objectives

(i) To seek to prohibit (by regulation or bylaw) the taking of horses, pack animals and domestic pets (including cats, but excluding dogs) into areas administered by the Department where natural, historic or recreation values are likely to be adversely effected.

(ii) To identify and gazette areas of land administered by the Department which are to be open to dogs and those areas where dog access will be controlled.

37.2.2 Explanation

(a) Dogs

The Minister of Conservation may declare areas of land administered by the Department to be either a controlled dog area or an open dog area. Permits will be required to take dogs into controlled dog areas. Identification of these areas will be determined by the vulnerability of fauna to dogs and potential conflict with other users. Exceptions will apply where specific management activity requires the use of dogs and is provided for in any management plan e.g. recreational hunting dogs will be allowed in Whanganui National Park (by permit) for pig hunting. Permits will also not be required for seeing-eye dogs, companion dogs, search and rescue dogs, Police and Customs Department dogs or dogs used by the Department of Conservation in species management programmes.

Certain areas are not able to be declared open dog areas. These include national parks, the Sugar Loaf Islands Marine Protected Area, wilderness areas, ecological areas, scenic or scientific reserves, wildlife refuges, sanctuaries and management reserves.

Areas proposed to become open dog or dog control areas will be identified in discussion documents which will be publicly notified and submissions invited. Following this consultation process, and after taking public submissions into account, a number of areas will be submitted for gazettal as open dog or dog control areas.

Once gazetted, the Department has powers to seize or destroy dogs not under proper control within any dog control or open dog area.

(b) Horses, donkeys, mules and other pack animals

Although the demand for horseback riding and horse trekking opportunities on land administered by the Department is low, the impacts of this activity can be significant.

Horses, donkeys, mules and other pack animals (e.g. llamas) can introduce or spread weeds, damage native vegetation through trampling or browsing and damage foot tracks or river and stream crossings. Conflict may also occur between horse riders and trampers on popular tracks. There may, however, be areas where horseback riding and horse trekking opportunities can be provided without compromising natural, historic or recreation values (e.g. on old roads or suitable low use tracks passing through areas which are already substantially modified). Parts of North Taranaki and Matemateaonga Ecological Districts, for example, may provide scope for this activity.

An assessment will be carried out and any suitable opportunities identified. Assessment criteria would include impact on natural and historic values, potential conflict with other users (including safety considerations) and cost implications of any additional track maintenance or facilities that may be required (e.g. upgrading or providing new bridges). The use of horses, donkeys, mules and other pack animals in areas administered by the Department will be restricted to formed roads and tracks identified through this process. The prohibition on the use of pack animals and other domestic animals in national parks will continue (required by statute).

The Department may also advocate access to other suitable areas, such as plantation forests, to reduce the need for access to land administered by the Department.

(c) Other pets

Other pets, such as cats, are sometimes taken into areas administered by the Department, or deliberately released in these areas. Because these animals pose a significant threat to native wildlife they will not be permitted in any area administered by the Department.

37.2.3 Implementation

(i) Prepare discussion documents identifying areas proposed to become open dog or dog control areas.

(ii) Undertake public consultation on the areas proposed to become open dog or dog control areas.

(iii) Identify special conditions applying to open dog and dog control areas.

(iv) Gazette open dog and dog control areas.

(v) Ensure information on open dog and dog control areas is well publicised in pamphlets, signs, maps and other visitor information prepared by the Department.

(vi) Enforce the provisions of the Conservation Act and National Parks Act relating to dog control.

(vii) Assess and identify tracks and roads suitable for horseback riding and horse trekking using the following criteria:

- *the potential for adverse effects on natural or historic values or sites of cultural significance on or near the track or road*
- *the physical effect of horse riding in terms of accelerated erosion or other damage to the track or road surface, as measured against walking impacts*
- *visitor numbers using the track or road are low or, when riders and other users can otherwise be accommodated on the same track*
- *the cost of providing or upgrading facilities to accommodate horse riders (e.g. bridges and additional track maintenance work).*

(viii) Restrict the use of horses, donkeys, mules and other pack animals to formed roads and identified tracks within areas administered by the Department. Seasonal resctrictions may apply.

(ix) Through publications and other methods, identify tracks and roads where horse riding will be permitted and under what conditions.

(x) Advocate access to other areas (e.g. plantation forests) and roads suitable for horse riding, where this is considered to be appropriate.

(xi) Monitor horse use in areas administered by the Department. If natural or historic values are threatened or if conflicts with other users arise, their use may be reviewed.

37.2.4 Outcomes

- The taking of domestic animals into areas administered by the Department is prohibited where natural, historic or recreation values are likely to be adversely effected.
- Enjoyment of land administered by the Department is enhanced through the provision of open dog areas and greater controls in areas where dogs present a defined risk.
- Protection of vulnerable native fauna is enhanced through the control of dogs on land administered by the Department.

37.3 VEHICULAR ACCESS AND USE

The use of vehicles other than on formed roads or in carparks is generally inappropriate in areas administered by the Department. Vehicles damage tracks, vegetation, other natural or historic features and can disturb or endanger other visitors. However, in certain areas, where the potential for impacts or conflict with other users is low, the Department may allow limited use of vehicles for recreation purposes, e.g. for mountain biking.

37.3.1 Objective

To prohibit the use of off-road vehicles (trail bikes, four-wheel drive vehicles and mountain bikes) in areas administered by the Department except for specified management purposes or where their use for access or recreation purposes is specifically permitted.

37.3.2 Explanation

(a) Motorised off-road vehicles

Motorised off-road vehicles such as trail bikes and four-wheel drive vehicles have the most potential to cause damage to natural and historic values and have a greater potential to disturb or endanger other users. For this reason, motorised off-road vehicles will generally be prohibited in areas administered by the Department, except on formed roads or carparks. An exception will be made for the use of vehicles for management purposes, such as search and rescue and the servicing of public facilities.

Some approaches have previously been made to the Department by four-wheel drive clubs to allow the use of off-road vehicles in areas administered by the Department. The Department considers there are more suitable areas available

for the use of off-road vehicles outside the land it administers and encourages use of these alternative areas. There is no obligation to provide opportunities for this form of recreation in areas administered by the Department. The impacts of the activity on natural and historic values are considered unacceptable.

(b) Mountain biking

Mountain biking is a rapidly growing activity in some parts of the country. There is already a demand for off-road biking opportunities in natural areas, but concern has been expressed about potential conflict with trampers and walkers.

Mountain biking can cause considerable damage to foot tracks and can impact on other natural features. The volcanic and papa soils found in the Conservancy would be prone to damage from rutting and subsequent washouts, so some track surfaces would not be suitable for bicycle use. National guidelines on the use of bicycles on tracks administered by the Department will be used to assess which tracks may be suitable for mountain bike use and to guide management of these opportunities.

The off-road use of mountain bikes (and other vehicles) is prohibited in Egmont and Whanganui National Parks, certain reserves and other areas administered by the Department. This prohibition will continue. Tracks in other areas administered by the Department may, however, be suitable for mountain-biking and use of these alternative areas could be considered. Disused roads running through areas administered by the Department in northern and eastern Taranaki (e.g. the road from Whangamomona to Aotuhia) may also provide good mountain biking opportunities.

37.3.3 Implementation

(i) Use of motorised off-road vehicles (trail bikes and four wheel drive vehicles) in areas administered by the Department will be confined to formed roads and carparks, except for management purposes or where their use for access or recreational purposes is specifically permitted.

(ii) Seek bylaws or regulations to control the use of off-road vehicles in certain areas, if required.

(iii) Prohibit the off-road use of mountain bikes in Egmont and Whanganui National Parks, certain reserves and other areas administered by the Department where their use is not permitted under legislation or not otherwise considered appropriate.

(iv) Seek appropriate bylaws or regulations to control mountain bike use in certain areas, if required.

(v) Identify tracks and roads suitable for mountain biking using the following criteria based on the national guidelines:

- *the potential for adverse effects on natural or historic values or sites of cultural significance on or near the track*
- *the physical impact of mountain bikes will not accelerate erosion or cause other damage to the track surface, as measured against walking impacts*

- *visitor numbers using the track or road are low or, where bikers and walkers can otherwise be accommodated on the same track.*

(vi) *Identify and provide information on tracks and roads where mountain biking is permitted.*

(vii) *Indicate at track and road entrances whether mountain biking is permitted and notify any controls placed on mountain bike use.*

(viii) *Advocate continued access to other areas, (e.g.plantation forests) and roads suitable for mountain biking, where this is considered to be appropriate.*

(ix) *Promote a code of conduct for mountain bike users.*

(x) *Monitor mountain bike use in areas administered by the Department. If natural or historic values are threatened or if conflicts with other users arise to a significant extent , their use of any identified tracks or roads may be reviewed.*

37.3.4 Outcomes

- The use of motorised off-road vehicles in areas administered by the Department outside of formed roads and carparks is restricted to control their impacts on natural and historic resources.
- Mountain bike use is restricted to roads and tracks where the potential for adverse effects or conflict with other users is low.

37.4 AIRCRAFT

Aircraft, especially helicopters, can assist the Department in its management functions and also makes it possible for the public to gain access to remote areas. Hang-gliding and paragliding, both forms of non-motorised flight, have developed as new forms of recreation. Controls on aircraft use, however, are required to limit adverse effects on natural and historic values and the experience of backcountry visitors.

37.4.1 Objectives

(i) ***To allow the use of aircraft in areas administered by the Department for essential management requirements and at a level of activity compatible with the purpose for which the area is administered and the quiet enjoyment of visitors.***

(ii) ***To allow the use of foot-launched, non-motorised aircraft (e.g. hang-gliders and paragliders) in areas administered by the Department where this does not conflict with natural, historic or recreation values.***

37.4.2 Explanation

The control of aircraft (which includes fixed-wing aircraft, helicopters, microlights, gliders, hang-gliders and paragliders) is the responsibility of the Civil Aviation Authority by virtue of the Civil Aviation Act 1990.

A concession is required to land, take off or hover over land administered by the Department which is not a certified aerodrome. This requirement does not apply to emergency landings, the use of aircraft for work on maritime navigational aids, aircraft operated by the New Zealand Defence Force or the Civil Aviation Authority of New Zealand.

Aircraft can provide a means of access for management and development purposes in areas administered by the Department, with minimal physical impact compared with vehicles, roading and other means of access.

Scenic flights provide an alternative means for people to view and enjoy areas administered by the Department. It is also important, however, that the quiet enjoyment of areas (especially remote areas) by other visitors is not unduly impaired.

Aircraft use will, therefore, be largely restricted to search and rescue purposes and management requirements e.g. wild animal control, fire fighting and the servicing of public facilities. Allowance will generally be made for aerial access for recreational hunters and possum trappers because of their contribution to wild animal control. Applications for helicopter permits for other purposes (e.g. the maintenance of a concessionaire's facility or commercial filming) will be considered according to set criteria. (see implementation (ii) below)

As a result of recent fires on land administered by the Department, Hughes 300 helicopters are now required to be fitted with guards which stop vegetation coming into contact with exhausts and manifolds when loading or hovering.

Allowance will be made for the use of foot-launched, non-motorised aircraft such as hang-gliders and paragliders in areas administered by the Department. Such use has negligible environmental impact, other than visual effect, and as the aircraft are non-motorised, the activity should not disturb the quiet enjoyment of other visitors. Pilots and passengers will be expected to comply with the relevant safety codes and to take full responsibility for their own safety.

Cross Reference
See Sec. 12.5.12

Mt Taranaki/Egmont provides the main opportunity for paragliding in the Conservancy, but Tangata Whenua have expressed concern about the use of the summit, an area of special cultural significance, as a take-off point. The Conservancy will consult with Tangata Whenua to define the summit area and may restrict the use of this area by paragliders. It may also be necessary to control the use of hang-gliders and paragliders in other areas if there are adverse effects on natural, historic or cultural values.

37.4.3 Implementation

(i) Access by helicopter for recreational hunters and possum trappers to areas administered by the Department will generally be allowed unless aerial access is otherwise restricted. A concession will be required for this activity.

Cross Reference
See Sec. 35

(ii) In all other circumstances the landing, taking-off and hovering of aircraft will require a concession in advance from the Department. Applications for concessions will be considered taking account of:

- *how essential is the purpose for which aircraft use is required*
- *what alternative transport is available*
- *effects of the aircraft use and proposed landing zone (or alternatives) on natural, historic or cultural values and other users*
- *safety aspects*
- *all commercial aircraft landings for recreation purposes on land administered by the Department will require a concession.*

(iii) Concessions may be personal to the applicant, and may specify flying routes, heights and times, and landing sites and times. A fee will normally be charged for processing a concession application.

(iv) Air-drops will require a concession. Packing materials used will be sterile (i.e. not hay) and will be removed from the area at the end of the drop.

(v) Any Hughes 300 helicopter working on land administered by the Department must be fitted with an approved exhaust manifold modification in accordance with national guidelines.

(vi) Helicopter pads essential for management purposes, search and rescue and other emergencies, or other approved purposes may be developed subject to any conditions necessary to minimise the impact on natural and historic values.

(vii) The use of foot-launched, non-motorised aircraft such as hang-gliders and paragliders in areas administered by the Department will be allowed where this does not conflict with natural, historic or cultural values. A concession for such use will not be required. The Department will consult with Tangata Whenua to define the summit area of Mt Taranaki/Egmont and, if necessary, will seek to prohibit use of this area by such aircraft.

37.4.4 Outcome

- Aircraft use in areas administered by the Department is limited to that required for appropriate management while not disturbing visitors.

38 Visitor Opportunities

38.1 TRAMPING AND WALKING

Well constructed tracks allow people to explore interesting areas and relax in the natural environment. Track systems lead visitors to rewarding places and concentrate use, restricting impacts to areas able to withstand their use. Tracks should cater for a range of visitors, from less experienced people visiting roadends to experienced backcountry users, and provide access to different environments, from lowland forest to alpine areas.

The Conservancy has three long distance tracks: the Matemateaonga walkway, the historic Kaiwhakauka-Mangapurua Track and the Around the Mountain Circuit in Egmont National Park. A number of shorter tracks, many close to roadends and population centres, cater for those interested in day walks or overnight tramping trips. The Conservancy manages more than 100 tracks and routes, with a combined length of over 420 km.

38.1.1 Objectives

(i) To provide a range of walking opportunities for visitors and to manage associated impacts.

(ii) Provide and maintain backcountry tracks where these are required to support Departmental field operations.

38.1.2 Explanation

(a) Strategic planning

The Wanganui Conservancy Recreation Strategy[23] indicates that future emphasis in new track development should shift from remote backcountry areas to roadends and tracks close to population centres. This would cater for the majority of visitors, who tend not to be active backcountry users.

Further value could be added to the visitor experience by providing interpretation with a conservation message. This may be in the form of information panels or a 'self-guided' walk.

To complement the well-developed walking tracks, existing backcountry facilities, such as tramping tracks and routes, will also be maintained to ensure this recreation opportunity remains available. Although priority in the backcountry will be attached to major tramping tracks, lower use tracks and routes will be retained to provide remote experiences.

Some tracks and routes may be developed or maintained predominantly for the purpose of supporting Departmental operations (principally wild animal control).

In certain instances, tracks may be closed where they become unsafe or where low demand does not justify continued maintenance.

Although major new developments in the backcountry are not generally supported, larger one-off developments may need to be considered as visitor

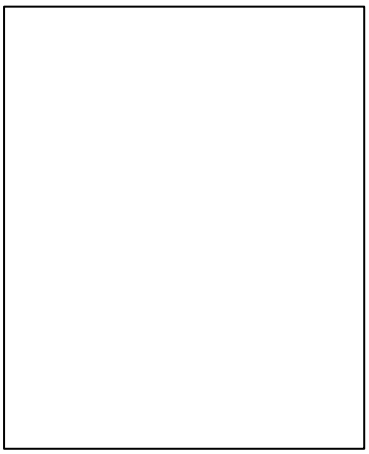
demands arise (e.g. through growth in tourism) and where there is Government and/or private sector support e.g. through sponsorship. Major upgrading and promotion of the Egmont National Park Around the Mountain Circuit, recreational development of the North Taranaki forests and establishment of an East-West Walkway are potential examples.

(b) Track construction and maintenance

High rainfall, easily eroded volcanic soils and increasing use cause tracks in Egmont National Park to be vulnerable to erosion. Track work in the park requires a lot of materials for drainage and retention work. The papa (mudstone) which underlies much of the Conservancy also makes track work difficult because of drainage problems. These factors make track work in the Conservancy expensive in terms of labour and the cost of materials, and limit the amount of new work. However, investment of resources in this work reduces the need for future expenditure on repairs.

A National Track Standard, developed jointly by the Department and the Hillary Commission for Sport Fitness and Leisure, governs construction and maintenance of walking tracks by all recreation organisations. Under the standard, tracks are to be classified as either Paths, Walking Tracks, Tramping Tracks or Routes, with each category having its own set of construction and maintenance criteria.

(c) Bridges



Bridges are an essential part of track networks and need constant maintenance.

A National Bridge Standard has been developed by the Department to govern bridge design and maintenance. All bridges on land administered by the Department must be regularly inspected and carefully maintained. Consents required under the Resource Management and Building Acts need to be sought by the Department from the relevant district or regional council.

(d) Community involvement

From time to time, local interest groups or volunteer labour express interest in creating tracks in their area. They may have the resources and dedication to produce a high quality track but resources from the Department may still be required. These may not always be available, especially if a track has only local interest and limited potential use. Sometimes community involvement can be directed to nearby areas where facilities are planned or require upgrading, thus benefiting both the Department and interest groups. Tramping clubs, in particular, may be able to assist the Department by adopting/maintaining a specific track or route in their local area.

38.1.3 Implementation

(i) Form and upgrade tracks according to approved development plans (e.g. the Egmont National Park Track and Hut Plan) and design manuals, in keeping with the strategic directions identified in the Wanganui Conservancy Recreation Strategy.

(ii) Give priority to the maintenance and development of short walks at roadends, off major or scenic highways or close to population centres.

(iii) Maintain the existing range of backcountry tramping tracks and routes to their current standard and, where there is a proven need and resources allow, carry out improvements.

(iv) In general, no new major track development will take place in backcountry areas. One-off development projects, however, may be considered where there is a proven need, minimal environmental impact and where additional funding is available.

(v) Classify all tracks in terms of their design and intended use as set out in the National Track Standard and maintain them according to their classification.

(vi) Continue maintenance and construction of foot bridges and other structures to a level consistent with the track classification, level of use and the safety of visitors.

(vii) Construct all bridges, huts, toilets and other structures to an approved architectural or engineering design. Exemption from consents and fees will be sought from local authorities as provided by the Third Schedule (m)(i) of the Building Act, where structures of an approved standard design are used.

(viii) Encourage outside organisations to develop and maintain tracks in areas which are consistent with the Department's priorities and to construct them to Department design standards.

(ix) Where outside organisations wish to establish tracks on land administered by the Department and which are outside the Department's priorities, approval will only be given where it is in accordance with the Recreation Opportunity Spectrum (ROS) zoning for the area, if there is a proven visitor demand and ongoing maintenance can be assured.

(x) Develop and maintain tracks and routes where required specifically or predominantly for efficient and effective Departmental operations.

38.1.4 Outcomes

- Provision of walking opportunities that meet the needs of a wide range of visitors.
- Provision of high quality and safe walking tracks catering for the needs of low impact roadend users.

38.2 ORGANISED GROUPS

Organised groups use land administered by the Department for a range of activities including club outings, school trips, open climbs, sports events (e.g. triathlons) and other types of events open to the general public.

While use by such groups can offer good opportunities for environmental education, the use of facilities and areas by large groups can have an impact on natural and historic values and the experience of other users.

38.2.1 Objectives

(i) To encourage the use of land administered by the Department by organised groups where this promotes greater awareness of and support for the protection of natural and historic values generally.

(ii) To seek to reduce conflicts between large organised groups and other visitors, and to minimise their impact on natural and historic values.

38.2.2 Explanation

(a) School groups

Use of some facilities and areas by large school groups can impact on the experience of other users. Potential exists for problems to arise in Egmont and Whanganui National Parks. The Department recognises the educational and social benefits of school visits to land it administers. Such visits provide early positive experience and understanding of natural and historic values. The Department will continue to encourage school visits and will liaise with schools to avoid potential safety and overcrowding problems.

Use of special facilities catering for large groups, such as Konini Lodge, will be promoted by the Department.

Popular with the public, summer climbs of Mount Taranaki / Egmont are organised by alpine clubs.

(b) Organised club and public events

Clubs sometimes run organised events which do not fall into the category of commercial activities, but are advertised as being open to the general public. Examples include the annual open climbs on Mt Egmont/Taranaki conducted by local alpine clubs. Clubs may also organise triathlons and other competitive sporting events and apply to run these in areas administered by the Department. The holding of such events can affect other users, pose safety risks and cause adverse environmental impacts. Proposals for holding events need to be

carefully considered and, if approved, controlled under a permit system.

Clubs may request donations from participants to cover the cost of organising such events. Where an entry fee is charged or significant commercial sponsorship is involved or where there is a high degree of promotion associated with the event, it may be classified as a commercial activity and a concession will be required.[22]

Cross Reference
See Sec. 35

38.2.3 Implementation

(i) Schools and other large groups will be encouraged to notify the nearest office of the Department of their intentions to visit land administered by the Department, so that safety of the group and potential environmental impacts can be discussed and other visitors can be made aware of their presence. Educational and social benefits mean some allowance will be made for the special needs of school groups.

(ii) Applications to use areas administered by the Department for organised club or public events will be permitted, at the discretion of the Conservator, if it is clear that natural,historic, cultural or recreational values will not be compromised.

(iii) Large scale, commercially sponsored events may be permitted, where such events can be shown to be consistent with protection of natural and historic values, and will not detract from the safe use and enjoyment of the area by other visitors.

(iv) The Department will recover all costs associated with authorising an event. If an event is classified as a commercial activity, a concession will be required and an appropriate concession fee charged.

(v) The Department may consider involvement in an event where there are opportunities to promote conservation objectives.

38.2.4 Outcome

- Undesirable impacts on natural and historic values and other visitors resulting from use by organised groups will be avoided or minimised.

38.3 RIVER-BASED RECREATION

The Conservancy provides a number of important opportunities for canoeing. These range from multi-day journeys on the Whanganui, Rangitikei and Mokau Rivers to short day trips on the Manawatu, Whangaehu, Waitara, Waiwhakaiho and Manganui Rivers. Scenery ranges from remote bush country and dramatic river gorges to rural countryside. Sections of the rivers range in difficulty from Grade 1, (easy, suitable for family groups) through to Grades 4 and 5, (very difficult to extreme, suitable only for experienced canoeists or rafters).

Jetboating occurs on the Whanganui, Rangitikei, Manawatu and other rivers. The Manganui o te Ao and Rangitikei are the main rivers for white-water rafting in the Conservancy and are also important for trout fishing.

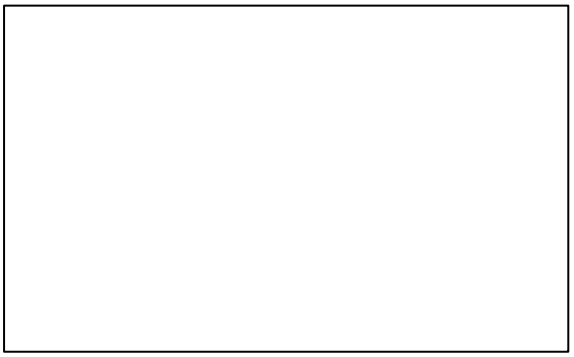
38.3.1 Objective

To provide and advocate for the major river-based recreation opportunities in the Conservancy, where these opportunities directly involve the use of adjoining land administered by the Department and to minimise visitor impacts on natural and historic values.

38.3.2 Explanation

Rivers are popular settings for recreation and the number of important recreational rivers are a notable feature of the Conservancy. Many rivers flow through or past areas administered by the Department, providing access to other recreation opportunities (e.g. hunting and tramping tracks) and sites of natural or historic interest. Particular examples include the Whanganui and Rangitikei Rivers.

Although it is not part of the park, the Whanganui River forms the major accessway through Whanganui National Park and is a major recreation opportunity in its own right. Use of the river by canoeists is steadily increasing, particularly by overseas visitors and this, combined with the impacts of concentrated use of the river margins in the adjoining national park, has led to the need for improved facilities and camping restrictions. A Whanganui Journey Hut and Camp Pass has been introduced to cover the cost of developing and maintaining the overnight facilities provided in the park for river users. Improved facilities will allow for the anticipated increased use of the river, while minimising visitor impacts on natural and historic values. If visitor numbers increase, crowding may occur and this will lead to social impacts. Management options, including introduction of a booking system would then need to be considered. The Whanganui Journey is managed as part of the national Great Walks system.



Canoeing the Whanganui River is becoming increasingly popular.

The Rangitikei River, with its scenic gorges offer canoeists, both beginners and the experienced, diverse opportunities. The river is well used by canoeists, mainly for day and weekend trips. Use, however, may increase in future and this will need to be monitored. There may be a need to develop facilities for canoeists.

In addition to canoeing, jetboating and angling, the Manawatu River is also used for yachting, powerboating and waterskiing in the lower reaches and estuarine area. The interests of the various recreational users on the Manawatu are represented by the Manawatu River Users Association. Unlike the Whanganui and Rangitikei Rivers, the Department administers little land along the Manawatu, so its involvement in river issues is more likely to be in an advocacy capacity rather than a direct management role, e.g. providing improved access and visitor facilities.

Other rivers in the Conservancy, such as the Mokau and Whangaehu, have further potential for recreation. Development of this potential should be assisted through advocacy, promotion and visitor facilities.

Cross Reference
See Sec 44.2

Statutory advocacy and public awareness can assist in maintaining the quality of river-based recreation opportunities by promoting suitable water flows, improved water quality standards and minimising the impact of changes in adjacent land use.

In some instances, river-based commercial operators (e.g. jet boating, canoeing and rafting companies) use adjoining land administered by the Department, for camping or visiting places of interest. For that type of use, a concession is required from the Department. Commercial activities carried out on the surface of rivers and other waterways are subject to the control of district councils under the Resource Management Act.

See Sec. 35

38.3.3 Implementation

(i) Promote and manage the Whanganui Journey opportunity in a manner which maintains the quality of the visitor experience and minimises adverse effects on natural and historic values in the adjoining Whanganui National Park. Introduction of a booking system may need to be considered if crowding occurs as a result of increasing visitor numbers.

(ii) Monitor recreational use of the Rangitikei River and associated effects on adjoining land administered by the Department. Where necessary, and where resources allow, maintain the quality of the visitor experience and minimise adverse effects on natural and historic values.

(iii) Develop visitor facilities in areas administered by the Department that provide access to and complement use of river-based opportunities.

(iv) Promote appropriate recreational use of other rivers in the Conservancy.

(v) Maintain or improve the quality of river-based recreation opportunities in the Conservancy by advocating suitable water flows, improved water quality standards, good access and sensitive use of adjacent land.

See Sec 44.2

38.3.4 Outcome

- A range of river-based recreation opportunities will be available within the Conservancy and managed to control undesirable effects on natural and historic values.

39 Recreation Facilities and Services

39.1 VISITOR IMPACTS

The New Zealand Environmental Care Code was developed by the Department and other organisations as a guideline for visitors to help protect the environment. It covers issues relating to plants, animals, rubbish, sewage, hygiene and fire. Consideration of others (necessary to minimise social impacts) and respect for historical and cultural heritage is also promoted. The Environmental Care Code provides a means by which the Department can promote care for the environment and responsible visitor behaviour. Opportunities are taken to promote and distribute the Code to both visitors and the general public.

39.1.1 Objective

To raise the awareness of visitors of their impacts on natural, historic and recreation values and seek ways to minimise adverse effects.

39.1.2 Explanation

(a) Rubbish

It is now a widely accepted practice for visitors to carry out their own rubbish when they visit areas administered by the Department. This is necessary to ensure that the problem of rubbish disposal is kept to a manageable level and to maintain the environment in its natural state. A 'carry-in, carry-out' philosophy is promoted to all visitors. 'Carry out' rubbish bags are supplied to backcountry users such as trampers, hunters and canoeists, on request, through the Department's visitor centres.

(b) Cooking and heating fuels

Most huts contain open fire places or stoves that are used for cooking and heating. In high use huts, wood, bottled gas or coal may be supplied for cooking and heating. Where fuel is not supplied, visitors often gather wood in the immediate vicinity to burn on camp fires. In certain situations, the gathering of fuel can have an adverse effect on the local ecosystem. For this reason, the use of portable camp stoves by visitors will be promoted.

(c) Toilets

New toilet facilities will be designed and sited so as to protect waterways from contamination. Where possible, the Department will replace existing pit toilets with septic tanks or compost-type systems at roadends and backcountry areas (e.g. Egmont National Park and at campsites adjacent to the Whanganui River)

(d) Social impacts

The Environmental Care Code largely focuses on minimising the physical impacts of visitors on the environment. Other impacts, however, can also arise as a result of recreational use and these are termed social impacts. For example, problems associated with over crowding can adversely affect an individual's recreation experience (i.e. finding bedspace in a crowded hut or sharing a campsite with a noisy group). Perceptions of over crowding and individual tolerance vary according to such factors as previous experience, expectations of the level of use and personal attitudes. Over crowding may also occur in both high use and low use areas (e.g. at busy campsites near the Whanganui River and encounters with large groups in remote backcountry areas).

Conflict can also arise between different groups of users (e.g. between walkers and mountain bikers using the same track).

Often social impacts resulting from an increase or change in visitor use occur before actual physical impacts become evident. If not addressed, social impacts can lead to dissatisfaction among users.

The Department recognises this and will carry out research to determine when social impacts are occurring and use appropriate management techniques to minimise impacts (e.g. use of pre-visit information to modify visitor expectations, use of Recreation Opportunity Spectrum zoning techniques and encouraging use of certain areas outside busy periods).

(e) Public awareness

The public will be informed about environmental and social issues associated with visitor use. An expected increase in the number of overseas visitors will require greater attention to the quantity, type and distribution of visitor information. Publicity, interpretation and staff contact are the prime means of minimising the rubbish disposal problem, promoting backcountry hygiene and other issues of self-sufficiency and sensitive use. The Environmental Care Code will play a role in the awareness process.

39.1.3 Implementation

(i) A 'carry-in, carry-out' rubbish policy will be implemented and promoted in all areas of the Conservancy. 'Carry-out' rubbish bags will be provided at the Department's field centre offices, visitor centres and huts.

(ii) Rubbish bins will be removed from huts and most roadend campsites and picnic areas except for high-use roadend areas where collection can be carried out on a regular basis.

(iii) Visitors will be encouraged to carry their own portable camp stoves for use in areas administered by the Department.

(iv) New toilet facilities will be designed and sited so as to protect waterways from contamination. Existing pit toilets in high use areas will be progressively replaced with improved disposal systems.

(v) The New Zealand Environmental Care Code will be promoted through the use of displays, signs and publications.

(vi) Concessionaires will be required to promote and follow the New Zealand Environmental Care Code and encouraged to adopt other codes developed after their concessions have been granted.

(vii) Undertake research to identify social impacts and use appropriate management techniques to minimise undesirable impacts.

38.1.4 Outcome

- Greater care for the environment and considerate visitor behaviour.
- Identification and management of social impacts to ensure quality recreation experiences.

39.2 VISITOR HEALTH AND SAFETY

There is an element of risk in all outdoor recreational activities. While individuals are primarily responsible for their own safety, all reasonable precautions will be taken by the Department to minimise risks to visitors.

39.2.1 Objectives

(i) To endeavour to ensure that all visitors to land administered by the Department are aware of the hazards and encouraged to take precautions to minimise risks.

(ii) To provide assistance to search and rescue agencies and participate in search and rescue activities when called upon.

39.2.2 Explanation

(a) Facility design and maintenance

The Department constructs and maintains facilities such as tracks and huts. Facilities should be safe to use and conform with the risks expected of the maintenance classification for the particular opportunity or area (i.e. roadend situation to remote). Information on the standard of facilities and the different types of recreation opportunity will be available to visitors.

(b) Visitor information

The Department provides information and advice on natural hazards which aims to make visitors aware of their responsibility for ensuring their own safety. Material prepared by the New Zealand Mountain and Water Safety Councils also plays a major role in informing and educating visitors. Information may relate to specific hazards (e.g. avalanche or hypothermia), health risks (e.g. giardia) or the skills and equipment required for undertaking certain activities.

Cross Reference
See Sec 12.7.6(vi)

Mount Taranaki/Egmont's exposed position and steep, icy slopes make it particularly hazardous. The mountain's high accessibility and deceptive nature increase these hazards, especially for visitors from outside the region or from overseas who may be less aware of them. The Department needs to take special steps to ensure visitors are aware of the potential risks. A leaflet advising visitors on mountain safety will be prepared in English, German and Japanese. Canoeists on the Whanganui River and trampers and hunters in general also need to be informed of the potential risks associated with their activities.

(c) Concessionaires

See Sec 35.3(iii)

Concessionaires will be required to show that their equipment, staff operating practices and training programmes meet safety guidelines. Concessionaires will have responsibility for ensuring the safety of their clients.

(d) Search and rescue

In emergencies, the New Zealand Police are responsible for co-ordinating search and rescue, but may draw on Conservancy staff who have appropriate training and local knowledge. Logistical assistance in the form of vehicles or use of facilities such as huts may also be provided. In addition to facilitating actual searches, the Department also authorises official search and rescue exercises in order to assist in the effective preparation for emergencies.

39.2.3 Implementation

(i) *While recognising that individuals are primarily responsible for their own safety, all reasonable precautions will be taken by the Department to minimise risks to visitors.*

(ii) *Facilities will be carefully sited to avoid potential hazards and maintained to a safe standard.*

(iii) *The Department will co-operate with regional and district councils and other authorities having responsibilities for public health and safety.*

(iv) *Visitor health and safety will be promoted through information about potential problems or dangers. Special attention will be given to informing visitors of the hazards associated with tramping or climbing on Mt Taranaki/Egmont.*

(v) *Information will be made available to the public on how to prevent infection by giardia and how to stop its spread. New toilet facilities will be designed and sited so as to protect waterways from contamination.*

See Sec 39.1.2(c)

(vi) *Concession documents will make it clear that concessionaires are responsible for ensuring the safety of their clients.*

(vii) *The Department will continue to assist and co-operate with the New Zealand Police in carrying out its search and rescue functions. Helicopter use will be permitted for all official searches. Permission for helicopter use may also be granted for official search and rescue exercises.*

(viii) Field staff will be trained in first aid and relevant outdoor skills.

39.2.4 Outcome

- Visitor health and safety in areas administered by the Department will be enhanced.

39.3 ROADEND AND ROADSIDE SERVICE AREAS

The Conservancy provides facilities for popular visitor activities such as picnicking, scenic viewing , camping and short walks in places with road access. These areas generally receive high use and cater for the majority of visitors, including those with special needs.

39.3.1 Objectives

(i) To provide for the needs and safe enjoyment of casual day visitors in a range of attractive road accessible locations in areas administered by the Department.

(ii) To not restrict camping, caravan and motor caravan use at specified locations on land administered by the Department.

39.3.2 Explanation

The Department provides for a wide range of outdoor recreation activities within the Conservancy. Trampers, climbers, hunters and canoeists are prominent backcountry users, but the majority of visitors to areas administered by the Department do not venture far from their vehicles. Service areas such as picnic areas, camping areas and carparks or roadends provide opportunities for these types of activities. Most sites are associated with the natural environment and are either in small reserves or on the fringes of large backcountry areas, such as the two national parks.

Service areas are the main point of contact between the Department and the majority of visitors. They therefore provide an important opportunity for the Department to increase public awareness of specific or general values through interpretation facilities such as nature walks, information boards and visitor centres. As service areas are high profile visitor sites, it is important to provide and maintain high quality facilities.

Cross Reference
See Sec 42.1

The three major roadends in Egmont National Park receive in excess of 360,000 visitors per annum. A Roadends Working Plan has been prepared to guide the future redevelopment and upgrading of these important visitor sites. This work will continue as funding and work priorities allow.

Priority will be given to the maintenance and upgrading of existing service areas in the Conservancy. Where funding allows the provision of new facilities, the priority will be for new roadend sites in North Taranaki, on the western fringes of Whanganui National Park and in Rangitikei/Manawatu (to service the needs of Palmerston North residents and travellers on State Highway No.1).

The security of visitors vehicles and their belongings has become an issue of concern at some service areas and road ends, particularly within Egmont National Park. Although the Department does not have a direct responsibility to deal with this issue, certain measures can be taken to enhance vehicle security at carparks. These may include signposting to warn visitors of the risks of leaving vehicles unattended, in the design of new carparks and modification of existing carpark landscaping and layout.

Installation of surveillance cameras may be appropriate in high use carparks, but these will not be funded by the Department.

(a) Informal camping

Camping sometimes occurs on roadside areas which do not contain facilities. Provided the sites remain tidy and stays are short, further action may not be required. If use grows or impacts occur, (e.g. improper disposal of toilet waste and clearing of tent sites) the sites will either need to be developed or steps taken to prevent camping. Where camping is occurring on a road reserve or is becoming a health hazard, action may be required through the local authority.

Camping on land held under the Reserves Act is only permitted in designated camping grounds or campsites, or in areas so defined in a management plan for the reserve.

(b) Caravans and motor caravans

Increasing use of caravans and motor caravans in New Zealand, some used by free independent travellers, has resulted in a demand for provision to be made for this activity (i.e. overnight stays at roadends) on land administered by the Department. Although the Department would prefer use to be made of formal campgrounds where facilities are provided, it recognises that some travellers wish to stay in natural or seldom-visited areas. The Department therefore considers it appropriate to allow limited opportunity for this activity where there are no adverse effects on natural, historic or recreation values.

As for camping, overnight accommodation on land held under the Reserves Act is only permitted at designated camping grounds or campsites, or in areas so defined in a management plan for the reserve.

The Department will encourage the use of caravans and motor caravans meeting the requirements of the New Zealand Standard NZS 5465: 1990 'Self Containment of Caravans, Motor Caravans and Boats'. The standard requires vehicles to have an onboard water supply, toilet facilities, cooking facilities, power supply, etc. This means that the use of such vehicles does not require the provision of additional facilities by the Department (e.g. cooking and ablution facilities) and, more importantly, does not lead to adverse effects on the immediate environment (e.g. through improper disposal of toilet waste, pollution of water courses, clearing of tent sites etc.).

Although caravan and motor caravan use will generally be allowed, it will not be actively promoted by the Department. If use increases significantly or adverse effects occur, the Department will introduce appropriate controls. Provision will not be made for dump stations on land administered by the Department. This is seen as the role of local authorities and commercial campgrounds

39.3.3 Implementation

(i) *Priority will be given to satisfying the needs of the large numbers of casual visitors to roadend and roadside areas with facilities comprising short walks, picnic sites and interpretation.*

(ii) *Provide high quality facilities at service areas and maintain these to a good standard, (e.g. toilets, picnic tables, short walking tracks and interpretation).*

(iii) *Give priority to the maintenance and upgrading of existing service areas.*

(iv) *Continue to implement the Roadends Working Plan for Egmont National Park, as funding and work priorities allow.*

(v) *Where the security of visitor's vehicles is identified as a problem at carparks located on land administered by the Department, the Department may:*

- *erect signs to warn visitors of the risks of leaving vehicles unattended, that parked vehicles should be securely locked and personal belongings removed*
- *make design and landscaping modifications to the carpark to enhance the security of parked vehicles.*

(vi) *Where funding allows the provision of new facilities, give priority to developing suitable roadend and roadside sites in North Taranaki, on the western fringes of Whanganui National Park and in Rangitikei/Manawatu.*

(vii) *Selection of new sites for facility development will consider opportunities for interpretation and short walks.*

(viii) *Develop facilities that cater for the special needs of disabled visitors, families with young children and the aged.*

(ix) *Seek the co-operation of Transit New Zealand and local authorities in the provision and maintenance of service areas and directional signs.*

(x) *Control informal roadside camping in areas administered by the Department, or on adjoining road reserves if visitor impacts occur.*

(xi) *Generally not restrict the use of caravans and motor caravans in suitable areas administered by the Department, provided sites remain tidy, use is infrequent and stays are of a short duration. Such use on land held under the Reserves Act is only permitted at designated camping grounds or campsites or areas so defined in a management plan for the reserve.*

(xii) *Compliance with the New Zealand Standard NZS 5465: 1990 'Self Containment of Caravans, Motor Caravans and Boats' will be encouraged for caravans and motor caravans using areas administered by the Department.*

(xiii) Monitor camping, caravan and motor caravan use and, if adverse effects occur, introduce appropriate controls.

39.3.4 Outcomes

- Facilities are provided in suitable road accessible locations that meet the needs of casual day visitors.
- Allowance is made for the limited use of caravans and motor caravans on land administered by the Department.

39.4 NEW ZEALAND WALKWAYS

Walkways were originally established as part of a national network of walking tracks. The concept has since widened. It now provides an enhanced profile for some tracks (e.g. the Whitecliffs Walkway) and a legal mechanism for providing public access across private land, opening up new recreation opportunities.

There are currently 12 walkways in the Conservancy, crossing both public and private land. Five are administered by the Department and seven by district councils. They vary in length and difficulty from a two hour stroll alongside the Te Henui Stream in New Plymouth to a three day tramp along the Matemateaonga Range. All walkways administered by the Department are identified on the Volume 2 CMS maps.

The New Zealand Walkways Act 1990 controls walkway administration. The Act sets out the process by which walkways are established over public or private land, contains management provisions and provides for walkway controlling authorities. Conservation boards have the role of recommending new walkway proposals to the Department.

Following public notification and comment, a New Zealand Walkways Policy was approved and formally adopted by the Department in April 1995.[27] The Policy expands on the Act, providing further detail on the management of walkways and stating priorities for the development of new walkways.

39.4.1 Objective

To establish and maintain a system of walkways over both private and public land for access to the countryside.

39.4.2 Explanation

(a) New walkways

Resources are currently committed to maintaining existing walkways and other tracks within the Conservancy. Proposals for new walkways would need to be carefully considered. New walkway proposals must:

- satisfy a public need for additional walking opportunities
- have minimal ongoing maintenance requirements
- have low development costs (including survey and gazettal costs)

- have minimal impact on natural and historic values and
- have the consent of all land managers and owners.

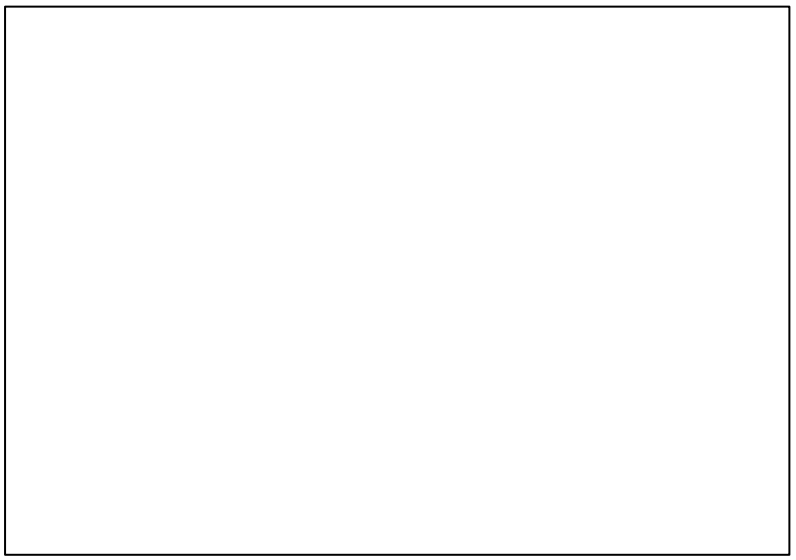
Support for new walkway proposals will be sought from local authorities, community groups and appropriate commercial sponsors.

Preference will be given to new walkways which (in priority order):

- are located within or close to urban population centres
- cater for a wide range of visitors (i.e. young families, older people and the disabled)
- are established over private land with or providing access to significant recreational, scenic, historic and natural values
- provide access to the coast, lakes and rivers
- facilitate access through private land over unformed legal roads
- form a potential link in the proposed national walkway from North Cape to Bluff and any east-west links (subject to the provision of additional funding if significant development work is required).

These priorities are based on directions contained in the New Zealand Walkways Policy and the Wanganui Conservancy Recreation Strategy.

(b) Maintenance of walkways



Walkways are important for giving the public access across private land.

Walkways have a different status to other tracks administered by the Department and normally attract a higher public profile. They therefore need to be built and maintained to a high standard. Recognising this, walkways will be appropriately classified under the National Track Standard and upgraded or maintained according to their classification.

Where a walkway is primarily on public land under the control of a local authority, or is of local rather than national importance, the local authority will be encouraged to accept responsibility for its maintenance and administration (the New Zealand Walkways Act provides for the appointment of local authorities as controlling authorities for walkways). The three Taranaki district councils have already assumed this role for walkways in local areas.

The assistance of volunteer groups in establishing and maintaining walkways will also be welcomed.

(c) Walkway gazettal

Walkways on private land are established through the registration of an easement or formal agreement against the title of the land. This means that if the owner changes or the attitude of the current owner changes, access is assured. Once all

easements for a walkway have been registered against the respective land titles, the walkway can be formally gazetted and brought under the administrative provisions of the New Zealand Walkways Act.

Gazettal of a walkway also benefits the land manager or owner. Through the New Zealand Walkways Act, public use can be better controlled and the land manager or owner may claim compensation where the Department is shown to be negligent.

The Department will give priority to achieving the gazettal of those sections of walkway under its control which cross private land. Gazettal of walkways which cross public land or legal road will be pursued only if more control over public use is required. This may occur, for instance, where there is a need to control the use of mountain bikes or horses.

The Department will encourage and, if required, assist local authorities to achieve gazettal of walkways under their control.

39.4.3 Implementation

(i) Priority will be given to maintaining existing walkways to a high standard. If additional resources are made available from Government or other sources, consideration will be given to new walkway proposals.

(ii) New walkways will be established only where strong justification and a recognised public need exist.

(iii) Priority will be given to new walkway proposals which have low establishment and maintenance costs.

(iv) New walkways that cater for a wide range of visitors, provide access over private land and complement existing recreation opportunities will be favoured.

(v) Walkways will be classified under the National Track Standard and upgraded or maintained according to their classification.

(vi) Natural, historic and cultural values will be interpreted on walkways wherever possible. Interpretation of Maori cultural values will only be carried out with the support of Tangata Whenua.

(vii) Visitor numbers will be monitored on walkways controlled by the Department. Local authorities will be encouraged to monitor visitors on walkways they control.

(viii) Local authorities will be encouraged to take over the administration and maintenance where a walkway is primarily of local importance.

(ix) Commercial use of walkways (e.g. for guided walks) will be at the discretion of the affected land managers and owners.

(x) Urgency will be given to securing legal public access over existing walkways controlled by the Department on private land. The Department will encourage and, if required, assist, local authorities to achieve gazettal of walkways under their control.

(xi) When negotiating new walkway agreements with land managers and owners, the Department will aim to obtain the longest possible term for public access rights.

(xii) Notices detailing any restrictions on public access and use will be erected on all walkways crossing private land to ensure the public is informed of its rights and responsibilities.

39.4.4 Outcome

- A well maintained network of walkways will be available for public use within the Conservancy.

39.5 ACCOMMODATION

Huts, booked accommodation and camping areas serve visitors who spend more than one day in areas administered by the Department. They can act as a focus for the journey as much as the natural features of the area, and their design and siting should consider this. The size and nature of the facilities must be considered in relation to their situation (e.g. roadend or backcountry), expected visitor numbers and associated effects.

The Department has 26 public huts, 3 booked accommodation facilities and 19 camping areas within the Conservancy..

39.5.1 Objectives

(i) To provide opportunities for overnight and extended stays for visitors in areas administered by the Department, appropriate to the Recreation Opportunities Spectrum zoning and natural and historic values of the area.

(ii) To provide and maintain back-country accommodation as may be required to support Departmental field operations.

39.5.2 Explanation

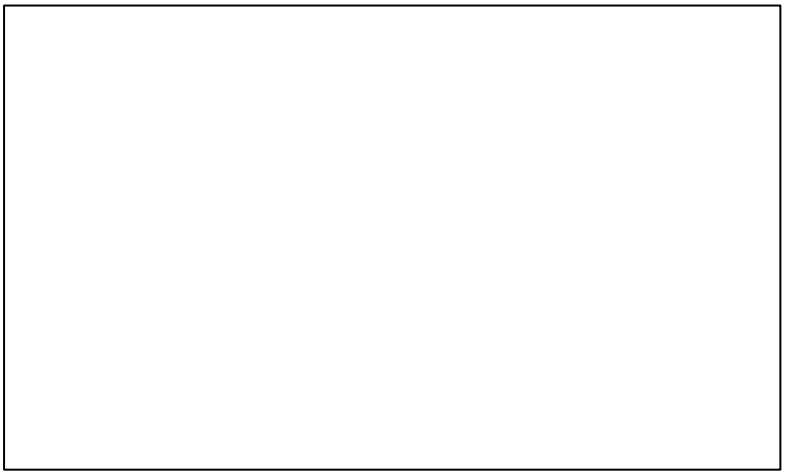
(a) Huts

The Conservancy's 26 public backcountry huts are graded into four categories; 22 are subject to the national hut fee system, and four are free. Fees for the use of huts and some campsites are collected through Backcountry Hut Tickets, Annual Hut Passes and Great Walk Passes. They go toward the development and maintenance costs of facilities.

The majority of huts are in the two national parks (or adjoining land administered by the Department) and are classified Category 2, 3 or 4 according to their standard and facilities. Three Category 2 huts on the Whanganui River become Great Walk huts during the Whanganui Journey Hut and Camp Pass season from 1 October to 30 April, with a pass required for use of the huts and several designated campsites.

Although hut use is generally low to moderate, overcrowding can occur in Egmont National Park and on the Whanganui River during the peak season and long weekends. Providing alternative camping facilities, promoting use during the off-season and publicising the likelihood of overcrowding at certain times may help to overcome this.

The Department has no immediate plans to build new huts, though some huts are nearing the end of their useful life and replacement will have to be considered (e.g. Whakahoro Hut). Some low use or inappropriately sited huts may also be considered for removal or relocation (e.g. reducing the number of huts and shelters on the Matemateaonga Walkway in order to consolidate use and reduce ongoing maintenance costs). A review may also be required if a hut is lost through an accident such as a fire or landslide. User groups will be consulted where any changes to facilities are proposed.



Waingongoro Hut, Egmont National Park. Modern huts offer comfortable accommodation. Hut fees cover some of the costs of these huts.

Under the Building Act 1991, the Department is obliged to comply with the New Zealand Building Code when constructing new buildings or carrying out major alterations to existing ones. Building standards and fire safety regulations will govern the type, size and location of future backcountry huts. The remote location and purpose of public huts often mean they cannot fully comply with the general standards for commercial or residential buildings and consequently an exemption must be sought to cover these special circumstances.

(b) Accommodation supporting Departmental operations

A number of small buildings are maintained for operational use by Departmental staff. These buildings, usually overnight accommodation, have been established for the sole purpose of supporting Departmental seasonal field operations, including wild animal control, wildlife surveys and track maintenance in remote back-country areas.

Small transportable huts are also used for short duration operations in remote areas. These huts are flown by helicopter to existing landing sites and are removed following completion of each operation.

The continued use of both types of building is based on issues such as staff health and comfort where staff spend extended periods in back-country areas. The cost of the alternative to provide daily transportation to the place of work with reduced productive hours and increased costs would be uneconomic.

(c) Booked accommodation facilities

The two major facilities in this category are Konini Lodge and the Camphouse which provide multi-purpose roadend accommodation at Dawson Falls and North Egmont in Egmont National Park. Both lodges are used by school, conservation and youth groups and play an important role in environmental education. The

Camphouse, however, now needs substantial upgrading to bring it up to a good standard of accommodation and to meet health requirements. Any changes will need to take into account the building's historic significance and rustic character. A review of the future use of the Camphouse is required.

Cross Reference
See Sec 24

A Department house at Pukepuke Lagoon Conservation Area is also available for bookings by school and family groups. Interpretative facilities are being developed at Pukepuke, so the building has potential for continued use as an education facility.

Other Departmental buildings, such as staff quarters, may also be made available to the public when they are not required for management purposes (e.g. Totara Lodge).

(d) Camping areas

The majority of camping areas provided by the Department are located on the Whanganui River and managed as part of the Whanganui Journey 'Great Walk' Hut and Camp Pass system. Camping in Whanganui National Park alongside the river is restricted to these designated campsites to consolidate use and control visitor impacts.

The remaining campsites are currently free of charge and have minimal facilities. The Department may consider upgrading facilities and introducing a self-registration camping fee system at these sites.

Other camping areas with limited facilities will be developed in backcountry areas where there is a recognised demand and to control visitor impacts.

(e) Exclusive use of buildings established by other parties

As a form of exclusive land use, private buildings do not benefit the wider public and will generally not be permitted in areas administered by the Department. Proposals from groups and clubs to establish their own accommodation facilities will be treated as an application for a lease or licence.

See Sec 12.5.12

Currently, in Egmont National Park, three alpine club lodges are operated under a licence or permit administered by the Department. The club lodges are locked buildings. Although operated primarily for the benefit of club members, the clubs also make the facilities available for bookings by other groups and the Department will continue to encourage this, provided this is at a reasonable charge. The operation of these lodges will be allowed to continue under a licence or permit arrangement provided the terms of the licence or permit are met.

In the event of a club lodge being destroyed (i.e. by fire etc.) it may be rebuilt or reinstated provided the building is not enlarged or rebuilt to a significantly different design or configuration. Should such changes be proposed, a separate application will be required. Major extensions to existing lodges, or new, additional club lodges will not be permitted in the park.

The intention is to allow for the continution of club lodges and the service they provide, while minimising development in the park and its consequent effects.

Two backcountry huts in the Conservancy, New Syme and New Trains, were established with the assistance of local alpine and tramping clubs. The huts are open to the public and managed under the backcountry hut fee system. The

Department will continue to encourage community involvement in the provision of public facilities.

39.5.3 Implementation

(i) *Huts will be maintained and upgraded in accordance with the relevant hut fee category and priority management needs.*

(ii) *Huts on major track systems will receive highest priority for maintenance and upgrading.*

(iii) *All accommodation will be regularly inspected by field staff and maintained to a suitable standard.*

(iv) *Low use or inappropriately sited huts may be considered for removal or relocation. The future of facilities lost through accident may also be reviewed. Any proposed changes will be discussed with relevant user groups.*

(v) *Where practical,new huts will be placed a minimumof four hours walk from the nearest neighbouring hut or roadend.*

(vi) *Seek agreement from the Building Industry Authority and territorial authorities to appropriate standards for new huts and those undergoing major renovations or addition.*

(vii) *Any new huts and camping facilities will be built in areas where they have the least impact on natural values and do not compromise historic or traditional sites.*

(viii) *Huts or formal camping areas will not be developed in remote zoned areas unless required for official wild animal control (which may include encouragement of recreational hunting) or other management purposes. Huts will be relocatable and removed when no longer required.*

(ix) *Huts will be available to the public on a 'first come, first served' basis and with payment of the appropriate hut fee.*

(x) *Huts may be reserved for specific management purposes and locked staff quarters provided as necessary.*

(xi) *Concessionaires will be allowed to use public huts on a 'first come, first served' basis with other users, unless otherwise determined by the Department.*

(xii) *The Department may limit the number of consecutive nights that a hut may be used.*

(xiii) *Retain and manage Konini Lodge and the Department house at Pukepuke Lagoon Conservation Area as booked accommodation facilities.*

(xiv) *Evaluate the future use of the Camphouse as a booked accommodation facility with regard to its status as a significant historic building.*

(xv) Departmental buildings, such as staff quarters, may be available for public use when not required for management purposes.

Cross Reference See Sec 37.1 and 39.3

(xvi) Camping areas with limited facilities will be provided in road accessible and backcountry areas where a recognised need exists and to control visitor impacts. A fee may be charged for the use of these facilities.

(xvii) Allow informal camping in areas administered by the Department, except where specifically prohibited to avoid deterioration of natural and historic values. If necessary, the Department will seek suitable bylaws or regulations to control informal camping.

(xviii) Allow for the reinstatement or rebuilding of existing club lodges in Egmont National Park in the event of damage by fire, avalanche etc., provided buildings are not enlarged or rebuilt to a significantly different design or configuration. Should such changes be proposed, a separate application will be required.

See Sec 12.7.6(v)

(xix) New buildings of an exclusive-use nature (i.e. not available for use by the public) will generally not be permitted.

(xx) Allow groups and clubs to finance and assist with the maintenance of backcountry huts provided that the location and design is in accordance with the provisions of this CMS and any approved management plan for the area concerned. Such huts will generally be available for unrestricted use by the public, with no priority for the group or club which financed the development. Special exceptions may be made in the case of club trips or special events in recognition of the club's support of the backcountry hut system.

(xxi) Continue to establish, relocate and maintain buildings, both permanent and transportable, where these are required to support seasonal field operations. Where any such building becomes redundant to the Department's needs, it will be removed and the site restored.

39.5.4 Outcome

- Suitable accommodation facilities are provided in appropriate locations, enabling visitors to enjoy and use areas administered by the Department in safety, with minimal impact on natural and historic values.

39.6 RECREATION FACILITIES FOR SPECIAL NEEDS

The requirements of the disabled, the aged and families with young children need to be considered when planning the development or modification of visitor facilities, especially in high-use, road accessible areas. New recreation opportunities can also be developed to cater for the special needs of such visitors.

39.6.1 Objective

Provide access and facilities where required to meet special needs of the disabled, the aged and families with young children.

39.6.2 Explanation

Under Section 25 of the Disabled Persons Community Welfare Act 1975, the Department is required to make provision for access for disabled persons in any new building, unless exemptions are obtained. This principle of ease of access for the disabled should also apply to other visitor facilities as far as practicable. Special attention needs to be given to this in high-use, road-accessible areas. Facilities such as access ramps and specially designed toilets can also assist other visitors besides the disabled e.g. baby-changing tables and access for prams.

The Wanganui Conservancy Recreation Strategy, in promoting greater development of recreation facilities at roadends, suggests that some of these opportunities could be designed to cater for a wide range of people.

There are some areas in the Conservancy, adjacent to roads, which could be suitable for developing tracks for the disabled. These include areas adjacent to the Whanganui River, on the fringes of Egmont National Park and in reserves close to major population centres. Such tracks would be constructed to a high-quality, barrier-free standard.

Scenic viewpoints, picnic areas and camping areas would also provide suitable recreation opportunities for such groups.

Well-designed interpretation facilities would add to the visitor experience.

39.6.3 Implementation

(i) *To provide access and facilities for people with special needs as required and where practicable, when developing new visitor facilities.*

(ii) *To develop suitable barrier-free and low gradient tracks adjacent to roads which cater for people with special needs where conditions permit. Interpretation facilities may also be provided to enhance the visitor experience.*

(iii) *To develop other suitable recreation facilities including scenic viewpoints, picnic and camping areas for people with special needs.*

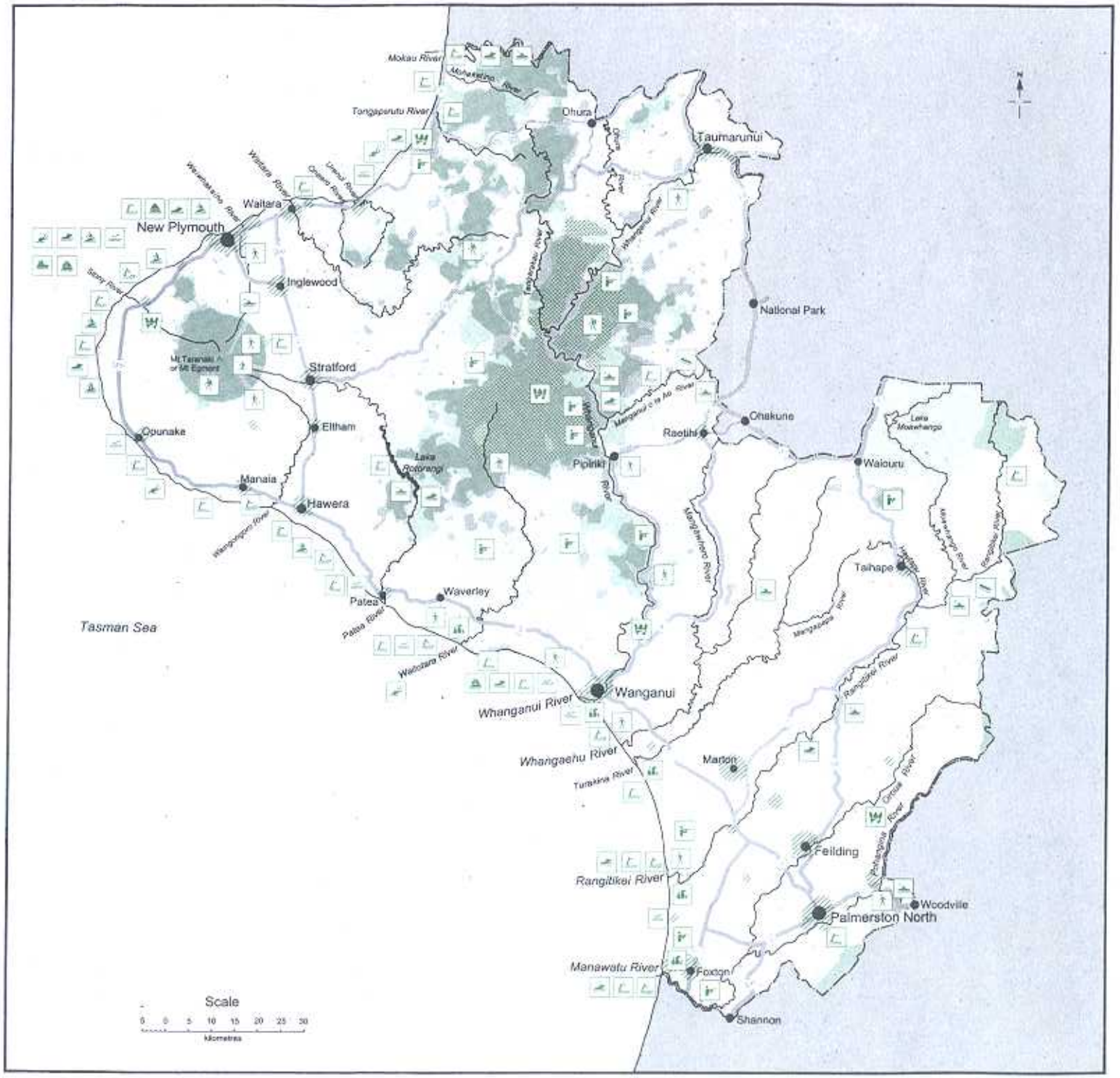
(iv) *To encourage local authorities to also provide, or co-operate with the Department in providing, suitable recreation facilities for those with special needs.*

39.6.4 Outcome

- Greater opportunity for recreational enjoyment will be provided for disabled persons, the aged and families with young children.

Figure 31

Recreation



Wanganui Conservancy CMS - April 1997 - Recreation Facilities and Services

Recreation Opportunity Classes
(ref. Appendix 10)

- Urban
- Rural
- Back Country Drive In
- Backcountry Walk in
- Remote

Recreation Activities
(indicative Only)

- Fishing (surfcasting/angling)
- Fishing (deep sea)
- Whitebaiting
- Boating
- Sailing
- Surfing
- Swimming / Bathing
- Diving
- Canoeing
- Rafting
- Birdwatching
- Walkway
- Walking
- Skiing
- Tramping
- Hunting
- Land Administered by the Department

40 Visitor Information

40.1 IDENTIFICATION AND SIGNPOSTING OF VISITOR SITES

Signs serve several important functions. They identify areas administered by the Department, direct visitors to attractions and facilities or places, inform visitors and warn visitors of potential hazards. Many signs have an interpretive role, adding to the visitor experience.

40.1.1 Objective

To identify areas administered by the Department and enhance the visitor experience by providing information.

40.1.2 Explanation

Signs and on-site information are the first obvious contact between the public and the Department at visitor attractions. The nature and quality of these signs and services creates an important image for the Department, so it is essential to maintain the highest quality.

Existing signs and on-site interpretation originated from several sources. The process of establishing a uniform Departmental image for signs is important. A national sign system has been developed by the Department and this is now being implemented in the Conservancy.

Some areas administered by the Department do not have any signs. Priority needs to be given to clearly identifying those areas that need signs. Once signs are in place they need to be maintained to a high standard, as failure to do so fosters vandalism and lowers the public image of the Department.

The Department will continue to consult with Tangata Whenua on the suitability of signs in areas of known spiritual significance.

Cross Reference See Sec 39.2

In certain areas (e.g. Egmont National Park), there may be a need to provide essential safety information to visitors. This could be achieved by placing a prominent sign at major access points to cater for the increasing number of overseas visitors, who may not be aware of local hazards or have difficulty understanding English. Use could be made of accepted international symbols and key foreign languages e.g. German and Japanese. Safety information will also be included in key visitor publications.

On-site information must be of a high quality and standardised across the Conservancy to ensure that information given at each location is consistent. It should link both Departmental and non-Departmental information systems.

Scope exists for using the heritage trail concept to link together natural and historic sites administered by the Department with other regional attractions. Heritage trails have been established in Horowhenua, Manawatu, Rangitikei, Taranaki and Wanganui. Where appropriate, the Department will seek to have natural and historic sites on areas administered by it included in new heritage trails.

40.1.3 Implementation

(i) *Identify all areas administered by the Department by appropriate signs, as resources allow and in order of priority.*

(ii) *All signs will eventually conform with the standards set by the Department's national sign system.*

(iii) *All signs and on-site information will be maintained to a high standard.*

(iv) *Liaise with Transit New Zealand and territorial authorities to ensure that access points and major visitor attractions on areas administered by the Department are appropriately signposted.*

(v) *Liaise with local heritage trail committees to ensure that natural and historic sites in areas administered by the Department are included in future heritage trails, where this is appropriate, and allow for heritage trail signs to be erected at these sites.*

(vi) *Provide signs to convey essential safety information to visitors at key visitor sites and, where there is an identified need, make use of accepted international symbols and key foreign languages to help convey this information to overseas visitors.*

Cross Reference See Sec 39.2

40.1.4 Outcome

- Areas administered by the Department are clearly identified and information is provided which enhances the visitor experience and appreciation of the natural and historic values.

40.2 INTERPRETATION

Interpretation goes beyond mere factual information in explaining the natural, historic and cultural values of a site to give visitors a deeper appreciation of what they experience. It needs to be user friendly so that it tells visitors what they want to know, simply and clearly.

It is important that a strong conservation message should be woven into all interpretation and that the Department is clearly identified as providing the facility and the service.

40.2.1 Objective

To ensure that visitors are informed about the origins, meanings and values of a place or event to give them a better appreciation of what they have experienced.

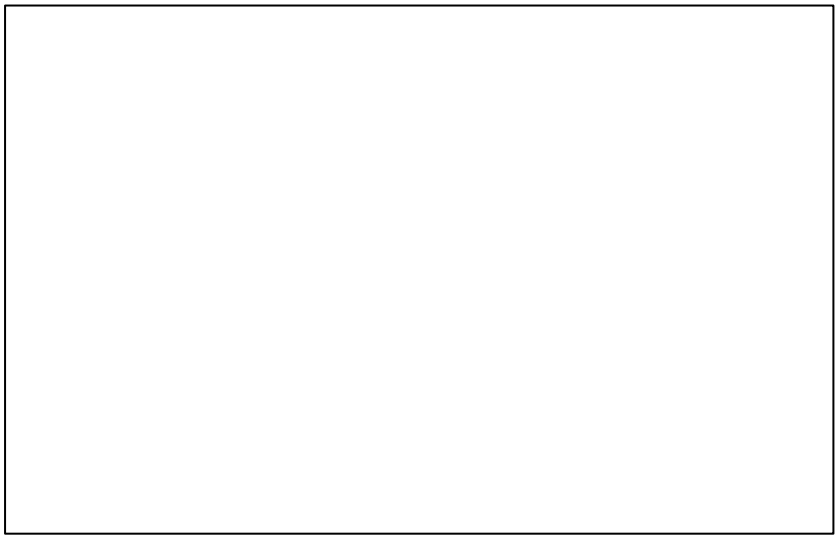
40.2.2 Explanation

For many visitors, the only point of contact with the Department will be on land it administers. The Department, therefore, needs to use the opportunity to reach visitors with quality information that leaves a good impression and delivers a message.

Planning has already begun for a redevelopment of the North Egmont Visitors Centre in Egmont National Park which has not been updated since it was built in 1978.

The development of visitor centres for Whanganui National Park will be investigated. Possible locations include Pipiriki and Stratford, if the park is extended westward.

The Conservancy has some major New Zealand rivers, some unique sand country, special geological features such as the marine terraces of South Taranaki and Wanganui, significant Maori and Pakeha history and its own special plants and animals. These are all stories worth telling through interpretation at key sites in the Conservancy, such as the Whitecliffs Walkway, Sugar Loaf Islands and Whanganui River.



Interpretation panels and displays inform the public about conservation goals. The Department uses such displays at field days, shopping malls and at many other venues.

Major urban population centres, including New Plymouth and Palmerston North also warrant attention. A joint project with the New Plymouth District Council was completed in 1995. This resulted in a more regionally focussed visitor information centre which includes some key Departmental information. It also provided a more prominent 'shop window' for the Department. An urban site is needed for the interpretation of natural and historic values of the Manawatu. There are few natural areas remaining in this highly developed farming district, making those that do remain particularly important. Accessing urban audiences is problematic and a shared 'shop window', such as that provided in New Plymouth is considered to be the best option.

The Department also needs to make the most of opportunities for on-site interpretation close to urban cantres, e.g. Pukepuke Lagoon and Beehive Creek Walkway in the Manawatu. The opportunity for joint projects with local authorities and other key associate groups will be explored.

Interpretation will be enhanced by Tangata Whenua input and, on sites of special cultural significance, the Tangata Whenua will know whether or not there should be any interpretation at all. Their contribution to interpretation projects will be a key to the success of the work.

A rewarding and informative first-hand experience that captures the imagination or spirit of an area can be the beginning of public support for the Department, and more importantly, for conservation.

(a) Priorities

Priority areas for interpretation will be assessed according to:

- current or potential visitor numbers to the site

- the message to be conveyed and the natural and historic values of the site
- the opportunity for a co-operative venture
- the relationship of the site to the interpretation.

40.2.3 Implementation

(i) *Implement the Wanganui Conservancy Interpretation Strategy which identifies and prioritises projects.*

(ii) *Create a network of quality signs and displays at key sites which identify natural, historic and recreation values. Priorities for this work are contained in the Wanganui Conservancy Interpretation Strategy.*

(iii) *Ensure that all interpretation tells a story about what people are seeing and that it is accessible, accurate and easily understood.*

(iv) *Establish a regular maintenance schedule to ensure the continued high quality of all interpretation within the Conservancy.*

Cross Reference See Sec 17

(v) *Consult with Tangata Whenua on the suitability of signs to be erected on, near or about areas of significance to them.*

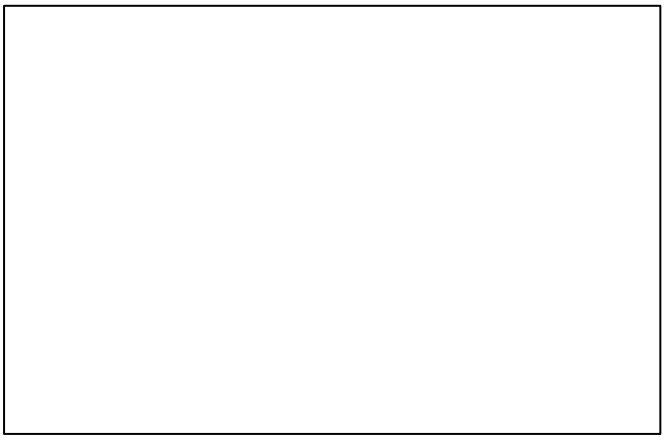
40.2.4 Outcomes

- Improved public appreciation of areas administered by the Department and the issues that affect them.
- An improved experience for the visitor and the goodwill this creates.
- Greater awareness and appreciation for the Department and its objectives.
- Improved public involvement and participation.

40.3 VISITOR INFORMATION SERVICES

A function of the Department under section 6 of the Conservation Act 1987 is to, 'Prepare, provide, disseminate, promote and publicise educational and promotional material relating to conservation'.

Colonial House at Pipiriki has displays to interpret the history of the area.



All field centres in the Conservancy provide the public with general and specific conservation information. Co-operation with local authority information centres at Taumarunui, Wanganui, Hawera, Stratford, New Plymouth and Palmerston North enable the Department to provide additional information to the public. Two visitor centres are established in Egmont National Park catering for approximately 120,000 visitors a year.

Opportunities to visit land administered by the Department can give visitors a better appreciation and understanding of natural historic and

recreation values. Information provided by the Department must be of a sufficient quality to enable the public to enjoy visits in safety and to inform the public of natural, historic and recreation values.

Summer nature programmes, and other events offer the chance for people to get a first hand experience of conservation.

As public interest in outdoor activities increases, the Department needs to ensure that concessionaires operating on land administered by the Department, promote a better understanding of the natural and historic values.

For most visitors, information centres are the first point of contact with the Department. Front-line staff are required to be well informed on many of the key natural and historic values.

40.3.1 Objective

To provide an effective information service to visitors which enhances public understanding and enjoyment of areas administered by the Department and an appreciation of natural historic and recreation values.

40.3.2 Explanation

Public requests for information, both verbal and written, cover a wide range of topics, issues and concerns. To meet these requests professionally and efficiently, staff need to be fully informed and have ready access to the relevant information.

Cross Reference
See Sec 41

Public awareness priorities in the Conservancy will reflect those contained in the Atawhai Ruamano document and those of the Conservancy Public Awareness Strategy. Consistent themes in these are:

- integration of advocacy in conservation work
- visitor advocacy
- community involvement in conservation action
- community partnerships.

40.3.3 Implementation

(i) Train staff who have regular public contact in customer services and interpretation and ensure these staff have an adequate understanding of key Departmental policy and operations.

(ii) Ensure that staff who have regular contact with the public are familiar with the Conservancy.

(iii) Process information requests efficiently and effectively.

(iv) Liaise with information centres and other information outlets in order to provide up to date recreation and conservation information.

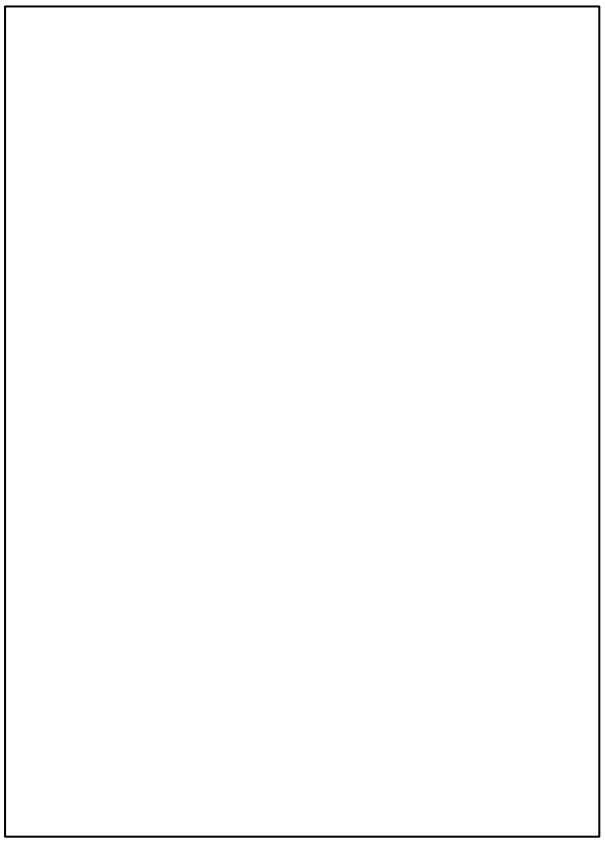
(v) Maintain information outlets at visitor and field centres.

40.3.4 Outcome

- An informed and efficient visitor information service will be available throughout the Conservancy.

41 PUBLIC AWARENESS

INTRODUCTION



Dr. David Bellamy was a key person in publicising the need to control old man's beard.

The Conservation Act 1987 enables the Department to advocate the conservation of natural and historic resources generally, to promote the benefits of conservation to present and future generations, and to prepare and distribute educational and promotional material relating to conservation.

Nearly all Conservancy staff are involved in public awareness in the course of their work. When dealing with groups of people or individual members of the public, they draw on either their own public awareness skills or those of the public awareness staff within the office. Such staff provide resources and advice to inform the public about conservation issues.

Some public awareness work is driven externally through requests for information or through issues raised by the public. Further opportunity for public awareness is provided by the large number of visitors to areas administered by the Department. Visitors require information about opportunities, facilities, access, safety and compliance. Other public awareness work is undertaken in response to activities of the Department which require public input or explanation.

The public awareness functions of the Department are as follows.

- To raise awareness and increase enjoyment of the natural and historic values of the Conservancy, both on and off areas administered by the Department, explain the impact of human activities on diverse and complex natural systems and help people appreciate the differing perspectives of Maori and European cultures towards natural resources. The Department places emphasis on enhancing people's visits to natural places so that they better appreciate the environment and the history of protection which has allowed the natural processes to continue.
- To explain the role of the Department and its approaches to conservation and management of natural and historic resources, especially those actions taken to decrease or prevent threats to the Conservancy's natural and cultural values. This also involves communicating safety and compliance requirements on areas administered by the Department, and ensuring conservation management is undertaken in an open and consultative way.
- To encourage and assist groups and individuals to sustain and enhance the natural and historic environment. People can be motivated to contribute toward protection through a variety of opportunities.

There are three avenues immediately available to staff.

- The first involves the natural or historic sites people visit. Some sites on areas administered by the Department provide ideal opportunities to stimulate interest in natural and historic values and in conservation practices amongst visitors.
- The second avenue is the contact made with various organisations and individuals in the course of the Department's work. Through good public relations and increased community participation in conservation, the Conservancy will be able to increase the conservation awareness of its associates.
- The third avenue is contact with the 'general public' through responding to public inquiries or through the news media.

Public Awareness Strategy

A Wanganui Conservancy Public Awareness Strategy has been prepared. This has as its main goal to increase understanding of and support for conservation of the Conservancy's natural and historic heritage. This strategy lists a number of public awareness priorities, including the promotion of a greater understanding of biodiversity, improving relationships with Tangata Whenua and other associates, and ensuring that public awareness is integrated in all conservation work.The strategy allows the focus of public awareness work to be directed toward the most important issues within the Conservancy, while being flexible enough to allow for changing circumstances or events.

42 Public Awareness

42.1 CONSERVATON AWARENESS

Without the support and understanding of the public, the Department's ability to achieve the conservation of New Zealand's natural and historic resources will be limited.

The Conservation Act 1987, sections 6(b)(c)(d) give the Department the ability to advocate for conservation generally, to promote its benefits and to provide and promote conservation information. Public awareness is a crucial aspect of advocating for conservation. It has a key role in enhancing people's awareness of the Department's work and appreciating natural and historic values.

The strategic focus for public awareness activities nationally includes the promotion of public understanding and appreciation of conservation and the Department.

42.1.1 Objectives

(i) To enhance public enjoyment of land administered by the Department and appreciation of its natural and historic values.

(ii) To improve public appreciation and understanding of and support for conservation and for the work of the Department.

42.1.2 Explanation

People who are well informed about New Zealand's biodiversity and historic and cultural heritage, who are aware of the threats to it and who understand the reasons for the Department's work, are more likely to be supportive.

Cross Reference
See Sec 40.3

People can be encouraged to learn more about conservation through first-hand experiences of the natural world. Such experiences are enhanced by the provision of information on conservation, safety and environmental care.

By working with education providers, conservation information can be included in educational programmes and provided for school groups visiting land administered by the Department.

A survey conducted by the Department in 1992 revealed that 'education and informing the public' was seen as one of the most important functions of the Department. A Women's Conservation Forum held in the Conservancy, confirmed the view that education should be given a high priority.

With approximately 270 early childcare facilities, 320 primary and secondary schools, three community polytechnics, a teacher training college, an international college and one university within the Conservancy, there are numerous opportunities to develop a solid base for conservation education.

Education is vital to the success of conservation in the long term.

The public develop many of their opinions about conservation and the Department through the media. Media opportunities and publications are effective ways to promote conservation awareness.

(a) Priorities:

Education

- Education in support of campaigns to achieve specific conservation outcomes.
- Education to enhance visitor experiences.
- Working with schools in smaller communities on interactive programmes designed to enhance specific conservation outcomes.
- Liaise with educators' professional bodies to promote the inclusion of a conservation education component in teaching programmes.
- Participate in relevant tertiary courses.

Media

- Media issues requiring urgent attention.
- Proactive work with the media to prevent crises.
- Proactive media campaigns for high profile conservation issues.
- General conservation news.

Publications

- Consolidation of recreation booklets.
- Production of urgent publications.
- Safety information.

42.1.3 Implementation

(i) Foster recreation opportunities on land administered by the Department.

(ii) Encourage and assist in the development of conservation programmes in schools and tertiary institutions.

(iii) Encourage schools to visit areas administered by the Department to gain first-hand knowledge and experience of conservation.

(iv) Maintain and update good quality conservation resource information.

(v) Initiate releases about the Department's activities and general conservation news, and send to selected media both within and outside the Conservancy.

(vi) Maintain a consistent, reasoned and accurate media response on contentious issues.

(vii) Ensure the media gets a consistent message where the Department is involved with associates on joint projects.

(viii) Provide staff with on-going help and training to recognise media opportunities and deal with them confidently and effectively.

(ix) Prepare a Publications Strategy to direct and prioritise publications. Public information needs will be established through contact with and assistance from user groups,

Tangata Whenua, information centres and others with an interest in conservation and the land administered by the Department.

(x) Produce a range of publications to meet recreational needs and inform the public about conservation, safety and environmental care.

(xi) Maintain the Department's corporate identity and national publications standards in all publications.

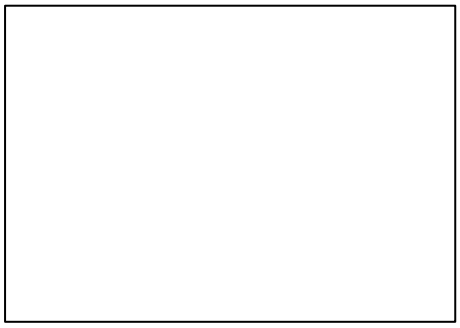
(xii) Provide opportunities for raising conservation awareness through volunteer activity.

42.1.4 Outcomes

- A higher and sustainable level of conservation awareness.
- Increased public support for conservation and the work of the Department.
- Increased public understanding of and compliance with safety and environmental care requirements.
- Less misunderstanding about high profile and contentious issues.

42.2 COMMUNITY INVOLVEMENT

The Department encourages individuals and community groups to participate in conservation programmes or to initiate their own, (e.g. wetland and forest restoration or protection). Such programmes can be undertaken on private land or land administered by the Department. The Department manages a multitude of small areas, many of which are ideally suited for 'adoption' by community groups for protection or to undertake agreed restoration programmes.



Volunteers reconstructing campsites at Upper Mangapurua on the Whanganui River.

Participation in conservation activities assists the Department to achieve conservation protection and also helps participants to increase their knowledge and understanding of conservation. Local knowledge gained from the community can also assist the Department in its conservation management work.

Several established opportunities for community participation in conservation programmes already exist. These include organised volunteer programmes such as Tu Kakariki and conservation holidays . Tu Kakariki provides sponsorship support for native tree planting on public land using community groups and schools. Conservation holidays allow the public to undertake projects in the Conservancy that could not normally be undertaken, while providing an interesting and worthwhile holiday for those taking part. Volunteer programmes also allow individuals or groups to participate in local conservation activities through ongoing projects such as old man's beard removal in Rangitikei reserves, ivy removal in the Paengaroa Scenic Reserve or restoration of the former Waitara landfill site.

Support will continue to be provided to New Zealand Conservation Corps run by the Ministry of Youth Affairs. Programmes run by the Corps provide valuable conservation experience for the participants.

42.2.1 Objectives

(i) To provide opportunities for public involvement in conservation projects.

(ii) To encourage and support community conservation initiatives.

42.2.2 Explanation

One of the best ways of learning about conservation is to become involved in conservation work. Such work must be enjoyable and within the potential ability of those undertaking the task. Without the assistance of volunteers, a variety of conservation projects, such as revegetation and historic place protection could not be undertaken.

In most instances, support will be given to community-based initiatives, since these are most likely to succeed in the long term. Criteria used to determine support for projects will include:

- availability of funding, especially sponsorships
- anticipated conservation outcomes
- matching the work to the ability and skills of the participants
- community ownership and public interest in the project
- availability of staff and other necessary resources
- accessibility
- activities that would be enhanced or not otherwise undertaken.

(a) Priorities

- national campaigns
- community based initiatives
- ongoing conservation projects, including those undertaken by the New Zealand Conservation Corps
- new conservation initiatives.

42.2.3 Implementation

(i) Community participation opportunities will continue to be provided.

(ii) Priority will be given to community-based initiatives.

(iii) Staff will be trained to run volunteer programmes.

(iv) Opportunities for conservation awareness will be provided through conservation volunteer programmes.

(v) Volunteer efforts will be recognised.

(vi) The Department will increase the level of communication with traditionally non-participatory community groups and encourage them to develop conservation initiatives and projects.

42.2.4 Outcome

- The public has contributed to conservation and has a sense of achievement.

42.3 ASSOCIATE LIAISON

The Department will strengthen relationships with Tangata Whenua, non government organisations (N.G.Os) environmental groups, recreation groups, landowners, farming groups, central government agencies, territorial authorities, and commercial and tourism agencies. These groups can have a significant role in conservation. Their support is essential for the success of much of the work undertaken by the Department.

42.3.1 Objective

To develop and maintain support for and contributions to conservation and the work of the Department through continued liaison with key associates.

42.3.2 Explanation

Much of the Department's contact with associates relates to protection and preservation work through management planning or protection issues. The Department will focus on improving communication with associates, working with owners of land of high natural and historic value and raising awareness among people whose activities most threaten these values. Ongoing liaison exists between the Department and many territorial authorities within the Conservancy. Scope exists to improve this liaison through regular meetings and the development of joint working groups to deal with issues of common interest.

Wherever possible, public awareness programmes will be developed in conjunction with associates and opportunities provided for their direct involvement. The potential for 'Friends of DoC' groups will be investigated as a way of encouraging further interaction between communities and the Department.

(a) Priorities

- maintain and enhance links with all associate groups
- raise awareness of and support for the work of the Department
- seek opportunities for joint involvement by associate groups in conservation projects.

42.3.3 Implementation

(i) The Department will liaise and consult with associates, on conservation matters.

(ii) The Department will encourage greater support for its work by associate groups .

42.3.4 Outcome

- A greater range of associate groups will support and contribute to the work of the Department.

STATUTORY PLANNING AND LIAISON

43 Introduction

In many areas where the Department seeks to protect natural or historic values, the land is not administered by it. This is particularly so in the lowland and coastal areas of the Conservancy. Because one of the most important opportunities for achieving protection over such land is through statutory planning of territorial authorities, it is important to maintain a close-working relationship with territorial authorities.

The statutory authority for the Department's involvement in the conservation of natural and historic resources on private land is the Conservation Act 1987. Advocacy under the Resource Management Act 1991 provides the most important opportunity for this involvement. The Department may also become involved in plans and policies of other departments, such as Fisheries Management Plans prepared under the Fisheries Act 1983.

Section 6 of the Conservation Act 1987 sets out the functions of the Department of Conservation. Sections 6(b) and (c) enable the Department to:

- advocate the conservation of natural and historic resources generally
- promote the benefits to present and future generations of the conservation of natural and historic resources generally and the natural and historic resources of New Zealand in particular.

Under the Resource Management Act, the Minister of Conservation has specific functions in relation to the coastal and marine area, and more general powers and responsibilities which apply to any agency which comes within the definition of 'person' under the Act. The Department's specific functions in relation to coastal areas, and those relating to land and freshwater issues are explained in this section.

The Resource Management Act sets out the planning and resource consent procedures for local government. The basic principle of the Act is the concept of sustainable management, the purposes and principles of which complement those of the Conservation Act.

The Resource Management Act requires the Minister to prepare a New Zealand Coastal Policy Statement, and allows for national environmental standards and regional policy statements that are not to be inconsistent with local authority plans. Regional coastal plans, regional policy statements, and district plans must be prepared by local authorities. Other regional plans can also be prepared covering a range of issues, such as land management, waste management and water quality. The Department must be consulted by local authorities when they prepare plans under the Resource Management Act, where these affect the interests of the Department.

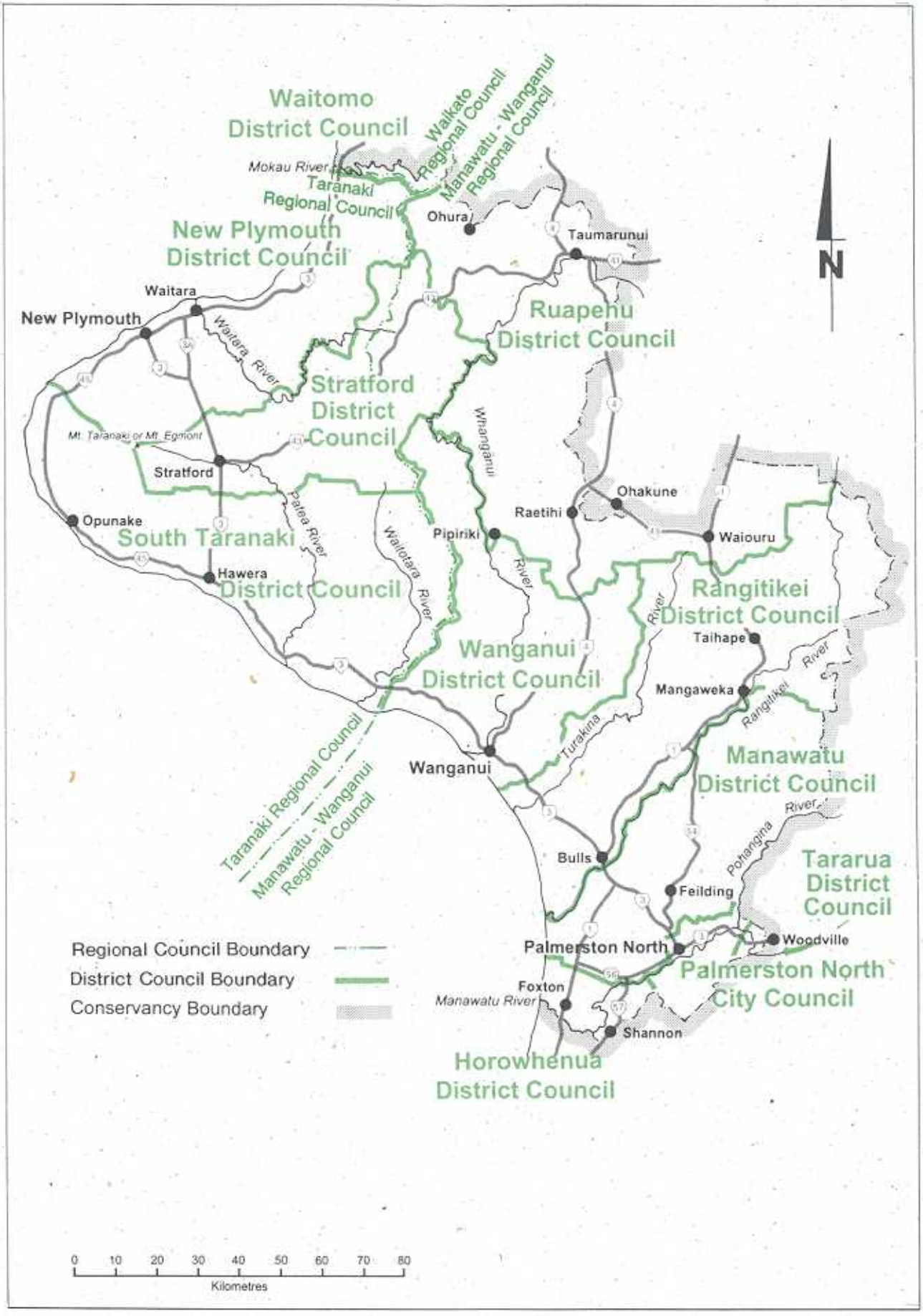
All regional policy statements and regional and district plans must have regard to the objectives in this Conservation Management Strategy in so far as a proposed policy or rule affects the Department's statutory responsibilities in relation to land that it

administers and including species under the Wildlife Act 1953 and Marine Mammals Protection Act 1978.

There are considerable pressures on natural and historic values in some parts of the Conservancy, particularly in the coastal and lowland areas of Manawatu and Taranaki, where natural areas have been affected by farming and urban settlement. However, extensive areas of mature or regenerating indigenous forest still remain in the hill country, particularly in the northern part of the Conservancy. The Conservancy includes the catchments of some major North Island rivers, e.g. Whanganui, Rangitikei and Manawatu. As a result, the Department's conservation advocacy functions for the protection of freshwater habitats, riparian vegetaion, natural areas on private land, and the coastal environment are particularly important, and complement those of other environmental organisations.

Approximately 60% of the Conservancy lies within the Manawatu-Wanganui Regional Council boundary, with the remainder within the area of the Taranaki Regional Council and a small area in the Waikato Regional Council. Nine district councils lie wholly or partly within the area of the Conservancy. These boundaries are identified on Figure 32.

FIGURE 32: LOCAL AUTHORITY BOUNDARIES



44 STATUTORY PLANNING

44.1 LANDUSE PLANNING

The planning processes under the Resource Management Act provide the main opportunity for the Department to have input into conservation issues, within the context of sustainable management across land of all tenures. The involvement of the Department will focus on policies and plans, and the Department will seek to ensure that planning under the Resource Management Act generally promotes conservation outcomes. Individual resource consent applications which have an impact on natural areas or values will also be assessed, and an input made into those applications which raise significant conservation issues.

The Resource Management Act requires the Minister of Conservation to be consulted in the preparation of policies and plans, and territorial local authorities and regional councils must have regard to this CMS when preparing their Resource Management Act documents. In addition, the Forests Amendment Act 1993 requires the Secretary of Forestry to consult with the Director General of Conservation about applications for the harvesting and milling of timber for personal use, and about the approval of sustainable management plans, and other matters related to plans and permits.

The Department, on behalf of the Minister, will initially focus on making an input into policies and plans prepared by regional and district councils to ensure these reflect a conservation perspective. It is important to ensure that regional policy statements include strong measures for the protection of natural and historic resources, as these will be reflected in district plans. All district plans will cover issues of key interest to the Department, including protection of natural areas, coastal management and riparian protection.

Protection in the context of the Resource Management Act (refers S6[a], [b], [c] and 7 [h]) means protection from the adverse effects of resource use.

The aim will be to participate successfully in the planning processes under the Resource Management Act to protect or enhance significant natural and historic resources in the Conservancy.

44.1.1 Objectives

(i) To promote the protection of all natural and historic values in the development of policies and plans prepared by regional and district councils, and in subsequent changes and reviews of these.

(ii) To have an input into resource consent applications notified under the Resource Management Act which raise significant conservation issues.

(iii) To seek the protection and/or enhancement of all significant natural and historic values in the Conservancy through other statutory processes and by liaison with local authorities, Tangata Whenua and other groups.

44.1.2 Explanation

To ensure that indigenous species and significant habitats in the Conservancy are sustained, recognition of them is necessary in Resource Management Act plans, in the resource consents process, and in making input on applications under the Forests Amendment Act. Though the Conservancy includes some significant and extensive protected areas, many natural areas, for example remnant areas of native forest, coastal dunes and wetlands, and riparian vegetation, are threatened by settlement and other forms of land development. The Department will encourage regional and district councils to include policies and rules in plans to give a high level of protection for the most vulnerable natural areas.

In promoting conservation issues in regional and district plans, the Department will liaise with allied groups to ensure that issues are handled in a co-ordinated way, and to maximise conservation gains.

(a) Priorities:

protection of natural areas on private land, including those identified as recommended areas for protection in the PNAP

- protection of riparian vegetation and habitats on lake and river margins
- land use and landscape protection measures for the margins of national parks
- protection of the natural character of the coastline
- ensuring that plans provide for management uses on land administered by the Department.

Cross Reference
See Sec. 44.3

The Department will give priority to promoting these issues in regional and district council policies and plans and subsequent changes prepared under the Resource Management Act. Input into individual resource consent applications will be a lower priority. The aim will be to hold 'pro-active' discussions with councils when their policies and plans are at the formative stage, rather than being 'reactive' to development applications.

In making an input into council policies and plans, close contact and liaison will be maintained with other interested groups and Tangata Whenua to ensure that issues are dealt with in an integrated way.

44.1.3 Implementation

(i) The Department will liaise with regional and district councils during preparation of their policies and plans and any subsequent changes to these, to seek that these reflect matters of conservation interest within a sustainable management context . The Department may make submissions where matters of conservation interest would be adversely affected.

(ii) An input will be made into consent applications under the Resource Management Act, with priority given to proposals where significant natural or historic resources would be adversely affected or where an important precedent is likely to be set.

(iii) The Department will provide timely and relevant advice to the Ministry of Forestry under Part IIIA of the Forests Act 1949 (as amended by the Forests Amendment Act 1993) .

(iv) Liaison with allied groups and individuals on planning issues will be used to maximise conservation gains and avoid duplication of effort.

(v) Appropriate provisions will be sought in regional and district plans for the protection of natural areas on land of all tenure, historic resources, lake and river margins, and the protection of the margins of land administered by the Department where necessary or desirable.

(vi) Pre-hearing meetings will be sought, where possible, to resolve conflict and to share information, both before and after making submissions.

(vii) Well researched and accurate information about natural, historic or recreation resources will be provided to local authorities to assist in the preparation of their polices and plans.

44.1.4 Outcomes

- To achieve the protection and enhancement of all significant natural and historic resources in the Conservancy.
- The inclusion of policies and other measures in regional and district plans which will assist with the conservation of natural and historic resources within a sustainable management context.

44.2 FRESHWATER ADVOCACY AND PLANNING

The functions of the Department in relation to water are identified in the Conservation Act 1987. They are to preserve indigenous freshwater fisheries and protect recreational freshwater fisheries and freshwater fish habitats. The Department is also able to foster the use of recreational fisheries where this is consistent with its conservation.

The control of water use, discharges to water, and activities on river beds lie with regional councils under the Resource Management Act 1991. The control of activities in relation to the surface of water is with district councils under the same legislation. The principal responsibility for freshwater management, therefore, lies with local authorities while the role of the Department is to promote management of water which is beneficial for conservation through statutory and other processes.

44.2.1 Objectives

(i) To ensure that in any application for a water conservation order or revocation or variation of an order, adequate consideration is given to the outstanding natural and historic attributes of the waterbody.

(ii) To ensure that in the preparation of regional policies, regional plans, district plans and in any subsequent changes to these, and for consent applications with significant potential adverse effects on the environment, adequate consideration is given to the natural, historic and recreational attributes of water.

(iii) ***To liaise with Tangata Whenua in developing the Department's position on water advocacy issues and to assist Tangata Whenua and the public generally to participate in water management for conservation.***

44.2.2 Explanation

There are waterbodies, including rivers, lakes and wetlands that remain largely in their natural state and which should be preserved. Others are modified by human activity but have characteristics that warrant protection. Some are degraded to the extent that restoration is needed to achieve sustainable management.

The water quality of most large rivers within the Conservancy is degraded by runoff of soil, nutrients, and micro - organisms (includes viruses, protozoa, and bacteria) from the land. Pollution of water by domestic and industrial waste discharges also occurs. Damming has affected the quality of aquatic habitats in some rivers. In addition, the diversion or abstraction of water at times of low flows can severely degrade aquatic habitats and the ecology of some rivers.

Severe erosion has disastrous affects on water quality.

(a) Priorities

The Department's national priorities for freshwater conservation are:

- conservation of outstanding natural and cultural resources of waterbodies
- conservation of vulnerable indigenous fish and their habitats.

Priorities for the Conservancy are:

Cross Reference
See Secs 11.5.4 and 14.5.4

- participation in activities aimed at conserving the natural and cultural resources of the Whanganui River, including support for the Royal Forest and Bird Protection Society application for a Water Conservation Order over the Whanganui River
- conservation and enhancement of the indigenous fishery and fish habitats
- protection of wetlands (including dune lakes)
- maintenance or enhancement of natural vegetation cover in headwater catchments
- promotion of enhanced riparian management and land management to ensure water quality suitable for the protection and enhancement of aquatic habitats
- restoration of the flow and/or water quality of the main stems of important rivers which are degraded
- promotion of water quality suitable for water-based recreation.

The conservation of water resources, mitigation of the effects of human activity and restoration of waterbodies can be achieved through the planning processes of the

Resource Management Act. The available mechanisms include water conservation orders, the policies of regional policy statements, rules in regional and district plans, and placing conditions on resource consents.

FIGURE 33 PROPOSED REGIONAL PLANS AND RULES - WANGANUI CONSERVANCY

Manawatu-Wanganui Regional Council	- Manawatu catchment water quality - Activities in the beds of rivers and lakes - Regional land management
Taranaki Regional Council	- Regional freshwater and river and lake beds plan

Source: References 53 and 100

Regional plans and rules in proposed regional policy statements of regional councils for the next 10 years, and which have implications for water resources are listed in Figure 33. District plans to be prepared by each district council are also likely to have implications for water resources.

44.2.3 Implementation

(i) *In response to an application for a water conservation order or revocation or variation of an order, the Department may, where appropriate, provide evidence at any hearings on characteristics of the waterbody which are considered to be outstanding:*

- *as a habitat for terrestrial or aquatic organisms*
- *as an indigenous fishery*
- *for its wild, scenic, or other natural characteristics*
- *for ecological values*
- *for recreational, historical, spiritual or cultural purposes.*

(ii) *The Department will participate in the informal and formal stages of regional and district plan preparation by:*

- *providing information on natural and historical resources, indigenous fisheries and fish habitats, and recreational use*
- *promoting the conservation of aquatic resources, including both ecological and recreational resources.*

(iii) *The Department will actively support the preparation of water management plans dealing with water quality in the:*

- *Whanganui River*
- *Manawatu Catchment*
- *Waiwhakaiho Catchment (including water allocation)*
- *Waitara Catchment*
- *lower Rangitikei Catchment*
- *Patea Catchment (including water allocation)*
- *Waitotara River*

- *Mohakatino River*
- *Tongaporutu River*
- *Mokau River.*

(iv) The Department will examine consent applications with significant potential implications for the conservation of water resources and may participate in the informal and formal stages of these applications.

(v) The Department will liaise with Tangata Whenua prior to lodging formal statutory submissions on water advocacy issues, where there is a particular Tangata Whenua interest.

Cross Reference See Sec 17

44.2.4 Outcomes

- Protection of waterbodies which have outstanding characteristics.
- Protection for remaining wetlands.
- Adequate water quality and water levels in wetlands, lakes, and rivers to safeguard the life supporting capacity of aquatic ecosystems and which sustain appropriate water-based recreation.

44.3 COASTAL PLANNING

The Resource Management Act established a new coastal management regime based on day-to-day management of coastal resources by local government. The regime retains a central government involvement to ensure the national interest in coastal management is represented. The Minister of Conservation is given that responsibility.

The Minister of Conservation's statutory role in coastal planning includes the preparation of a New Zealand Coastal Policy Statement (NZCPS) and approving regional coastal plans. The NZCPS is implemented through regional coastal plans, policy statements, regional and district plans. These plans must not be inconsistent with the NZCPS. The Department will make submissions on proposed regional coastal plans, and other planning documents (e.g. district plans) which deal with management of the coastal environment.

The Minister may also identify 'Areas of Significant Conservation Value', and activities to be described as 'Restricted Coastal Activities' (RCAs) for inclusion in regional coastal plans. RCAs are specified either because they have significant or irreversible adverse effects, or because they occur in 'Areas of Significant Conservation Value'. The Minister is also required to make decisions on applications for coastal permits to carry out Restricted Coastal Activities, and to monitor the effect of NZCPS.

Any advocacy undertaken by the Department is in terms of the Resource Management Act and will be to advise on the likely impacts of any activity and on measures which may be taken to avoid, remedy, or mitigate the adverse effects of the activity on the coastal environment. The Department will make submissions to assist in the processing of resource consent applications and coastal plans. This may be informally, through the provision of information directly to resource users, or formally through the planning processes provided in the Resource Management Act 1991.

44.3.1 Objectives

(i) To encourage the preservation of the natural character of the coastal environment.

(ii) To work with territorial authorities to implement the New Zealand Coastal Policy Statement.

(iii) To encourage organisations with resource management responsibilities to acknowledge natural and historic values and develop policies for the conservation of coastal and marine ecosystems.

44.3.2 Explanation

The coastal environment has important cultural and ecological values which need to be protected, both for their intrinsic significance, and their value as a resource for present and future generations. A national priority identified in the New Zealand Coastal Policy Statement (Policy 1.1.1), is the preservation of the natural character of the coastal environment.

A number of authorities and organisations will be developing policy which relates to the coastal environment. These include government departments, territorial authorities and voluntary organisations. Territorial authorities and resource users have a responsibility to promote sustainable management of natural resources as set out in the Resource Management Act.

The area below mean high water spring (MHWS) is managed primarily through rules in regional coastal plans. Activities above MHWS have the potential to affect natural values in the marine area. These are controlled through district plans. The protection of the natural character of the coastal environment from the adverse effects of activities must be recognised and provided for in Resource Management Act plans and policies.

The provision of information on ecosystems, amenity values, historic and cultural matters can assist developers and resource users to ensure that their activities will not have an adverse effect on the natural character of the coastal environment.

The Sugar Loaf Islands Marine Protected Area promotes care for the marine environment.

The Department's role will be to identify areas with high natural, historic and recreation value, provide advice on the likely impacts of any activities, and advise on measures which may be taken to avoid, remedy, or mitigate impacts on the coastal environment.

44.3.3 Implementation

(i) Liaise with local authorities to ensure that policies and plans are not inconsistent with the NZCPS .

(ii) Ensure that matters of national priority, as identified in the NZCPS, are protected, especially in decisions on resource consent applications for activities in the coastal environment .

(iii) Use the planning processes in the Resource Management Act to promote the protection of the natural character of the coastal environment and marine ecosystems.

(iv) Provide advice to regional and district councils on activities which are likely to adversely affect natural and historic values in the coastal environment.

(v) In co-operation with local authorities, ensure the effectiveness of policies and plans is monitored and seek appropriate remedies where activities are having an adverse effect on the coastal environment.

(vi) Liaise with Tangata Whenua and the conservation boards on coastal planning and management issues.

(vii) Support policies which will achieve integrated management of natural and historic resources within the Conservancy and avoid any adverse effects on the coastal environment.

(viii) Support organisations, the community and Tangata Whenua to develop and achieve their own conservation objectives for the conservation of the coastal environment.

44.3.4 Outcomes

- Improve the level of protection for the coastal environment.
- Achieve recognition of and sustainable management of natural, historic and recreation values in the coastal environment.

44.4 MANAGEMENT PLANNING

Cross Reference
See Sec 1.4

The Conservation Act (Sections 17[D] to 17[I] establishes the management planning framework for the Department, requiring the preparation of a Conservation Management Strategy (CMS) for each conservancy and providing for the preparation of Conservation Management Plans (CMPs) for a specific area or areas administered by the Department.

This CMS will now serve as the primary management planning document for all areas administered by the Department. It will supercede all existing management plans where they are inconsistent or have expired and avoid the need for new plans to be prepared, except for national parks. Management plans are therefore no longer required unless their preparation has been identified in this CMS. The CMS links the Conservation Act, general policies approved by the Minister and guidelines produced by Head Office.

The function of CMPs will be to implement provisions contained within the CMS. They will establish detailed objectives for the integrated management of natural and historic resources within specific areas. They may also provide detailed objectives for recreation, tourism and other conservation purposes.

Other types of non-statutory planning documents exist. These are generally based on functions of the Department (functional strategies) and provide detailed provisions

for particular activities such as recreation, wild animal control or species recovery, for a five to 10 year period.

44.4.1 Objectives

(i) To ensure the integrated management of all areas administered by the Department and integrated management between conservancies.

(ii) To provide opportunities for Tangata Whenua and the public to become involved in the preparation of any amendments to the CMS and the preparation or review of any CMPs.

44.4.2 Explanation

Prior to 1990, separate management plans were required for all reserves. Of the 329 reserves in the Conservancy, only 37 had approved management plans, almost all of which have now expired. Draft management plans were prepared for a further 44 reserves. Management plans were also prepared for the two National Parks within the Conservancy. Appendix 5 lists all approved and draft management plans.

In the past, management plans concerned themselves almost solely with the particular land unit and ignored significant adjacent lands and shared issues. Only the most recent plans provide an adequate basis for resolving many external issues. The CMS will provide a better basis for management because it deals with Conservancy priorities as a whole, rather than focusing on detailed management of individual areas administered by the Department. The CMS helps the Department to respond to problems by providing the policy framework for resolving a wide range of issues not currently encountered in an individual land unit.

(a) Consultation

The Department is required to involve Tangata Whenua and the public in the review of the CMS and in the preparation of CMPs, as the land it administers is public land. To be effective in its management, the Department needs to know the views of the community and to have its support. The challenge for the Department is to clearly explain its management objectives to the public and to provide opportunities for them to respond in meaningful ways.

Areas administered by the Department can not be managed in isolation from their surroundings. Therefore the Department needs to consult and work co-operatively with other authorities such as regional and district councils and Tangata Whenua. The Department will also promote and participate in joint management planning exercises, where appropriate, for areas of natural and historic significance.

(b) Functional strategies

Where a need can be established, the Conservancy will prepare functional strategies or operational plans. These will provide a greater level of detail than that contained in the CMS or a CMP, particularly in resource information, but will lack the wider vision of the CMS. The key policy direction contained in these strategies or plans may be

incorporated in the CMS.

The development of recreation and interpretation strategies provides a better basis for the management of many reserves than existed formerly. Similarly, coherent programmes for habitat and species management and many other aspects of management draw together aspects of planning within each functional area.

44.4.3 Implementation

(i) *The CMS will be the basic planning document for the Conservancy. Any existing management plans, and any subsequent plans must comply with the provisions of the CMS.*

(ii) *Approved and operative CMPs for reserves listed in Appendix 5 remain the statutory planning documents which will be used for the management of these areas. They are however, overridden by the CMS and should there be any policy inconsistency, it is the CMS which prevails. CMPs for reserves may be revoked in the future as necessary and will not be reviewed unless specified in this CMS.*

(iii) *Existing management plans for Egmont National Park and Whanganui National Park will be maintained and reviewed in accordance with the National Parks Act.*

(iv) *Further CMPs may need to be prepared if one or all of the following factors apply to a specific area:*

- *There are special issues which cannot be covered by the CMS in sufficient detail, or cannot be resolved by consultation or other processes.*
- *The area has a high public profile, or has particular significance for the community or sectors of the community.*
- *There are competing demands on the area.*

In light of the above factors, CMPs will be required for the Sugar Loaf Islands Marine Protected Area and for the proposed North Taranaki Conservation Park, should it become established.

Cross Reference
See Sec. 12.5.6 & 13.5.12

(v) *Public input will be sought during all stages of the preparation and review of strategies and plans. Input from Tangata Whenua, conservation and user groups and adjoining landowners will be specifically sought.*

(vi) *The conservation boards will be involved in the development of strategies and plans and in any pre-notification consultation with Tangata Whenua or other groups.*

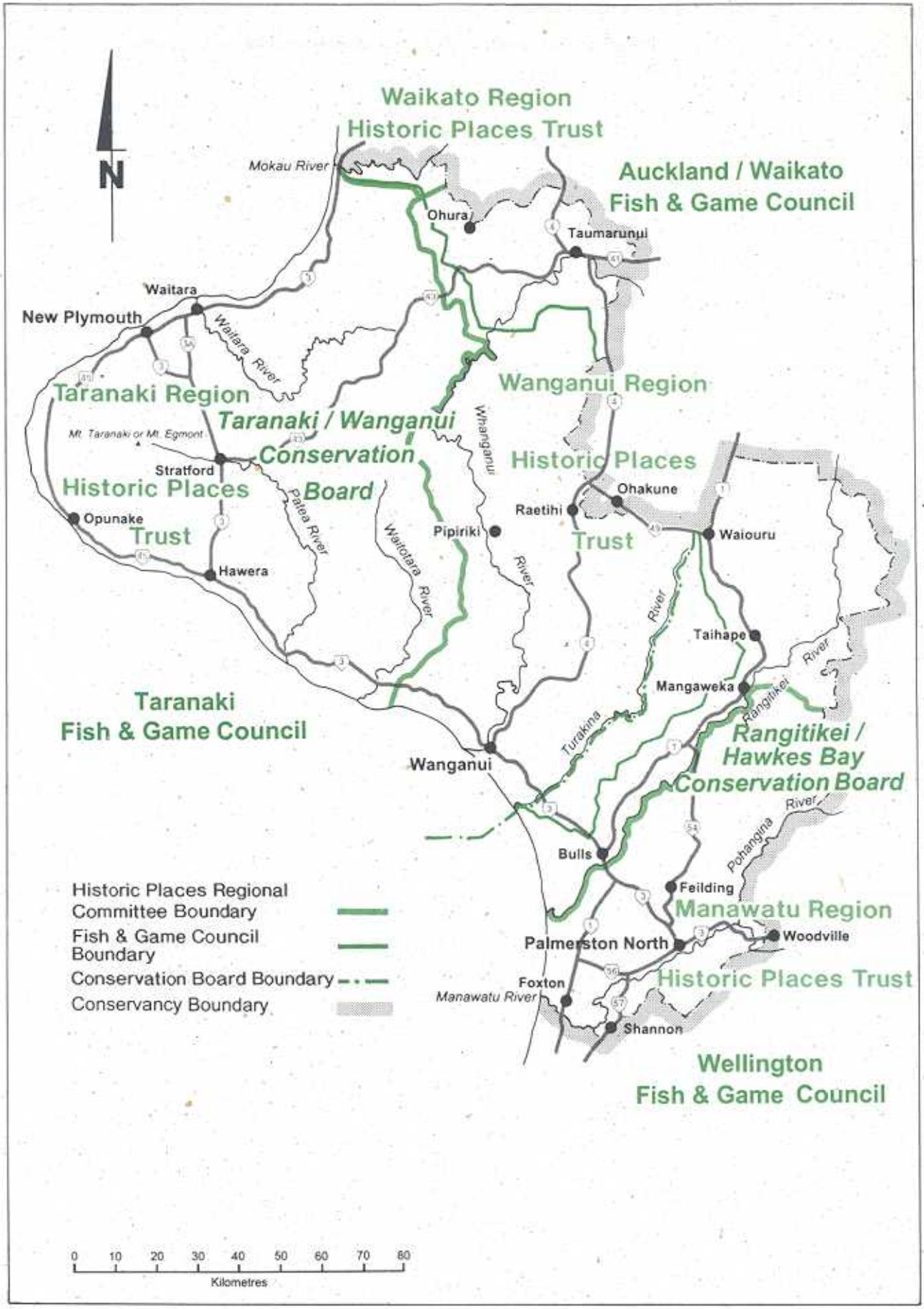
(vii) *The concept of management planning guidelines to provide for the integrated management of significant natural and historic areas controlled by more than one party, will be promoted where appropriate.*

(viii) *Functional strategies or operational plans may be prepared and reviewed where more detailed management direction is required, or for specific work programmes.*

44.4.4 Outcome

- Integrated management of all areas administered by the Department.

FIGURE 34: CROWN AGENCIES WITH CONSERVATION RESPONSIBILITIES



45 Servicing Conservation Boards

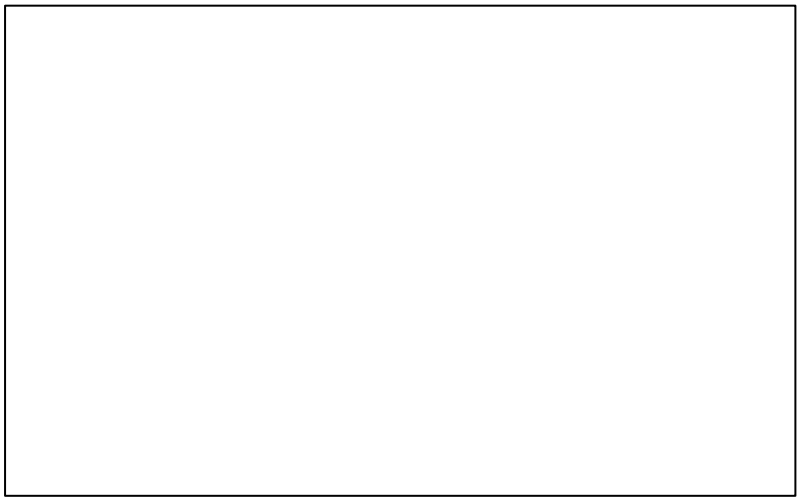
Conservation boards are appointed by the Minister of Conservation to fulfil functions under the Conservation Act. They provide a public input into, and an oversight of the Department's activities. Members are selected according to criteria in the Act and represent a range of community views on conservation. Each member is appointed for a three year term and may be reappointed for further terms. Boards have planning and policy roles, as well as the power to advocate conservation generally and participate at statutory hearings. Through their activities, conservation boards provide a major avenue for public input into all aspects of the Department's work.

45.1 Objective

To service the two conservation boards within the Conservancy to enable them to carry out their functions and responsibilities under the Conservation Act and other legislation.

45.2 Explanation

The Department is required under section 6V of the Conservation Act 1987 to service the Taranaki/Wanganui and Rangitikei/Hawkes Bay Conservation Boards, both of which have jurisdiction over parts of the Wanganui Conservancy. Staff are employed to provide the necessary servicing support. Boards are financed from the annual Conservancy budget.



Conservation boards provide an important channel for public input into the Department's work.

The Taranaki/Wanganui Conservation Board, which is entirely serviced by Wanganui Conservancy, has jurisdiction over that part of the Conservancy extending from the Mokau River in the north to the Turakina River in the east (Figure 34). The remainder of the Conservancy, including the Rangitikei and Manawatu Plains, comes under the jurisdiction of the Rangitikei/Hawkes Bay Conservation Board. This board is serviced by the Hawkes Bay Conservancy, and the Wanganui Conservancy as necessary.

45.3 Implementation

(i) Relevant information on conservation issues will be forwarded to board members for their consideration.

(ii) The boards will be consulted on relevant conservation issues.

(iii) The boards will be assisted to provide an effective input on relevant conservation issues .

(iv) Give boards an opportunity to provide input into business plan priority setting.

(v) Facilitate the boards' liaison with other agencies involved in conservation, including regular meetings with conservation and recreation groups.

(vi) Familiarise boards with their area of jurisdiction, including inspections of significant areas and issues.

(vii) Regularly assist and advise boards and review the effectiveness of servicing.

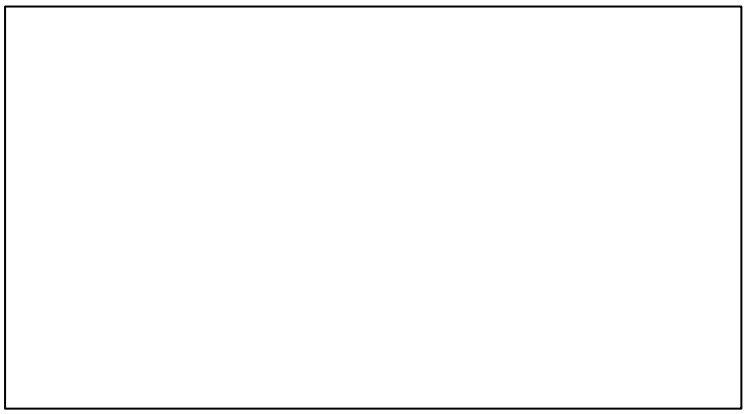
45.4 Outcome

- Well informed and versatile conservation boards that are able to contribute effectively to and represent the public on a range of conservation management issues.

46 Liaison with Fish and Game Councils

The Conservation Act 1987 sets out the Minister's functions in relation to fish and game councils.

In 1990, fish and game councils replaced the former acclimatisation societies in the management of the sports fish and game resource for the benefit of recreational hunters and anglers. Council members are elected by licence holders for a three year term. Fish and game councils are responsible for the management, maintenance and enhancement of sports fish and game resources, and to represent the interests of recreational users in statutory planning processes.



Ducks are banded to monitor numbers for hunting and conservation.

Sports fish, as defined under the first schedule of the Freshwater Fisheries Regulations 1983, include brown and rainbow trout, salmon, and perch while game bird species (first schedule of the Wildlife Act 1953) include introduced species such as mallard duck, pheasant and quail and some native species such as NZ shoveler, grey duck and paradise duck.

The Department liaises closely with fish and game councils through regular attendance at council meetings and through supporting council initiatives which are consistent with the Department's own conservation priorities.

The Conservation Act states that nothing in any sports fish and game management plan should conflict with a CMS.

46.1 Objectives

(i) To maintain a good liaison with the Taranaki, Wellington and Auckland/Waikato Fish and Game Councils .

(ii) To support fish and game council management of the sports fish and game resource within the Conservancy where it does not compromise natural or historic values.

(iii) In conjunction with fish and game councils, provide for gamebird hunting and sports fishing on land administered by the Department where this does not compromise natural or historic values or other recreational users.

46.2 Explanation

The Conservancy encompasses most of the Taranaki Fish and Game Council and parts of the Wellington and Auckland/Waikato Fish and Game Councils (Figure 34).

Generally, there are few game bird hunting opportunities on land administered by the Department within the Conservancy. Major exceptions are some of the wildlife

management reserves in the Manawatu and Wanganui areas (e.g. Pukepuke Lagoon). The Department will allow the continued recreational use of these areas, while also maintaining a close relationship with fish and game councils over management of the areas.

46.3 Implementation

(i) *Conservancy staff will regularly attend meetings of the Taranaki and Wellington Fish and Game Councils, while liaison with the Auckland/Waikato Fish and Game Council will be maintained through Waikato Conservancy Office.*

(ii) *Recreational hunting and angling will be allowed in specific areas administered by the Department, providing the use does not compromise the safety of other users or the natural or historic values.*

(iii) *Game bird and sportsfish management in areas administered by the Department will be jointly managed by fish and game councils and the Department. The Department will determine the extent and nature of any restrictions to be applied to the management of gamebirds and sportsfish on land administered by the Department in order to protect natural or historic values. These restrictions will be communicated by field centre managers to fish and game councils for implementation as appropriate.*

(iv) *The Department will support fish and game council programmes which preserve and enhance wetland and riparian habitats.*

(v) *The Department will review fish and game council operational plans and fish and game management plans to ensure they do not conflict with this CMS or any CMPs.*

46.4 Outcomes

- Maintenance of a good relationship between the Department and fish and game councils.
- Management of areas administered by the Department so that use of those areas by game bird hunters and anglers is provided for, without compromising natural and historic values and other appropriate recreation uses.

CONTENTS

PART D - IMPLEMENTATION, MONITORING AND REVIEW

PART D

47 CMS Implementation

Conservation Management Strategies are implemented through the Department's annual business planning process. The business plan, prepared under Section 41(2)(d) of the Public Finance Act 1989, covers a 12 month period from July to June and serves as a financial contract between the Department and the Minister of Conservation.

47.1 Objectives

(i) To reflect the management objectives and implementation provisions of this CMS in annual business plans for the Conservancy.

(ii) To consult with the Taranaki/Wanganui and Rangitikei/ Hawke's Bay Conservation Boards on implementation of the CMS.

Cross Reference
See Sec. 45.3(iv)

47.2 Explanation

One of the main purposes of the CMS is to provide a guide to the priorities to be pursued in the Conservancy over the next 10 years and beyond. The CMS therefore establishes targets which the Conservancy will aim to achieve. Annual business plans will seek to achieve these priorities as personnel and finances permit and depending on the priorities of the government of the day.

Annual business plans will detail the relative allocation of effort and funds to achieve the management objectives identified in the CMS. There is a clear auditable trail from this strategy, through the business plan and project planning sheets, to on-the-ground effort, expenditure and conservation achievement.

If significant investment is proposed to be made outside of or in conflict with the CMS, it will be reviewed by the Department in consultation with the conservation boards.

47.3 Implementation

(i) Business plans will be prepared to reflect objectives set out in the CMS.

(ii) The conservation boards will be consulted on priorities for the Conservancy prior to preparation of business plans.

47.4 Outcome

- Implementation of the CMS will be achieved through the business planning process.

48 CMS Monitoring and Review

Monitoring of the CMS will be carried out to ensure that its provisions are implemented effectively, that the provisions of the CMS are still current and that they are serving the best interests of conservation in the Conservancy. Conservation boards will play an important role in this regard.

Throughout the 10 year timeframe of the CMS it may be necessary for amendments to be made to reflect changed priorities or where provisions have become outdated or provide inadequate direction. There is a requirement under the Conservation Act 1987 to review CMSs no later than 10 years after they are approved.

48.1 Objective

Ensure that the CMS is a current and effective policy document through on-going monitoring, subsequent amendment and review.

48.2 Explanation

(a) Monitoring

Many opportunities exist for the Department to monitor progress in achieving the objectives of the CMS. Monthly financial reporting on projects along with four monthly and annual performance reporting against the Conservancy business plan provides two such opportunities.

Cross Reference
See Sec 45

Section 6 M(c) of the Conservation Act establishes one of the functions of the conservation board to advise the New Zealand Conservation Authority and the Director-General on the implementation of Conservation Management Strategies. A process will be established to give the conservation boards regular opportunity to review progress in achieving the objectives and implementation provisions of the CMS.

Other agencies and groups also have a shared interest in the implementation and monitoring of the CMS. Of particular note are the interests of Tangata Whenua, for the monitoring of the CMS.

(b) Review

Processes for the review and amendment of CMSs are provided for in Sections 17(H) and 17(I) of the Conservation Act. The procedures for review and amendment are the same as those for preparation and approval of the CMS as set out in Appendix 3.

A review of the CMS as a whole, or in part, may be initiated at any time by the Director-General after consultation with the appropriate conservation boards. The entire CMS must be reviewed not later than 10 years after its approval, although the Minister of Conservation may extend this period.

Amendment to the CMS may be initiated at any time by the Director General after consultation with the appropriate conservation boards. Every amendment must be carried out in accordance with Section 17F of the Conservation Act.

Where any proposed amendment is of such a minor nature that the Director General and the conservation boards consider the amendment will not materially affect CMS objectives, a simple process may apply and no formal public consultation will be required.

48.3 Implementation

(i) *Continue to provide the conservation boards with a precis of four monthly and annual reports on performance against the Conservancy business plan.*

(ii) *Assess all changes in national priorities and Government direction to determine what changes, if any, must be made to the CMS to reflect these.*

(iii) *Convene a meeting of the conservation boards in the middle of each board's three year term to monitor implementation of the CMS and to recommend appropriate responses to changing circumstances.*

(iv) *Review or amend the CMS when:*

- *directed by the Director General of Conservation*
- *when general policy or government directions represent a significant departure from provisions of the CMS*
- *when CMS monitoring indicates that its provisions are impractical or have been superceded by new information or evidence*
- *if the Department intends to prepare a conservation management plan but there is no provision for it in the CMS.*

48.4 Outcome

- The CMS always remains relevant to conservation management in the Conservancy.

CONTENTS

PART E - REFERENCES

PART E

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CONTENTS

PART F - APPENDICES

PART F

Appendix 1

PRINCIPLES OF THE TREATY OF WAITANGI

The meaning of the 'Principles of the Treaty' will vary depending on context.

Four key principles are identified:

- to act reasonably and in good faith (partnership - principle of co-operation and share obligations
- to make informed decisions
- to avoid action which will prevent the redress of claims
- Government must be able to govern.

Note (1)

The 'Partnership' principle is a shorthand means of describing the elements which the Treaty envisaged would reflect the relationship between the Crown and Maori. Those elements include notions of reasonableness, awareness of the other partner's views, willingness to accommodate those views, fairness and good faith. In short, co-operation.

Note (2)

To inform oneself does not always require consultation. Consultation is not negotiation. While agreement between the parties is the ideal it is not necessarily required. Nature and scope of consultation required will depend on the purpose and objectives of consultation. Early consultation is important. (Refs: Te Puni Kokiri's publication on consultation)

Note (3)

In the Broadcasting Assets Case, the Privy Council stated that the principles comprised 'the underlying mutual obligations and responsibilities which the Treaty places on the parties' (at p 5). The Privy Council also noted that the obligations imposed are 'not absolute and unqualified'. Further, 'this relationship the Treaty envisages should be founded on reasonableness, mutual co-operation and trust' (at p 5).

Note (4)

This statement was prepared by the Director-General of Conservation for the February meeting of the New Zealand Conservation Authority in 1994.

SUMMARIES OF THE PRINCIPLES OF THE TREATY OF WAITANGI

WAITANGI TRIBUNAL	COURT OF APPEAL
The Essential Bargain	
The exchange of the right to make laws for the obligation to protect Maori interests.	The acquisition of sovereignty in exchange for the protection of rangatiratanga.
Partnership	
The Treaty implies a partnership exercised with utmost good faith. Treaty is an agreement that can be adapted to meet new circumstances. The needs of both Maori and the wider community must be met, which will require compromises on both sides. The courtesy of early consultation. The principle of choice: Maori, Pakeha, and bicultural options.	The Treaty requires a partnership and the duty to act reasonably and in good faith (the responsibilities of the parties being analogous to fiduciary duties). The freedom of the Crown to govern for the whole community without unreasonable restriction. Maori duty of loyalty to the Queen, full acceptance of her Government through her responsible Ministers, and reasonable co-operation.
Active Protection	
The Maori interest should be actively protected by the Crown. The granting of the right of pre-emption to the Crown implies a reciprocal duty for the Crown to ensure that the Tangata Whenua retain sufficient endowment for their foreseen needs. The Crown cannot evade its obligations under the Treaty by conferring its authority on some other body. The 'taonga' to be protected include all valued resources and intangible assets.	The duty of the Crown is not merely passive but extends to active protection of the Maori people in the use of their lands, and other guaranteed taonga to the fullest extent practicable. The obligation to grant at least some form of redress for grievances where these are established.
Tribal Rangatiratanga	
The Crown obligation to legally recognise tribal rangatiratanga. Tino rangatiratanga includes management of resources and other taonga according to Maori cultural preferences.	Maori to retain chieftainship (rangatiratanga) over resources and taonga and to have all the rights and privileges of citizenship.

Note: The wording provided in this summary is that used in the original sources. The original sources include the decision of the Waitangi Tribunal and in case law from the Court of Appeal. These sources are indicated in: Environmental Management and the Principles of the Treaty of Waitangi (1988).

Appendix 2:

GLOSSARY

active management

Historic places on land administered by the Department or for which it is responsible:

(a) management of which involves specific business plan expenditure.

(b) which have a special protected status e.g. historic reserve or classified historic place.

advocacy

The collective term for work done to promote conservation to the public and outside agencies by the Conservation Department, conservation boards and the New Zealand Conservation Authority. Advocacy includes taking part in land use planning processes and using a range of methods to inform and educate the public and visitors on conservation issues.

amend

In relation to conservation management strategies, conservation management plans, freshwater fisheries management plans and sports fish and game management plans, means any change that does not affect the objectives of the strategy or plan. Such a change may not require a full public process.

(Conservation Act 1987)

amenity values

Those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, cultural and recreational attributes.

(Resource Management Act 1991)

archaeological site

Any place in New Zealand that:

(a) Either

- was associated with human activity that occurred before 1900, or
- is the site of the wreck of any vessel where that wreck occurred before 1900 and

(b) Is or may be able through investigation by archaelogical methods to provide evidence relating to the history of New Zealand.

(Historic Places Act 1993)

assessment of significance

There are two types of assessment:

(a) Non-statutory, or in-house assessment of significance.

(b) Formal assessment of significance determined by the Historic Places Trust.

biological community

A group of plants or animals, of distinctive character related to a particular set of environmental requirements. The term is used in a general, collective sense.

biodiversity/biological diversity

The variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems.

(United Nations Convention on Biological Diversity 1992)

coastal environment

An environment in which the coast usually is a significant part or element. The extent of the coastal environment will vary from place to place depending how much it affects or is (directly) affected by coastal processes and the management issue concerned. It includes at least three distinct, but interrelated parts; the coastal marine area, the active coastal zone, and the land back-drop.

coastal marine area

The area of foreshore and seabed between the outer limit of the territorial sea and mean high water springs. At river mouths the landward boundary is the lesser of; one kilometre upstream or five times the width of the river mouth.

(Resource Management Act 1991)

concession or concession document

Means a lease, or a licence, or a permit or an easement granted under Part IIIB of the Conservation Act 1987 and includes any activity authorised by the concession document.

(Conservation Act 1987)

conservation plan

A document that outlines the cultural significance of an historic place and specifies the nature of the physical works to be undertaken in order to conserve it.

conservancy

The Department of Conservation has 14 regional offices in different parts of the country. Each office and/or the region it is responsible for is called a conservancy.

conservation

In respect of conservation areas, means 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.

(Conservation Act 1987)

conservation area

All land, foreshore and interest in land held under the Conservation Act 1987.

(Conservation Act 1987)

conservation boards

There are 17 regional conservation boards, each comprising not more than 12 appointed members. Their functions include overseeing the preparation of the conservation management strategies and national park management plans for their area, approval of conservation management plans (e.g. for the Sugar Loaf Islands Marine Protected Area), advising the New Zealand Conservation Authority or Director-General of Conservation on regional conservation matters and advising on new walkways.

(Conservation Act 1987 s6M)

conservation management plan (CMP)

A plan for the management of natural and historic resources, and for recreation, tourism and other conservation purposes which implements the conservation management strategy and establishes detailed objectives for integrated management within any area or areas specified in a conservation management strategy.

(Conservation Act 1987 s17E)

conservation management strategy (CMS)

A strategy which implements General Policies and establishes objectives for the integrated management of natural and historic resources and for recreation, tourism and other conservation purposes. The strategy is reviewed every 10 years.

(Conservation Act 1987 s17D)

consultation

A genuine invitation to give advice and genuine consideration of that advice. To achieve consultation, sufficient information must be supplied and sufficient time allowed by the consulting party to the consulted to enable it to tender helpful advice. It involves an ongoing dialogue.

(adapted from McGechan decision in Air New Zealand v Wellington International Airport (CP403/91, 6 January 1992))

corporate plan

An annual plan which the Department is required to prepare.

(Public Finance Act 1989)

CRI

Coastal Resource Inventory (CRI). It is a programme undertaken by the Department of Conservation to identify important physical, biological and human resources in the coastal zone. The programme is organised into First, Second and Third Order Surveys.

Department, the

Department of Conservation.

district plan

This is prepared and changed by the territorial authority according to the requirements of the Resource Management Act 1991 for the purpose of sustainable management of natural and physical resources. District plans indicate what uses are permitted for land within the district.

(Resource Management Act 1991)

ecology

The study of organisms in relation to one another and to their surroundings.

(NZ Pocket Oxford Dictionary)

ecological district

One of the major levels used for the ecological classification of land. New Zealand has been divided into 268 ecological districts according to geological, topographical, climatic and biological features and processes, which interrelate to produce characteristic landscapes and ranges of biological communities.

(The New Zealand Protected Natural Areas Programme, DSIR)

ecological region

A single, very distinctive ecological district or more commonly, a group of adjacent ecological districts which have diverse but closely related ecological components and relationships.

(The New Zealand Protected Natural Areas Programme, DSIR)

ecosystem

A biological system comprising a community of living organisms and their environment involved together in the process of living. There is a continuous flow of energy and matter through the system. The concept implies process and interaction. They range in size from small freshwater ponds to Earth itself.

endangered

A plant or animals in danger of extinction and whose survival is unlikely if the casual factors continue.

(Red Data Book of New Zealand 1981)

endemic

Refers to species of plants and animals which are unique to an area or animals which may migrate but breed only in the area.

(Red Data Book of New Zealand 1981)

ephemeral wetlands

Wetlands which have surface water for only part of the year, or which dry out in some years and not others. Some species that use ephemeral wetlands do not occur in permanent wetlands.

esplanade reserve

A local purpose reserve usually 20 metres wide, vested in the territorial authority or in the Crown with the purposes of protecting conservation values, enabling public access to or along the sea, a river or lake and recreational use where this is compatible with conservation values. Usually created as a result of subdivision of private land. Refer marginal strips.

(Resource Management Act 1991, Reserves Act 1977)

estuary

A broad tidal area associated with a river where there is a mixing of saline and freshwater.

(Draft New Zealand Coastal Policy 1992)

fauna

Animal life of a place or time.

(Collins Concise Dictionary)

field centre

Each conservancy is divided into field centre areas. Each field centre is responsible for the day-to-day management of its area.

fish and game councils

Fish and game councils are responsible for the management of sports fish and game birds for the benefit of recreational hunters and anglers. Council members are elected by licence holders for a three year term.

fishery

One or more stocks or species of freshwater fish or aquatic life that can be treated as a unit for the purposes of conservation or management.

(Conservation Act 1987)

flora

Plant life of a given place or time.

(Collins Concise Dictionary)

foreshore

Shore between high- and low-water marks at mean spring tides.

(Conservation Act 1987)

Forest Heritage Fund

A nationally contestable fund established by Government in 1990 to help fund the voluntary and permanent protection of indigenous forest and associated vegetation on private land.

freshwater fish

Species of finfish (classes Agnatha and Osteichthyes) and shellfish (classes Mollusca and Crustacea) that spend all or part of their life histories in freshwater.

(Conservation Act 1987)

functional planning

Strategic assessment for a single function of the Department over a wide geographic area. For example, wild animal control plans for a conservancy, or conservation strategies.

(Management Planning Guidelines, DOC)

general policy

Is a guide for decisions based on general approaches. General policy is used to mean a statement, directive or guide adopted by the Minister of Conservation, or the New Zealand Conservation Authority following a statutory process under the Conservation Act, National Parks Act, Reserves Act, Wildlife Act, Marine Reserves Act, Wild Animals Control Act, Marine Mammals Protection Act and the New Zealand Walkways Act. Conservation management strategies are required to implement statements of General Policy.

(Management Planning Guidelines, DOC)

habitat

The environment in which a particular species or group of species lives. It includes the physical and biotic characteristics that are relevant to the species concerned. For example, the habitat of the blue duck consists of swift water with an abundance of freshwater insects.

hapu

A group of extended families recognising a common ancestor.

historic area

An area of land that:

(a) Contains an inter-related group of historic places; and

(b) Forms part of the historic and cultural heritage of New Zealand; and

(c) Lies within the territorial limits of New Zealand

(Historic PlacesAct 1993)

historic place

Any land (including an archaeological site), building or structure (including part of a building or structure); or any combination of land and a building or structure that forms part of the historic and cultural heritage of New Zealand and lies within the territorial limits of New Zealand; and includes anything that is in or fixed to such land.

(Historic Places Act 1993)

Historic Places Act registrations

Category I: Places of special or outstanding historic or cultural heritage significance or value:

Category II: Places of historic or cultural heritage significance or value.

Historic Places Act 1993

ICOMOS

The International Council on Monuments and Sites. Established by UNESCO to set world standards for cultural heritage preservation.

indeterminate (species)

A plant or animal known to be extinct, endangered, vulnerable, or rare, but where there is not enough information to say which of the four categories is appropriate.

(Red Data Book of New Zealand 1981)

integrated management

The management of activities, existing or potential, in a manner which ensures that each is in harmony with the other and that priorities are clear.

international visitors

International visitors are people visiting New Zealand from overseas who are not New Zealand citizens.

IUCN

International Union for the Conservation of Nature and Natural Resources - the World Conservation Union, based in Geneva. Comprises governments and non government organisations.

intrinsic value

This is a concept which regards the subject under consideration as having value in its own right independent of any value placed on it by humans. Elements of intrinsic value with respect to ecosystems can include their integrity, form, uniqueness, functioning inter-relationships and resilience. (refer biodiversity)

implementation provisions

Specific statements on how objectives are to be achieved which may include criteria for assessment.

(Management Planning Guidelines, DOC)

interpretation

Conveying information about the origin, meaning or values of national or cultural heritage via live, interactive or static media. It occurs in the vicinity of the subject and is designed to stimulate visitor interest, increase understanding and promote support for conservation.

iwi

A group of several sub-tribes which share common ancestral links.

iwi authority

The authority which represents an iwi and which is recognised by that iwi as having authority to do so.

(Resource Management Act 1991)

kainga, kaika

Village, settlement, home.

(Waitangi Tribunal Report (Wai 27) 1991)

kaitiakitanga

The exercise of guardianship. In relation to a resource this includes the ethic of stewardship based on the nature of the resource itself.

(Resource Management Act 1991)

kaupapa

An abstract word with many meanings. Within the Department it is generally used in the sense of vision, philosophy, cause, idea or theme.

land administered by the Department

All land held, managed or administered under the Conservation Act and other Acts administered by the Conservation Department (refer First Schedule of the Conservation Act 1987).

Land Acquisition Fund

A Departmental fund which is used to meet costs associated with the establishment of statutory protection over areas of private and Maori land.

lease

A grant of an interest in land that:

- gives exclusive possession of the land and
- makes provision for any activity on the land that the leasee is permitted to carry out.

(Conservation Act 1987)

licence

Is a

- profit a prendre, (the right to take produce from land and/or a grazing right) or any other grant that gives a non exclusive interest in land or
- a grant that makes provision for an activity on the land that the licencee is permitted to carry out.

(Conservation Act 1987)

mahinga kai, mahika kai,

Places where food is procured or produced.

(Waitangi Tribunal Report (Wai 27) 1991)

mana

Authority, control, influence, prestige, power.

(Waitangi Tribunal Report (Wai 27) 1991)

mana whenua

Customary rights and authority over land *(Waitangi Tribunal Report (Wai 27) 1991)* customary authority exercised by an iwi or hapu in an identified area.

(Resource Management Act 1991)

management planning

The process of setting and confirming objectives for the management of natural and historic resources,and recreation, tourism and other conservation purposes, and specifying the actions and resources necessary to achieve those objectives.

(Management Planning Guidelines, DOC)

marginal strip

Land reserved from disposition by the Crown under the Land Act 1948 and the Conservation Act 1987 along the foreshore, waterways greater than 3 metres wide (when are not used by the Electricity Corporation of New Zealand for generating electricity) and lakes. Marginal strips are 20 metres wide unless a reduction of width has been approved by the Minister. For more information refer to the Act.

(Conservation Act 1987)

mataitai

Means food resources from the sea and mahinga mataitai means the areas from which these resources are gathered.

mauri

Life principle, special character.

(The Revised Dictionary of Maori, P.M. Ryan)

natural area

A place which has predominantly indigenous species (i.e. which has a high degree of *naturalness*) . Usually this means that the vegetation will be dominated by indigenous plants, but some natural areas lack obvious plants and are dominated by indigenous animals (e.g. inter-tidal mudflats or seabird colonies on cliffs); unmodified geological or landform features with few or no obvious plants or animals can be regarded as natural (e.g. limestone caves, shingle riverbeds, coastal cliffs).

natural character

The qualities of an area that taken together give it a particular, recognisable character. These qualities may be ecological, physical, spiritual or aesthetic in nature.

natural value

Having importance for the presence of indigenous species or ecosystems, or unmodified landforms (see *naturalness*).

naturalness

The degree to which a place is characterised by indigenous species (see *natural area, natural value*). A high degree of naturalness occurs when there are few or no impacts from exotic species, including human impacts.

natural hazard

Section 2 of the Resource Management Act defines a 'Natural Hazard' as: 'any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment'.

(Resource Management Act 1991)

natural resources

Include plants and animals and their habitats, landscape and landforms, geological features, and systems of interacting living organisms, and their environment.

(Conservation Act 1987)

nature conservation

The preservation and protection of the natural resources of New Zealand having regard to their intrinsic values and having special regard to indigenous flora and fauna, natural ecosystems and landscape.

(Conservation Act 1987)

New Zealand Conservation Authority (NZCA)

A national body of 12 appointed members established under section 6a of the Conservation Act 1987. Amongst other functions, its has the statutory responsibility for approving General Policy, conservation management strategies, plans and national park management plans.

(Conservation Act 1987)

Nga Whenua Rahui

A fund established to facilitate the voluntary protection of indigenous forest on Maori owned land.

objectives

Statements of intended results. These can be broad or narrow in scope and should be accompanied by implementation provisions.

(Management Planning Guidelines, DOC)

original character

Also includes original vegetation and original landscape. Original means the nature of the vegetation or landscape as it was before human intervention. In practice, where Maori modification of vegetation was not conspicuous, original can be equated with 'as it was when Europeans arrived'.

pa

Fortified village, or more recently any village.

(Waitangi Tribunal Report (Wai 27) 1991)

permit

A grant of rights to undertake an activity that does not require an interest in land.

(Conservation Act 1987)

power generation

The process where electricity is generated and does not include the means by which it is distributed

Protected Natural Areas Programme (PNAP)

A programme which aims to establish a network of reserves and other protected natural areas which is representative of the full range of New Zealand's natural diversity. Ecological districts are surveyed and areas identified which best represent the diversity of their natural features. These are termed recommended areas for protection or RAPs.

protection plan

A plan that outlines how the Conservancy's historic places are going to be legally protected. It includes a database of those places.

preservation

In relation to resources under the Conservation Act 1987, means the maintenance, so far as is practicable, of their intrinsic value.

(Conservation Act 1987)

productivity, biological

The rate at which growth processes occur either in an ecosystem or in an organism. It is normally expressed as: the weight of dry matter/unit area/unit time (e.g. kg/ha/year).

preservation

In relation to resources under the Conservation Act 1987, means their maintenance, as far as is practicable, in their current state but includes restoration to some former state and augmentation, enhancement or expansion.

(Conservation Act 1987)

rahui

A restriction on access, prohibition.

(Waitangi Tribunal Report (Wai 27) 1991)

rare

Species with small world populations that are not at present endangered or vulnerable, but are at risk.

(Red Data Book of New Zealand 1981)

recommended area for protection (RAP)

A place identified as a priority for protection because it contains the best example(s) of its type or class of natural ecosystem and/or landscape in an ecological district.

(NZ Protected Natural Areas Programme, NZ

Biological Resources Centre Publication No. 6)

Recreation Opportunity Spectrum (ROS)

The ROS is a system for classifying outdoor experiences. It identifies opportunities along a continuum from urban to wilderness. It has eight main categories and provides both an inventory and planning process.

regional councils

Locally elected councils which have primary responsibility for management of water, soil, geothermal resources and pollution control. They are also responsible for regional aspects of hazard mitigation, soil conservation and hazardous substances.

regional plans

The purpose of these is to assist regional councils to carry out their functions. They are designed to address specific resource management issues for which regional councils are responsible. Councils must decide what regional plans they will prepare. Plans may cover matters such as water management, soil conservation, natural hazard mitigation and air pollution (refer regional policy statement).

(Resource Management Act 1991)

regional policy statements

These set out the objectives for managing resources and are prepared by regional councils in accordance with the Resource Management Act 1987. They provide the overall framework for achieving sustainable management in the region and are binding on regional and district plans.

(Resource Management Act 1987, Regional Policy Statements and Plans, Ministry for the Environment)

rehabilitation

To return a degraded ecosystem or population to an undegraded condition, which may be different from its original condition.

(IUCN 1991)

restoration

Means returning a place as nearly as possible to a known earlier state by reassembly, reinstatement and/or the removal of extraneous additions.

(ICOMOS 1993)

review

In relation to conservation management strategies and management plans means to reconsider objectives and policies and following a process of public comment, to approve a new strategy or plan, having regard to increased knowledge or changed circumstances.

(Conservation Act 1987)

rohe

Boundary, tribal region.

(Waitangi Tribunal Report (Wai 27) 1991)

runanga

Assembly, council.

(Waitangi Tribunal Report (Wai 27) 1991)

significance assessment

An assessment of the values of a historic place based on the criteria set out in section 23 of the Historic Places Act 1993.

specially protected areas

Conservation parks, wilderness areas, ecological areas, sanctuary areas, watercourse areas as detailed in Part IV of the Conservation Act 1987.

(Conservation Act 1987)

species recovery plan

A plan of action intended to halt the decline of a threatened species and increase its population.

SSWI

Sites of Special Wildlife Interest. A list of areas identified by the former New Zealand Wildlife Service which provide important habitat for wildlife.

state areas

"State area" means -

- Any conservation area;
- Any National Park within the meaning of the National Parks Act 1980;
- Any land of the Crown within the meaning of section 176 of the Land Act 1948;
- All land administered as maritime park; and
- Any other area or class of land (whether or not vested in or administered by the Crown) declared by Order in Council to be a State area for the purposes of this Act.

(Forest and Rural Fires Act 1977)

stewardship area

Land held under the Conservation Act which is not a marginal strip or a specially protected area (ref sections 16-23 of the Conservation Act) such as a conservation park, ecological area, sanctuary area, wilderness area, or watercourse.

(Conservation Act 1987)

sustainability, ecological

The use of the components of an ecosystem in ways that allow for the perpetuation of the character and natural processes of that ecosystem.

sustainable management

'Managing the use, development, and protection of natural and physical resources in a way or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while (a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations, (b) safe-guarding the life-supporting capacity of air, water, soil, and ecosystems, and (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.' This definition is specific to the Resource Management Act 1991.

(Resource Management Act 1991)

taiapure

An area established under the Fisheries Act 1983 as an area of estuarine or coastal water of special significance to any Iwi or Hapu, either as a source of food or for spiritual or cultural reasons, and administered for the conservation of the fish, aquatic life, and seaweed.

taking

In relation to plants this includes breaking, cutting, destroying, digging up, gathering, plucking, pulling up and removing of the plant. In relation to fish it means fishing.

(Conservation Act 1987)

Tangata Whenua

People of a given place *(Waitangi Tribunal Report (Wai 27) 1991)* in relation to a particular area, means the iwi, or hapu that holds mana whenua over that area.

(Resource Management Act 1991)

taonga

Prized possession, property.

(Waitangi Tribunal Report (Wai 27) 1991)

territorial authorities/councils

These terms are used to refer to district and city councils. These are locally elected bodies responsible, amongst other things, for land use planning under the Resource Management Act 1991.

threatened, (species)

A term used loosely to include species that are rare, vulnerable, endangered and of indeterminate status.

tikanga Maori

Maori customary values and practices.

(Resource Management Act 1991)

tourists

Tourists are visitors who stay away from their usual place of residence for one or more nights. They may be from New Zealand or overseas and are a subset of visitors.

traditional site

A place or site that is important by reason of its historical significance or spiritual or emotional association with Maori.

(Historic Places Act 1980)

urupa

Cemetery, burial ground.

(Waitangi Tribunal Report (Wai 27) 1991)

visitors

Visitors are people who visit land administered by the Department for recreation; participating in activities for personal satisfaction, interest or enjoyment. Visitors include adults and children, from both New Zealand and overseas, and they may either arrange their own visit or use the services of a concessionaire. The term 'user' can also be used to describe 'visitor'.

vulnerable

A plant or animal believed likely to move into the endangered category in the near future if the casual factors continue.

(Red Data Book of New Zealand 1981)

wahi tapu, waahi tapu

Sacred place.

(Waitangi Tribunal Report (Wai 27) 1991)

walkway

An area of land that has been declared a walkway or an area of land over which a walkway has been established under the New Zealand Walkways Act.

(New Zealand Walkways Act 1990)

water conservation

Made to recognise and sustain those characteristics of a water body which afford outstanding amenity or intrinsic values. They are made by the Minister for the Environment on the recommendation of a special tribunal and/or the Environment Court.

(Resource Management Act 1991)

WERI

Wetlands of Ecological and Representative Importance. A register of ecologically important wetlands.

wetland

Permanent or intermittently wet areas, shallow water and land-water margins. Wetlands may be fresh, brackish or saline, and are characterised in their natural state by plants or animals that are adapted to living in wet conditions.

(NZ Wetlands Management Policy 1986)

whanau

Family.

wild animal

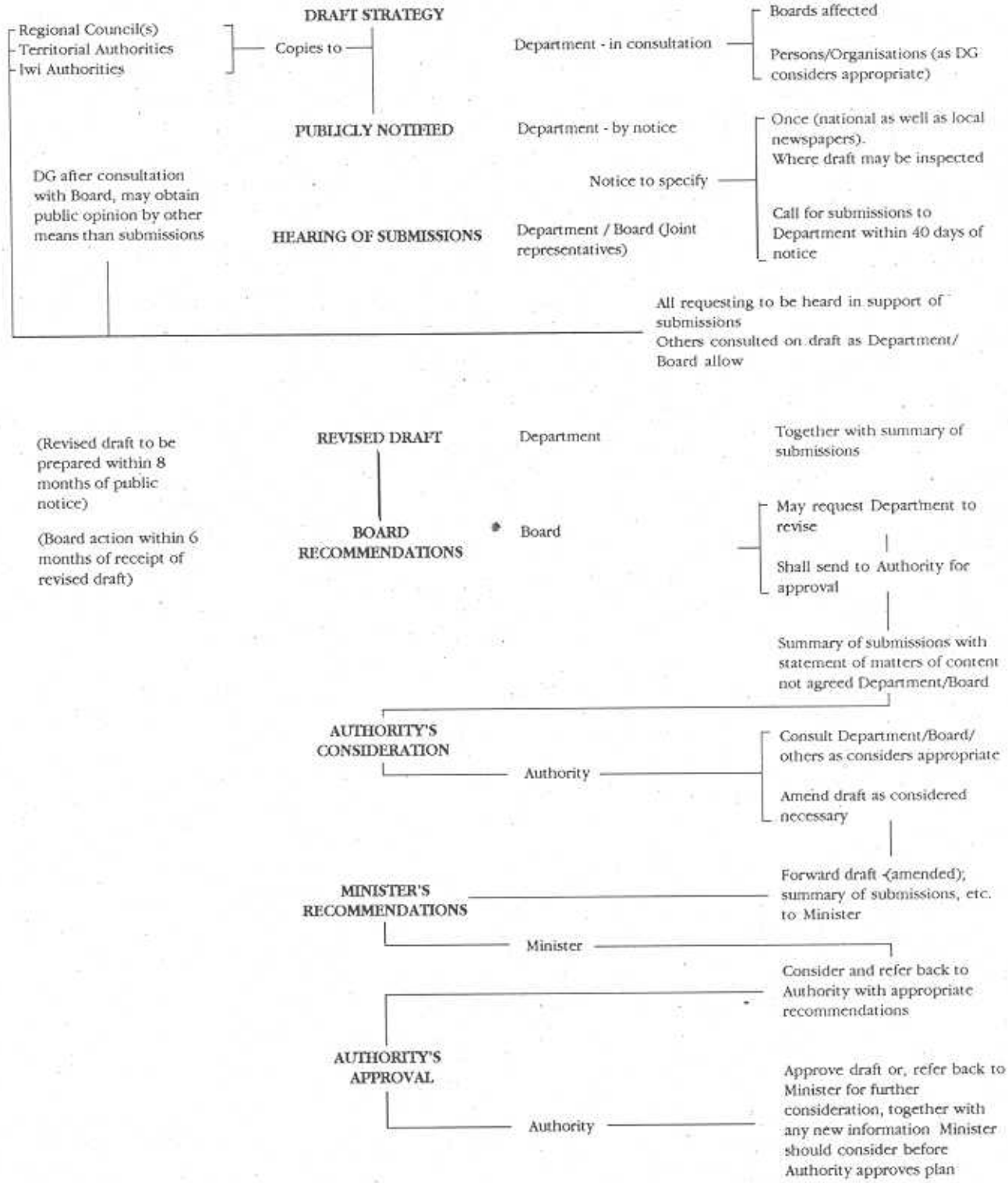
Deer, chamois, thar, wallaby and possum, goats and pigs that are living in a wild state. Except for deer kept in captivity for farming, does not include animals kept in captivity or rats, mice, rabbits, stoats, ferrets or weasels. Refer to the Act for the legal definition.

(Wild Animal Control Act 1977)

Appendix 3

PROCEDURE FOR PREPARATION AND APPROVAL OF CONSERVATION MANAGEMENT STRATEGIES

Section 17F Conservation Act 1987



Appendix 4

PART A

OTHER ACTS ADMINISTERED BY THE DEPARTMENT WHICH ARE RELEVANT TO THE WANGANUI CONSERVANCY AND REGULATIONS ADMINISTERED BY THE DEPARTMENT

Historic Places Act 1993

The Historic Places Trust has functions and powers under this Act and reports to the Minister of Conservation.

Marine Mammals Protection Act 1978

This Act provides for the protection, conservation and management of marine mammals.

Marine Reserves Act 1971

This Act provides for the setting up and management of areas of sea and foreshore as marine reserves for the purpose of preserving them in their natural state as a habitat for marine life for scientific study.

Mount Egmont Vesting Act 1978

This Act provides for the symbolic return of Mount Egmont to the Taranaki Maori Trust Board on behalf of the Maori tribes concerned, and the gift of the mountain back to the Crown by the Board for the purposes of a national park for the use and enjoyment of all the people of New Zealand.

National Parks Act 1980

This Act provides for the protection of areas of New Zealand that contain scenery of such distinctive quality, ecological systems, or natural features so beautiful, unique, or scientifically important that their preservation is in the national interest.

Native Plants Protection Act 1934

This Act provides protection for native plants.

New Zealand Walkways Act 1990

This Act establishes and maintains public walking tracks over public and private land in New Zealand.

Queen Elizabeth II National Trust Act 1977

The Minister of Conservation administers this trust which encourages and promotes the provision, protection and enhancement of open space.

Reserves Act 1977

This Act makes provision for the acquisition, control, management, maintenance, preservation, development and use of reserves.

Sugar Loaf Islands Marine Protected Area Act 1991

This Act provides for the setting up and mangement of the Sugar Loaf Islands Marine Protected Area for the purpose of protecting that area of the sea and foreshore in its natural state as the habitat of marine life, and to provide for the enhancement of recreational activities.

Freshwater Fisheries Regulations 1983

These regulations were originally made under the Fisheries Act 1983, and are now administered by the Department pursuant to the Conservation Act 1987 (as amended by the Conservation Law Reform Act 1990). The Department's role is to manage and conserve freshwater fisheries and fishery resources in New Zealand and maintain free passage for freshwater fish.

Trade in Endangered Species Act 1989 and Regulations

This Act regulates the export and import of specified endangered species or any product from those species.

Wild Animal Control Act 1977 (and various regulations)

This Act applies to land of all tenures and provides for the control of wild animals generally, and for the eradication of wild animals locally. The Act is administered to ensure concerted action against the damaging effects of wild animals, co-ordinate hunting measures and provide for the regulation of recreational and commercial hunting. The Department's responsibilities include permitting and licensing to capture, keep or move wild animals, carrying out special provisions for management of goats, animal recovery operations and deer farming regulations.

Wildlife Act 1953 and Wildlife Regulations 1955

This Act provides for the protection of all native (indigenous) mammals, most native birds, reptiles, amphibians and some terrestrial invertebrates. The regulations address the farming of species that are potentially detrimental to protected species.

Whitebait Regulations 1994

These regulations were made under the Conservation Act 1987 and specify the length of season, type and number of nets, hours of fishing, and allow by permit, the taking of whitebait outside the season, for hui or tangi.

PART B.

OTHER RELEVANT ACTS AND REGULATIONS WHICH EMPOWER OR BIND THE DEPARTMENT

The Resource Management Act 1991

The Department uses processes under the Resource Management Act 1991 to advocate the conservation of natural, historic and physical resources. The mandate for this activity comes from section 6 of the Conservation Act 1987.

The Department will use provisions of this Act to seek protection for wildlife and fisheries habitat on land not administered by the Department.

Day to day responsibility for coastal administration and management in the Coastal Marine Area (below MHWS) is the responsibility of regional councils. Each regional council was required to prepare a regional coastal plan by 1 October 1993, which was to be approved by the Minister of Conservation. This plan is to cover all matters below MHWS, except for fisheries and navigation issues.

The Minister of Conservation is responsible for preparing the New Zealand Coastal Policy Statement (NZCP) which covers the 'coastal environment'. Regional policy statements, regional plans and district plans are not to be inconsistent with NZCP or any other national policy statement. Applications for coastal activities with major impacts will be dealt with as Restricted Coastal Activities and will require the consent of the Minister of Conservation.

The key processes that the Department of Conservation will participate in are preparation of policy statements, plans, resource consent applications and heritage orders.

Forest and Rural Fires Act 1977 and Regulations

The Department is a Rural Fire Authority. Its powers and responsibilities are covered by this Act. The Department must prepare fireplans, issue burning permits, control fires and liaise with various fire authorities. It also manages a 1 km fire safety margin surrounding every area of Crown land.

Forest Amendment Act 1993

This Act establishes a framework for the sustainable mangement of indigenous forests. It is administered by the Ministry of Forestry (MOF), although there are important roles for the Department. MOF is required to consult with the Department about applications for the harvesting and milling of indigenous timber for personal use, and about the approval of sustainable management plans.

Marine Pollution Act 1974

Ministry of Transport administers this Act which deals with the prevention and cleaning of oil pollution of the sea. The Department assists with regional planning and protection of marine mammals and wildlife.

Marine Farming Act 1971

The Ministry of Agriculture administers this Act which provides a framework, for the leasing, licensing and provisions of marine farming. The Department's powers are laid out in accordance with the Department's Marine Farming Policy and there is joint consent for marine farming licences, spat-catching areas, prohibited anchorages and mining interests.

Crown Minerals Act 1991

The Ministry of Commerce administers this Act. The Department grants access agreements under this Act.

Noxious Plants Act 1991

This Act is administered by the Ministry of Agriculture. The Department is bound by this Act to control noxious plants on land that it administers.

Treaty of Waitangi Act 1981

Observance and confirmation of the principles of the Treaty of Waitangi by the use of a tribunal to make recommendations on claims. Much of the land administered by the Department has claims under this Act.

Maori Purposes Act 1931

Administers land gifted to the Crown for preservation and managed as Scenic Reserves under the Reserves Act 1977.

Public Works Act 1981

The Department can grant consent to setting apart of conservation areas and reserves and declaring Crown/reserve land as road.

Appendix 5

APPROVED MANAGEMENT PLANS - WANGANUI CONSERVANCY

* denotes expired plans as at April 1997

		CONSERVATION UNIT NO	APPROVAL DATE	REVIEW DATE
1	Ratapihipihi Scenic Reserve	70422	2/11/81	2/11/91*
2	Rimutauteka Scenic Reserve	70528	3/2/84	3/2/94*
3	Everett Park & Makara Scenic Reserves	70526/527	21/3/84	21/3/94*
4	Te Urinui Pa Historic Reserve	70306	21/1/81	21/1/91*
5	Makuhou Scenic Reserve	70096	14/5/86	14/5/96*
6	Hazelburn Scenic Reserve	70158	14/5/86	14/5/96*
7	Kaikawaka Scenic Reserve	70186	14/5/86	14/5/96*
8	Manawatu Gorge Scenic Reserve	70027	18/2/86	18/2/96*
9	Bruce Park & Silverhope Scenic Reserves	70132/133	18/2/80	18/2/90*
10	Dress Circle Scenic Reserve	70160	18/12/81	18/12/91*
11	Rangiwahia Scenic Reserve	70185	10/3/82	10/3/92*
12	Mangoira Scenic Reserve	70188	10/3/82	10/3/92*
13	Pemberton Memorial Park Scenic Reserves	70161	12/1/82	12/1/92*
14	Omatane Scenic Reserve	70144	12/1/82	12/1/92*
15	Utiku Scenic Reserve	70155	3/6/82	3/6/92*
16	Te Rangipai Scenic Reserve	70140	3/6/82	3/6/92*
17	Puke Scenic Reserve	70159	27/4/82	27/4/92*
18	Bruce Memorial Scenic Reserve	70134	22/4/80	22/4/90*
19	Turangarere Scenic Reserve	70021	22/7/87	22/7/97
20	Kaitapa Scenic Reserve	70022	27/2/78	27/2/97*
21	Otaihape Scenic Reserve	70118	27/2/87	27/2/97*
22	Wanganui River Reserves (most now WNP)		29/3/82	29/3/92*
	No. 3 Scenic Reserve	70347		
	No. 100 Scenic Reserve	70352		
	No. 4 Scenic Reserve	70345		
	No. 5 Scenic Reserve	70346		
	No. 99 Scenic Reserve	70336		
	No. 7 Scenic Reserve	70287		
	No. 6 Scenic Reserve	70286		
	No. 8 Scenic Reserve	70285		
	Pipiriki Rubbish Reserve	70648		
	Pipiriki Government Building Reserve	70643		
	Ohoutahi Scenic Reserve	70267		
	Ranana/Morikau Scenic Reserve	70268		
	Tauakira Scenic Reserve	70079		

APPROVED MANAGEMENT PLANS - WANGANUI CONSERVANCY

		CONSERVATION UNIT NO	APPROVAL DATE	REVIEW DATE
	Moukuku Scenic Reserve	70099		
	Otawaki Scenic Reserve	70106		
	Paetawa Scenic Reserve	70105		
	Puketarata Scenic Reserve	70103		
	Wanganui River Scenic Reserve	70102		
	Ramahiku Conservation Area	70057		
	Kanihinihi Scenic Reserve	70101		
23	9 Taumarunui Scenic Reserves		Feb-87	Feb-97*
	Tapui Scenic Reserve	70288		
	Hikumutu Scenic Reserve	70329		
	Puawai Scenic Reserve	70547		
	Sunshine Scenic Reserve	70348		
	Taumaruiti Scenic Reserve	70364		
	Mihirangi Scenic Reserve	70299		
	Kakahi Scenic Reserve	70333		
24	Titirangi Scenic Reserve	70157	18/12/86	18/12/96*
25	Egmont National Park	70001	May-86	May-96*
26	Whanganui National Park	70005	1/3/89	1/3/99
27	Awahuri Scenic Reserve	70071	14/5/86	14/5/96*
28	Namunui Scenic Reserve	70117	18/12/86	18/12/96*
29	Paengaroa Scenic Reserve	70092	18/12/86	18/12/96*
30	Simpson Scenic Reserve	70148	18/12/86	18/12/96*
31	Te Kapua Scenic Reserve	70152	18/12/86	18/12/96*
32	Kahu Scenic Reserve	70154	18/12/86	18/12/96*
33	Mangaweka Scenic Reserve	70153	18/12/86	18/12/96*
34	Ohingaiti Scenic Reserve	70146	18/12/86	18/12/96*
35	Makohine Scenic Reserve	70151	18/12/86	18/12/96*
36	Himatangi Bush Scientific Reserve	70062	18/1/85	18/1/95*
37	Sugar Loaf Islands Marine Protected Area	70691	20/6/97	20/6/2007

Updated June 1997 *Copies of the above Management Plans are held in the Wanganui Conservancy Office library.*

NO.	NAME	CONSERVATION UNIT NO.	DATE PREPARED
1	Makino Scenic Reserve	70006	1981
2	Makino Scenic Reserve	70384	
3	Ngaurukehu Scientific Reserve	70028	1986
4	Apiti Scenic Reserve	70189	1986
5	Auputa Scenic Reserve	70197	1986
6	Galbraith Scenic Reserve	70193	1986
7	Karewarewa Scenic Reserve	70198	1986
8	Tunatau Scenic Reserve	70192	1986
9	Makiekie Scenic Reserve	70190	1986
10	Makopua Scenic Reserve	70191	1986
11	Kawhatau Scenic Reserve	70194	1990
12	Upper Kawhatau Scenic Reserve	70195	1990
13	Rangitane Forestry and Scenery Reserve	70196	1990
14	Pou Tehia Historic Reserve	70437	1981-86
15	Kawau Pa Historic Reserve	70432	1981-86
16	Mahoetahi Historic Reserve	70529	1981-86
17	Pukerangiora Pa Historic Reserve	70525	1981-86
18	Omata Stockade Historic Reserve	70662	1983
19	Awa-Te-Take Pa Historic Reserve	70524	1981-86
20	Pukearuhe Historic Reserve	70431	1971
21	Puketakauere Pa Historic Reserve	70664	1981-86
22	Te Koru Pa Historic Reserve	70548	1983
23	Te Pau O-Te-Huia Pa Historic Reserve	70626	1981-86
24	Tataraimaka Pa Historic Reserve	70554	1981-86
25	Taumata Historic Reserve	70531	1981-86
26	Tapuinikau Pa Historic Reserve	70374	1981-86
27	Retaruke Valley Reserves:		Nov-86
	Hautonu Scenic Reserve	70254	
	Kauhangaroa Scenic Reserve	70297	
	Kawautahi Scenic Reserve	70294	
	Konini Scenic Reserve	70331	
	Kouturoa Scenic Reserve	70291	
	Mangaorakei North Scenic Reserve	70279	
	Mangaoturu Scenic Reserve (pt)	70182	
	Ngamoturiki Scenic Reserve	70282	
	Ngataumata Scenic Reserve	70283	
	Ohuha Scenic Reserve	70290	
	Oio Scenic Reserve	70295	
	Orupe Scenic Reserve	70281	
	Oruru Scenic Reserve	70184	

NO.	NAME	CONSERVATION UNIT NO.	DATE PREPARED
	Papapotu Scenic Reserve	70255	
	Pukeatua Scenic Reserve	70280	
	Retaruke Scenic Reserve	70292	
	Rotokahu Scenic Reserve	70284	
	Upper Retaruke Valley Scenic Reserve	70298	
	Pukeatua Conservation Area	70169	
	Neilsons Conservation Area	70168	
	Te Ruahine Scenic Reserve	70278	
	Taheke Conservation Area	70301	
28	Rangitatau Scenic Reserve	70232	Jun-87
29	Koatanui Scenic Reserve	70235	Jun-87
30	Moumahaki Scenic Reserve	70231	Jun-87
31	Westmere Scenic Reserve	70237	Jun-87
32	6 Scenic Res. in Wanganui/ Waitotara Dist.		Jun-87
	Patukino Scenic Reserve	70262	
	Manganui o tahu Scenic Reserve	70264	
	Kauarapaoa Scenic Reserve	70266	
	Raorikia Scenic Reserve	70238	
	Powataunga Scenic Reserve	70265	
	Haehaekupenga Scenic reserve	70269	
33	Nukumaru Recreation Reserve	70652	Aug-86
34	Maitahi Scientific Reserve	70226	1982
35	Ngawaierua Scenic Reserve	70234	Jun-87
36	Patua Scenic Reserve	70546	post 1982
37	Rotokare Scenic Reserve	70187	Sep-93
38	Gordon Park Scenic Reserve	70540	1980
39	Pukepuke Lagoon Conservation Area	70044	8/11/90
40	Round Bush Scenic Reserve	70065	Feb 1982
41	Okoki Pa Historic Reserve	70520	
42	Mystery Block (Kauarapaoa) Conservation Area	70310	1983
43	Mangawhio Lake Scenic Reserve	70311	1987
44	Puketarata - Parihamore Pa Historic Reserve	70663	1976

Compiled December 94

Appendix 6

DISTRIBUTION OF THREATENED SPECIES[10] IN WANGANUI CONSERVANCY BY ECOLOGICAL DISTRICT

FD = FOXTON	MA = MATEMATEAONGA
MP = MANAWATU PLAINS	EG = EGMONT
MO = MOAWHANGO	NT = NORTH TARANAKI
RA = RANGITIKEI	TA = TAUMARUNUI
E = Presumed Extinct	o = Present

	FO	MP	RA	MO	MA	EG	NT	TA
EXTINCT								
Logania depressa				E				
Huia		E	E	E	E	E		
North Island thrush			E	E	E	E		
North Island bush wren						E		
Laughing owl						E		
CRITICAL								
Acaena rorida				o				
Amphibromus fluitans		E		o		E?		
Ranunculus recens "Moawhango"				o				
Sebaea ovata	o							
ENDANGERED								
Dactylanthus taylorii			o	o		o	o	o
Lepidium oleraceum						o		
Olearia hectorii			o					
Pterostylis micromega		o		o		E		
Ranunculus recens "Manaia"						o		
Rorippa divaricata							E	
North Island kokako			E		E	E	o	
Black stilt*	o							
White heron*	o					o	o	
Hector's dolphin							o	
VULNERABLE								
Alepis flavida			o				E	
Coprosma wallii			o					
Crassula peduncularis						o		
Deschampsia caespitosa				E?				
Eleocharis neozelandica	o							
Hebe speciosa							E	
Isolepis basilaris	o							
Marattia salicina						o	o	
Mazus novaezeelandiae	o	o	o					
Melicytus drucei					o			
Melicytus flexuosus			o					
Peraxilla colensoi			o				o	
Peraxilla tetrapetala			o	o			o	
Pomaderris apetala							o	
Prasophyllum aff. patens				o		o		
Ranunculus ternatifolius				o				
Teucridium parvifolium		o	o					
Urtica linearifolia	o	o						
North Island brown kiwi		o	o	o	o	o	o	o
New Zealand dabchick	o	o	o		o			

	FO	MP	RA	MO	MA	EG	NT	TA
VULNERABLE (continued)								
Reef heron	o					o	o	
Australasian bittern	o	o		o		o	o	
Royal spoonbill	o	o				o	o	
Blue duck				o	o	o	o	o
New Zealand falcon		o	o	o	o	o	o	o
Banded dotterel	o	o		o		o	o	
Wrybill	o					o		
Caspian tern	o	o				o	o	
North Island kaka		o	o	o	o	E	o	o
Black petrel						E		
New Zealand dotterel	o							
Short-tailed bat					o		o	
Long-tailed bat	o	o	o		o		o	o
RARE								
Adiantum formosum		o						
Carex uncifolia				o				
Coprosma obconica			o					
Euphorbia glauca						o		
Gratiola nana						o		
Muehlenbeckia ephedroides			o	o				
Myosotis “glauca”				o				
Myriophyllum robustum						o		
Olearia capillaris						o		
Pimelea arenaria “south”	o					E?		
Pittosporum obcordatum			o					
Pittosporum turneri				o				E
Tupeia antarctica			o	o				
Variable oystercatcher	o					o	o	
Long-tailed cuckoo		o		o	o	o	o	o
Stitchbird						E		
North Island saddleback						E		
Least golden plover	o							
Far-eastern curlew	o							
Asiatic whimbrel*	o							
Sanderling*	o							
Sharp-tailed sandpiper	o							
Curlew sandpiper*	o							
Red-necked stint	o							
Eastern little tern	o							
Goldstripe gecko						o		
INSUFFICIENTLY KNOWN								
Korthalsella salicornioides	E		o					
Libertia peregrinans	o			E		E		
Oreomyrrhis “delicatula”				o				
Uncinia strictissima				E?				

	FO	MP	RA	MO	MA	EG	NT	TA
TAXONOMICALLY INDETERMINATE								
Critical								
Celmisia "Mangaweka"			o					
Pimelea "Turakina"	o							
Endangered								
Limosella "Opunake"						o		
Vulnerable								
Myosotis "Volcanic Plateau"				o				
Small-scaled skink				o				
Powelliphanta 'Egmont' (land snail)						o		
Giant kokopu		o			o		o	
Short-jawed kokopu	o	o			o		o	
Brown mudfish	o	o			o	o		
Rare								
Limosella "Manutahi"	o							
Insufficient known								
Cardamine "Reporoa Bog"				o				
Pimelea aridula agg.				o				
Powelliphanta 'Waitotara' (landsnail)					E			
LOCAL								
Anemanthele lessoniana			o					
Brachyglottis sciadophila			o					
Brachyglottis turneri					o		o	
Centipeda minima	o	o						
Crassula manaia	o					o		
Ileostylus micranthus	o	o	o		o	o		
Myosotis "pansa"							o	
Oreomyrrhis "minutiflora"						o		
Pseudopanax ferox				o				
Tetrachondra hamiltonii				o				
Thismia rodwayi								o
North Island fernbird	o	o		o	o	o	o	o
North Island robin					o	E	o	o
Striped skink					o	o	o	
Cook's petrel						E		

*These species are vagrants or rare visitors to the Conservancy.

Appendix 7

GEOLOGICAL SITES AND FEATURES OF IMPORTANCE WITHIN WANGANUI CONSERVANCY

	FEATURE	LOCATION AND MAP REFERENCE	SIGNIFICANCE	IMPORTANCE (See footnote below)	VULNERABILITY (See footnote below)	PROPOSED ACTION
1	Airedale Reef buried forest	Headland near Waitara Q19/177463	Roots and trunks of buried forest.	B	3	Advocate protection under the Resource Management Act
2	Alpha 1 Oil Well	Moturoa breakwater New Plymouth P19/992382	Earliest well in New Zealand	A	3	Advocate protection under the Resource Management Act
3	Arawhata hot springs P20/902046	Arawhata Road Taranaki	Warm springs	C	2	Advocate protection under the Resource Management Act
4	Atene oxbow	Whanganui River S21/940648	Well defined cut- offmeander	B	3	Advocate protection under the Resource Management Act
5	Brunswick Quaternary marine terrace	Brunswick Road Wanganuic R22/784500	Sequence of overbeds with a mixture of lithologies	B	3	Advocate protection under the Resource Management Act
6	Castlecliff coastal Pleistocene sediments	Wanganui coast R22/780403	Sequence of sedi-mentary changes reflecting glacio-eustatic sea level changes	A	3	Advocate protection under the Resource Management Act, or seek formal protection under the Conservation Act or Reserves Act
7	Fanthams Peak parasitic cone	Southern flank of Mt Taranaki/Egmont P20/020100	Well preserved parasitic cone	A	3	Ensure protection under the Egmont National Park Management Plan
8	Hautawa Road Pliocene fauna T22/315483	Turakina Valley, Wanganui	Diverse molluscan fauna	B	3	Advocate protection under the Resource Management Act
9	Himatangi dune dammed lakes	Himatangi Beach Manawatu S24/021873	Largest Holocene area in the country dune	B	2	Advocate protection under the Resource Management Act
10	Himatangi sand-drifts S24/997888	Himatangi Manawatu development	Evidence of past phases of dune	C	2	Advocate protection under the Resource Management Act
11	Hookers shelter volcanic section	Southern flank of Mt Taranaki/Egmont P20/036091	Exposure recording volcanic events within the park	B	2	Ensure protection under the Egmont National Park Management Plan
12	Inaha Beach Quaternary sequence	South Taranaki coastline Q21/103793	Contains records of lahar events and vegetational history	B	3	Advocate protection under the Resource Management Act
13	Jerusalem Hot Springs	Wanganui R21/886814	Warm springs	C	2	Advocate protection under the Resource Management Act
14	Kahui debris flows	North-west slopes of Mt Taranaki/ Egmont P20/897147 P20/912914	Series of debris flow	C	1	Advocate protection under the Resource Management Act, or ensure protection under the Egmont National Management Plan

GEOLOGICAL SITES AND FEATURES OF IMPORTANCE WITHIN WANGANUI CONSERVANCY (CONTINUED)

	FEATURE	LOCATION AND MAP REFERENCE	SIGNIFICANCE (See footnote below)	IMPORTANCE (See footnote below)	VULNERABILITY (See footnote below)	PROPOSED ACTION
15	Kapuni 1 - oil exploration wel	North-east of Kapuni Taranaki lQ20/111919	First successful oil deep well in N. Z.	B	2	Advocate protection under the Resource Management Act
16	Karere Lagoon	North side of the Manawatu River S24/254862	Well defined landform	C	2	Advocate protection under the Resource Management Act
17	Katikara Formation aeolian	Pouakai ring plain Taranaki P20/897185 P20/913187 P19/06530 P20/897185	Evidence for aeolian tephra redeposition tephra sections during the last glacial	B	2	Advocate protection under the Resource ManagementAct
18	Kawaekaka landslide	South of Mangaweka Wanganui T22/473496	Landslide with slump flow	B	3	Advocate protection under the Resource Management Act
19	Kohi Gorge petroglyphs	Kohi Stream gorge Waverley Q21/467607	Prehistoric rock art site	C	2	Advocate protection under the Resource Management Act
20	Landguard Bluff Pleistocene sequence	Wanganui Coast R22/820367	Pleistocene fossiliferous sedimentary sequence	B	3	Advocate protection under the Resource Management Act
21	Maero debris flow	Mt Taranaki/ EgmontP20/966144 P20/963145 P20/965144	The youngest pyro-clastic flow deposits from Mt Taranaki/ Egmont	B	3	Ensure protection under the Egmont National Park Management Plan
22	Manawatu Gorge	East of Palmerston North T24/471954	Gorge bisecting main North Island ranges	B	3	Existing protection under the Reserves Act
23	Manawatu River estuary	Manawatu River mouth Foxton S24/000787	Habitat of many birds	C	2	Existing protection under the Reserves Act
24	Manawatu and Rangitikei alluvial terraces	Either side of the Manawatu River T24/400946	Best example of alluvial terraces in New Zealand	A	3	Advocate protection under the Resource Management Act
25	Manawatu coastal foredunes	Manawatu coast S24/993904 foredunes	Well defined continuous	B	1	Advocate protection under the Resource Management Act
26	Midhirst swamps	Midhirst Q20/229126	Region of blocked drainage	C	2	Advocate protection under the Resource Management Act
27	Mt Jowett Pleistocene fossil locality	Mt Jowett Wanganui R22/866442	Holostratotype of terangian stage	B	2	Advocate protection under the Resource Management Act
28	Mt Taranaki/ Egmont stratovolcano	Central Taranaki P20/018117	Largest andesite stratovolcano in New Zealand	A	3	Ensure protection under the Egmont National Park Management Plan
29	Mt Stewart Anticline	Manawatu Plains S23/215030	Actively growing asymmetrical anticline	B	3	Advocate protection under the Resource Management Act

GEOLOGICAL SITES AND FEATURES OF IMPORTANCE WITHIN WANGANUI CONSERVANCY (CONTINUED)

	FEATURE	LOCATION AND MAP REFERENCE	SIGNIFICANCE	IMPORTANCE (See footnote below)	VULNERABILITY (See footnote below)	PROPOSED ACTION
30	Nukumaru Beach to Castlecliff Beach Plio-Pleistocene Section	Beach and sea cliffs between Nukumaru Beach and Castlecliff Wanganui R22/752430	Stratotypes for the Castlecliffian and Nukumaruan Stages seek formal protection	B	3	Advocate protection under Resource Management Act, or under Conservation Act or Reserves Act (some already protected under the Reserves Act)
31	Ohawe Beach Quaternary terraces	South-east of Ohawe Beach Taranaki Q21/144784	Interglacial marine terrace and cover beds, record of major lahar event and last interglacial pollen sequence	B	3	Advocate protection under the Resource Management Act
32	Ohingati cut-off meander	Rangitikei River Ohingaiti T22/408448	Clearest cut-off meander in New Zealand	B	3	Advocate protection under the Resource Management Act
33	Opunake Cliffs lahar sequence	Opunake Beach Taranaki P20/832942	Records avalanche and lahar flows from Mt Taranaki/Egmont	B	2	Advocate protection under the Resource Management Act
34	Oroua Valley Triassic fossil locality	Ruahine Range Manawatu T22/662352	Fossil locality	B	3	Advocate protection under the Resource Management Act
35	Owhaoko Plateau	Between Tararau River and Rangitikei River Wanganui U20/793985	Shows the maximum marine transgression in the late miocene	B	3	Advocate protection under the Resource Management Act
36	Pakihikura Pumice sequence	Pakihikura Hill Manawatu T22/360355	Paleomagnetically documented sedimentary sequence	A	3	Advocate protection under the Resource Management Act
37	Pipiriki (Wairoa) Hot Springs	Pipiriki Wanganui R20/851911	Warm springs	C	2	Advocate protection under the Resource Management Act
38	Pukeiti "paint"ochre mines	Pukeiti Taranaki P19/957235	Only recorded ochre mine in New Zealand	B	3	Advocate protection under the Resource Management Act
39	Pungarehu debris avalanche mound field	West of Mt Taranaki/ Egmont P20/804192	Most well preserved surface of a volcanic debris avalanche deposit in New Zealand	A	1	Advocate protection under the Resource Management Act
40	Rangitawa Stream Quaternary sediments	Rangitawa Stream Wanganui S23/196163	Rangitawa Pumice and Rangitawa Fossil beds	B	2	Advocate protection under the Resource Management Act
41	Rangitikei River Plio-Pleistocene fossiliferous sediments	Rangitikei River S23/214224	Thick pleistocene section with diverse shell beds	B	3	Advocate protection under Resource Management Act
42	Rangitikei Gorge	Rangitikei River T21/647624	Impressive gorge	B	3	Advocate protection under Resource Management Act, or seek formal protection under Conservation Act or Reserves Act

GEOLOGICAL SITES AND FEATURES OF IMPORTANCE WITHIN WANGANUI CONSERVANCY (CONTINUED)

	FEATURE	LOCATION AND MAP REFERENCE	SIGNIFICANCE	IMPORTANCE (See footnote below)	VULNERABILITY (See footnote below)	PROPOSED ACTION
43	Rewa Hill Pleistocene shallow marine sediments	Rewa, Wanganui T22/347316	Sedimentary structures clearly visible	B	2	Advocate protection under the Resource Management Act
44	South Taranaki uplifted marine terraces	South Taranaki Q22/493592	New Zealand's most complete sequence of uplifted marine terraces	A	3	Advocate protection under Resource Management Act, or seek formal protection under Conservation Act or Reserves Act
45	Stratford Mountain House umus	Eastern side of Mt Taranaki/ Egmont.Along the the Stratford Mountain House	Evidence of Maori presence prior to its latest eruption	B	1	Ensure protection under the Egmont National Park road to Management Plan
46	Sugar Loaf Islands and Paritutu	New Plymouth coastline Paritutu P19/986378	Oldest volcanic centre in Taranaki	B	2	Ensure protection under the Sugar Loaf Islands Conservation Management Plan and the Sugar Loaf Islands Marine Protected Area Act
47	Sugar Loaf Islands taranakite	Sugar Loaf Islands New Plymouth P19/985379	Type locality for taranakite	A	3	Ensure protection under the Sugar Loaf Islands Conservation Management Plan and the Sugar Loaf Islands Marine Protected Area Act
48	Te Koru Pa stonework	Oakura New Plymouth P19/956302	Stone retaining walls	B	2	Area already protected as an Historic Reserve
49	Tongaporutu coast Miocene fossil sequence	Rapanui Stream to Taranaki Q18/491697	Holostratotype of Tongaporutuan stage	B	3	Advocate protection under the Resource Motunui Coastline Management Act, or seek formal protection under Conservation Act or Reserves Act
50	Umutekai debris dammed swamp	South-east of New Plymouth P19/079340	Swamp blocked by debris or lahar flow	C	2	Advocate protection under the Resource Management or Conservation Acts
51	Waipipi Beach Plio-Pleistocene section	Waipipi Beach Wanganui Coast Q22/479521	Holostratotype of Waipipian stage and Oturian stage	B	3	Advocate protection under the Resource Management Act, or seek formal protection under Conservation Act or Reserves Act
52	Waitara estuary	Waitara River mouth Taranaki	Salt wedge estuary	B	2	Advocate protection under the Resource Management Act. Protect some areas as Scenic Reserve
53	Waitotara ventifacts	Mouth of Waitotara River Wanganui R22/545490	Area of abundant ventifacts	B	2	Ensure protection under the Resource Management Act or the Reserves Act

GEOLOGICAL SITES AND FEATURES OF IMPORTANCE WITHIN WANGANUI CONSERVANCY (CONTINUED)

	FEATURE	LOCATION AND MAP REFERENCE	SIGNIFICANCE	IMPORTANCE (See footnote below)	VULNERABILITY (See footnote below)	PROPOSED ACTION
54	Waverley Beach Drowned forest	Waverley Beach Wanganui Q22/488517	Pre-human podocarp-dominated forest	C	2	Advocate protection under the Resource Management Act
55	Whitecliffs coastal cliffs	Pariokariwa Point Taranaki Q18/434577	Coastal white cliffs	B	2	Advocate protection under Resource Management Act
56	Wilkies Bluff Pliocene section	Waitotara Wanganui Coast R22/558501	Holostratotype of Mangapanian Stage	B	4	Advocate protection under the Resource Management Act, or seek formal protection under the Conservation Act or Reserves Act.
57	Zigzag, Waihi Beach Plio-Pleistocene fossiliferous sediments	Waihi Beach Wanganui Coast Q21/168771	Stratotype for Hawera 'Series'. Includes shellbed with very diverse, shallow water fauna	B	3	Advocate protection under the Resource Management Act

Footnote: Assessment of importance and vulnerability

Importance:
- A International - site of international scientific importance
- B National- site of national scientific, educational or aesthetic importance
- C Regional- site of regional scientific, educational or aesthetic importance

Vulnerability:
- 1 Highly vulnerable to complete destruction or modification by humans
- 2 Moderately vulnerable to modification by humans
- 3 Unlikely to be damaged by humans
- 4 Could be improved by human activity

Note: Sites of Regional importance with less than a moderate vulnerability to human activities have not been listed in the above table.

Appendix 8

AREAS WITH IMPORTANT NATURAL VALUES IN THE WANGANUI CONSERVANCY COASTAL ENVIRONMENT

(Additional sites with important natural values above MHWS are identified in PNAP reports for the Foxton [86], Egmont [4] and North Taranaki [6] Ecological Districts.)

FOXTON ECOLOGICAL DISTRICT

1. Waiinu Beach

The Waiinu Reef is a unique feature on a coast which is dominated by sandy beaches. The reef is characterised by limestone outcrops which extend from Mean High Water Spring (MHWS) to 500 m offshore.

The hard rock platform is a resistant, limy conglomerate of Pleistocene origin containing abundant well-preserved fossils of oysters, toheroa, cockles, paua and barnacles.

There is an abundance of marine invertebrates, plants and fish.

2. Waverley Beach

Waverley Beach is of geological interest. Wave erosion has carved a series of caverns and ravines in the cliff. Eleven small peninsulas project 5-15 m out to sea (at high tide) and an eroded stack is accessible at low tide. The eroding stacks, caverns and tunnels form unique landforms with high scenic values at the land/sea interface. In places, the cliff tops support dense mats of small native plants. These are dominated by the turf-grass, *Zoysia minima,* and contain the nationally local herb, *Crassula manaia.*

Wave erosion has undercut the cliffs and the softer ash layer has been removed leaving only the harder papa layer exposed as terraces. Blow holes have also been formed as a result of wave erosion and at high tides seawater is forced through in quite a spectacular display.

3. North and South Traps, off Patea

The North and South Traps, offshore south of Patea, are of particular interest because of the abundant marine life and tall underwater pinnacles.

The two large adjoining reef systems, approximately 6 km offshore, provide an important marine habitat in an environment largely dominated by sand. There are few large, permanent, accessible reef systems in the area.

The reefs have high ecological value, with large forests of the seaweed *Ecklonia* and an excellent assortment and abundance of marine life.

4. Pink and White Coralline Alga

At a depth of 100 m, the seabed between Foxton and Wanganui supports extensive sponges and numerous characteristic finger-like growths of striking pink and white coralline alga. Several new or previously rare crustacea have also been found.

In depths of 40 - 60 m off Manawatu, rubble platforms with a low elevation (25 - 30 cm above the surrounding bottom) occur. These are a few hundred metres to several kilometres in width. A gravel boulder accumulation with a low elevation is located about 12 km off Wanganui and is well-known to recreational users.

Geological survey confirms that these gravels are also found in the Nelson area and on the gravel plain just south of the Waitotara River. Rich fauna of branching corals, bryozoans, sponges, ascidians, crustacea, mollusca, polychaetes and small demersal fish are frequently associated with this type of bottom.

5. Zooplankton Biomass

The zooplankton biomass in the South Taranaki Bight and the Cook Strait is more than four times (1335 mg/m^3) the national average (300 mg/m^3) and six times the North Taranaki Bight readings (204 mg/m^3).

ESTUARIES

6. Whenuakura Estuary

The Whenuakura estuary is small but relatively unmodified apart from invasion by spartina. It is important for seabirds such as the threatened Caspian tern and wading birds such as the rare variable oystercatcher which use this estuary as a place to roost and feed (Sites of Special Wildlife Interest Inventory). The estuary is part of a migratory route and is an important 'stepping stone' for these migratory bird species. The rare variable oystercatcher has been recorded nesting in this area. The estuary is an RAP in the Foxton PNAP report[86].

7. Waitotara River Estuary

The Waitotara River estuary is considered to be one of the least modified and most representative estuaries in the Conservancy. It is important for migratory wading birds such as the threatened royal spoonbill and banded dotterel, as well as international migrant birds such as the eastern bar-tailed godwit. The sub-fossil totara stumps in the river are of historic interest. Whitebait spawning occurs in the Waiau Stream which runs into the estuary.

A protected area (Conservation Area) lies on the true right bank of the Waitotara River and abuts the estuary and the open coast. The protected area consists of dunes, dune lake and ephemeral wetlands. The lake has associated reed swamps and is the habitat of the threatened Australasian bittern, NZ shoveler, black swan and other waterfowl. The ephemeral wetlands contain populations of the threatened plants *Eleocharis neozelandica* and *Sebaea ovata*. Pingao occurs on the dunes. The area provides an important buffer to the estuary.

8. Whanganui River Mouth/Estuary

The Whanganui River estuary is characterised by mudflats which are exposed at low tide. The main area of mudflat is situated between the Cobham Street bridge and the port. While the true right bank is modified and includes the port, dunes and tidal flats remain on the true left bank. Corliss Island lies within this area and has a saltmarsh fringe.

The estuary is important for wading birds which use this area for roosting and feeding. Fifty-two different bird species have been recorded, including international migratory species such as eastern bar-tailed godwits and lesser knots. Birds which migrate within New Zealand are also present. These include species such as pied stilt, the nationally threatened black stilt, royal spoonbill, wrybill and Caspian tern.

The estuary is also an important breeding ground for many fish species including the black and yellow-belly flounder and freshwater native fish species such as galaxids.

9. Whangaehu Estuary River Mouth

A tidal mudflat of about 20 ha bound by sand dunes and a 5 ha estuarine area at the mouth of the Whangaehu River which has been recommended for protection[86]. Small herbfields, rushland, sedgeland and reedland are all present. Over 75% of the estuary is bare sand or mud; but in the east there is about 1 ha of indigenous vegetation. The area would be very close to its original condition. The estuary is bordered on the true right bank by Whitiau Scientific Reserve. This is a nationally important dune system with dry dunes, damp hollows and ephemeral wetlands, containing the critically endangered herb *Sebaea ovata* and several other threatened plants.

Cross Reference
See Sec 7.5

The estuary is a feeding and roosting area for wading birds. Birds recorded include the threatened banded dotterel and the royal spoonbill, as well as the Caspian tern and black-fronted dotterel.

10. Turakina River Estuary Spit

A sand spit follows the true right bank of the Turakina River from opposite Koitiata township south-east for approximately 2 km. This area was recommended for protection[86]. Less than 10% of the area is vegetated. Pingao is the most numerous species occurring over small areas of up to 100 m^2. There are also areas of spinifex and marram. This ecological unit was never common but would have occurred from time to time at several estuaries in the ecological district.

The area has a high degree of naturalness with an unusual dominance of pingao and extensive areas of tidal flats that provide important habitat for wading birds. Migratory waders seen here are threatened wrybill and banded dotterel; also known are eastern bar-tailed godwit, black-fronted tern, Caspian tern and variable oyster-catchers.

The area is recognised as being highly dynamic.

11. Rangitikei River Estuary and Saltmarsh

An estuary covers about 200 ha. Half is covered by saltmarsh south of the main channel of the Rangitikei River and has been recommended for protection. The remainder of the area comprises the river, two oxbow lakes, dunes and a sandplain. There is some weed invasion but the area still gives a good indication of the original condition. The

Conservancy's largest populations of *Carex litorosa* are located within this area. A native community of sea rush and jointed rush thrives over a thick mat of indigenous and exotic herbs.

Thirty-five different bird species have been identified on this estuary. These include such species as the threatened banded dotterel, rare variable oystercatcher and pied stilts.

12. Manawatu Estuary

A river estuary with tidal mudflats and a series of sand dunes at the river mouth. It extends about 4 km up the Manawatu Estuary. This is a recommended area for protection[86] which covers the area from the western side of the Foxton loop to the sea and includes an S-bend of the Manawatu River and associated tidal mudflats, a 100 ha saltmarsh on the north bank along the loop edge and two smaller saltmarshes totalling about 40 ha on the south bank of the river. Much is in a relatively natural condition. It is habitat for one of the Conservancy's largest populations of the threatened fernbird.

The saltmarsh area is important as the vegetation is representative of a pre-European condition. The adjoining dune complex shows a representative vegetation pattern with healthy populations of indigenous shrubs, especially *Pimelea arenaria.*

The Manawatu estuary is regarded as being of national importance as a feeding, breeding and roosting area for 58 bird species including international migrants (See Section 7.5). Regular users of the estuary include the endangered white heron, the threatened Australasian bittern, wrybill, banded dotterel and royal spoonbill. The Ornithological Society of New Zealand has identified this estuary as being of national importance for wading and coastal birds. It is regarded as one of the best habitats for wading birds south of Kawhia in the North Island.

The estuary receives high recreational use and has high landscape value.

EGMONT ECOLOGICAL DISTRICT

13. Waitara, Waiongana and Airedale Reefs

These are extensive reef systems which are exposed at low tide. The reefs are very accessible and are important for the collection of edible shellfish such as mussels, paua and sea urchins.

Airedale reef is important geologically as it contains the roots and trunks of a buried forest.

The reefs in this area show similar basic assemblages of organisms, and there are two significant mussel beds at the eastern end (closest to the Waitara River) and the western end (closest to the Waiongana River) of the Waitara reef.

14. Four Mile Reef

This reef system is located approximately 6.5 km offshore from Ohawe Beach, Hawera. Reef systems such as this are rare in the South Taranaki Bight. The reef has abundant and diverse marine life.

This reef is a traditional fishing reef and is important to local Iwi.

15. Cape Egmont

Three major ocean currents pass Cape Egmont bringing flora and fauna from cool and warm waters into the area. The result is an interesting and diverse assemblage of marine organisms. Unusual pinnacles are present offshore and these are of interest geologically as well as providing habitat for many sedentary marine invertebrates.

Extensive offshore andesitic boulder reefs are present and extend for 5-10 km offshore. These reefs were formed by erosion of coastal lahars.

The marine habitat in this area is thought to be complex and unique for New Zealand, but the mobile and broken nature of the habitat makes it extremely difficult to study.

16. Tataraimaka

The Tataraimaka Pa (Crows Nest) is a prominent coastal feature. The area is an Historic Reserve which was reserved and gazetted in 1906. The site is now mostly covered with pohutukawa, but it was once part of a military site and is the burial place for 24 Maori.

Northern blue penguin frequent this area and the many burrows indicate that it is an important breeding area.

Two tauranga waka are located on the foreshore.

ISLANDS

17. Sugar Loaf Islands

The Sugar Loaf Islands Marine Protected Area includes island sanctuaries, conservation parks, foreshore, seabed and water and is administered by the Department. The original name given to this area by Ngati Te Whiti was Ngā Motu. The area consists of five islands and two rock groups located just offshore from the city of New Plymouth. The islands are the oldest volcanic remnants in Taranaki. These are the only offshore islands of the Conservancy and they have unique scenic, wildlife, botanical and archaeological features.

The offshore islands of Moturoa, Motumahanga (Saddleback Island), Waikaranga (Seal Rock Group), and Whareumu (Lion Rock) are sanctuaries and access is by permit only. The inshore islands of Pararaki (Seagull Rock), Mataora (Round Rock) and Motuotamatea (Snapper Rock) are protected as Conservation Park. The islands, especially the two predator free offshore islands, provide important habitat for nesting seabirds . The colony of grey-faced petrels is close to their southern limit for breeding and the islands are a breeding ground for the New Zealand fur seal.

Cross Reference
See Sec 12.5.4e

The area has cultural and historical significance. Several archaeological sites have been recorded on, and in the vicinity of the Sugar Loaf Islands. Two urupa have been identified in the wider area of the Sugar Loaf Islands and associated reefs.

The islands are the type locality for taranakite, a phosphate mineral associated with guano, which makes them a mineral locality of national importance.

MARINE HABITATS

A diverse range of underwater habitats can be found in the Sugar Loaf Islands Marine Protected Area. These habitats include caves, caverns, rock faces, flats, pinnacles, crevices, overhangs, boulder fields and sand.

Marine life in this area is diverse and abundant, with several species which are uncommon and some which appear to be unique to the area. Sixty five species of sponge have been recorded.

ESTUARIES

18. Waiwhakaiho Estuary

The Waiwhakaiho estuary is important for wading and migratory birds. The river is an important area for whitebait spawning and was once an important lamprey fishery. The river provides a very diverse freshwater shrimp habitat.

19. Waiongana Estuary

This estuary is important for migratory wading birds and whitebait spawning habitats. Offshore reef systems extend from either side of the river mouth.

20. Waitara Estuary

Geologically, the Waitara estuary is recognised as being a salt wedge estuary in a tectonically uplifting zone. The estuary covers 2 ha and consists of estuarine shrub saltmarsh and reed swamp. Although the river channel has been extensively modified, important estuarine vegetation and two discrete areas were recommended in 1986 for protection under the PNAP [4]. An inspection of the two areas in 1994 revealed that only the area on the true left bank is sufficiently unmodified to warrant protection as a natural area; that on the true right is heavily invaded by weeds. This is the only known location in the ecological district of several indigenous plants including the marsh ribbonwood and *Carex litorosa*.

The estuary is an important habitat for migratory wading birds and as a breeding and nursery ground for the juvenile stages of many species of fish and crustacea.

The area has historical value. Fourteen shipwrecks have been recorded on the Waitara bar.

NORTH TARANAKI ECOLOGICAL DISTRICT

21. Pariokariwa Reef

This is a large reef system between Pariokariwa Point and North of the Waikiekie Stream. It extends 1.5 km offshore from Pariokariwa Point and runs in a northerly direction. It includes the small intertidal area known locally as Waikiekie Reef. Here, approximately 30 m of rocky intertidal habitat is exposed at low tide. The reef at this point extends approximately 900m offshore and runs in a NE-SW direction for about 1km. The reefs are relatively shallow, ranging in depth from 8 to 20 m.

This coast is a dynamic, high energy environment, within which sand is continuously on the move. The intertidal and subtidal reef system supports diverse marine life. It is elevated, avoiding the 'sand blasting' effects of moving sediments. Seaweeds and encrusting (attached) marine animals, such as sponges, abound along with bryozoans, ascidians, crustaceans, shellfish and a large variety of fish.

The diversity of encrusting animals is typical of a community which is generally in decline elsewhere around New Zealand through damage to habitat by trawling methods and by sedimentation from land runoff. The sponge communities or 'garden' habitat on these rock platforms are outstanding. Initial indications are that this area contains at least three undescribed species of sponge of the genus *Axinella* and possibly one of *Latrunculia;* these species are rare throughout New Zealand. Anemones, hydroids and bryozoans which live on the overhangs and crevices indicate a rich, stable encrusting community (Dr Chris Battershill, NIWA, Greta Point Wellington, personal communication).

The adjacent 'Whitecliffs' (Parininihi) are of geological interest and give the area high scenic value. The Whitecliffs Conservation Area is a large area of protected forest which adjoins the foreshore.

The shipwreck of the 'Alexandra' lies in shallow water offshore.

Fluttering shearwaters breed on the cliffs and blue penguins burrow near stream mouths.

22. Te Kawau

Te Kawau is a small, flat-topped, steep sided island Pa which is protected as an historic reserve and archaeological site (Kawau Pa). The island is surrounded by the sea at high tide only. The Pa is an ancient site of the Ngati Tama.

Blue penguin are common around this area and white-fronted terns and grey-faced petrels nest on the cliffs and offshore stacks.

Kawau Pa is an attractive landmark on this scenic section of the North Taranaki coast.

23. Epiha Reef

This is a large intertidal reef system between the Mokau and the Mohakatino Rivers. This rock platform supports a range of encrusting organisms including mussels, limpets and barnacles and is the most extensive intertidal reef system in North Taranaki.

ESTUARIES

24. Mimi Estuary

The Mimi Estuary includes an extensive sandspit and has tidal mudflats, salt marsh and sand dunes, all of which are uncommon in North Taranaki.

A range of migratory and wading birds use this area. Whitebait spawning occurs in the upper reaches of the estuary.

The estuary is an important nursery for juvenile marine species and for flounder. Blue penguin have been recorded breeding in this area.

25. Urenui Estuary

The Urenui Estuary covers approximately 80 ha and contains tidal mudflats and earth banks. Migratory birds roost and feed here.

There is whitebait spawning in the upper reaches. Snapper and trevally spawn offshore and run up the estuary to feed. The estuary is also an important flounder fishery. The endangered Hector's dolphin is occasionally sighted offshore.

26. Tongaporutu Estuary

The Tongaporutu Estuary is a large mudflat estuary which is relatively unmodified and unpolluted. The estuary is bounded by bluffs and offshore stacks, bearing hardwood forest.

The whole area is visually spectacular.

The offshore stacks and cliff edges have breeding colonies of grey-faced petrels. Blue penguin have been recorded nesting in this area. The estuary has diverse and abundant species of shellfish. Whitebait spawning occurs in the upper reaches of the estuary. The rare variable oystercatcher has been recorded here.

The Tongaporutu coast is considered nationally important for its geology. Fossils of the Miocene Epoch (halostratotypes of the Tongaporutuan stage) are present.

The offshore stacks and cliffs are considered to be regionally important and show excellent turbidite exposures at the Tongaporutu River mouth. Material is also present from the Rapanui formation (Pleistocene Epoch).

Extensive caves are cut back into the cliffs south of the rivermouth. These feature strong horizontal strata and frequent waterfalls.

27. Mohakatino Estuary

This estuary, with brackish swamp and extensive mudflats at low tide, is one of the least modified in North Taranaki.

The sand flats and the wetland adjacent to the estuary are habitats for threatened species such as Australasian bittern and Caspian tern. The rare variable oystercatcher, regionally important fernbird and spotless crake have also been recorded.

The Mohakatino Swamp Conservation Area covers 12.5 ha, on the true right bank of the river. Because it is adjacent to the coastal marine area it is especially important and it acts as a buffer to the estuary. Tainui, a nationally vulnerable tree, grows on the swamp edge.

The river supports whitebait, flounder and shellfish. The estuary is rated as nationally significant in the Wetlands of Ecological and Representative Importance. The land/seascape in this area is very unusual and dramatic.

28. Mokau Estuary

This is a large estuary (approximately 70 ha). The sequences of vegetation, from saltmarsh to brackish swamp, to freshwater swamp and swamp forest, and to terrestrial forest, are some of the most intact in the North Island. The river is a major geographic feature draining a rugged catchment, much of which is in native bush. Blue penguins are known to breed at the river mouth. Migratory wading birds and the

rare variable oystercatcher have been recorded.

The area is rich in history with many ships having been wrecked on the river bar. The area has many pa sites and midden pits.

Appendix 9

FORMAL NAMES OF SPECIES, AS USED IN TEXT

* Denotes introduced species

PLANTS

Common Name	Formal Name
* African clubmoss	*Selaginella kraussiana*
akiraho	*Olearia paniculata*
* alder	*Alnus glutinosa*
bamboo spike sedge	*Eleocharis sphacelata*
* banana passionfruit	*Passiflora mollissima*
* barberry	*Berberis glaucocarpa*
beech	*Nothofagus* spp.
bidibid(=piripiri)	*Acaena* spp.
black beech	*Nothofagus solandri var. solandri*
black maire	*Nestegis cunninghamii*
blue wheat grass	*Elymus solandri*
bog pine	*Halocarpus bidwillii*
* boneseed	*Chrysanthemoides monilifera*
* boxthorn	*Lycium ferocissimum*
bracken (fern)	*Pteridium esculentum*
bristle tussock	*Rytidosperma setifolium*
* broom	*Cytisus scoparius*
* buddleia, purple	*Buddleja davidii*
cabbage tree	*Cordyline australis*
carmine rata	*Metrosideros carminea*
* cathedral bells	*Cobaea scandens*
* cherry laurel	*Prunus laurocerasus*
* Chilean flame creeper	*Tropaeolum speciosum*
Chlilean rhubarb	*Gunnera tinctoria*
cliff kiokio	*Blechum* sp. (unnamed; *B.capense* aggregate)
club sedge	*Isolepis nodosa*
Cook's scurvy grass	*Lepidium oleraceum*
* cotoneaster	*Cotoneaster glaucophyllus* (mostly, but also *C.microphyllus C.franchetii, C.simonsii, C.lacteus* in places)
crassula	*Crassula* spp.
* creeping bent	*Agrostis stolonifera*
* Darwin's barberry	*Berberis darwinii*
dwarf mazus	*Mazus novaezeelandiae*
* elderberry	*Sambucus nigra*
* elm, suckering	*Ulmus x hollandica*
* evergreen buckthorn	*Rhamnus alaternus*
everlasting daisy	*Anaphalis* spp.
filmy fern	*Hymenophyllum* and *Trichomanes* spp.
four-square	*Lepidosperma australe*
giant maidenhair (fern)	*Adiantum formosum*
* ginger	*Hedychium gardnerianum, H.flavescens*
* gorse	*Ulex europaeus*
grass-tree	*Dracophyllum traversii*
Hall's totara	*Podocarpus hallii*
hangehange	*Geniostoma rupestre* var. *ligustrifolium*

ANIMALS

Common Name	Formal Name
albacore tuna	*Thunnus alalunga*
arrow squid	*Nototodarus sloanei*
banded dotterel	*Charadrius bicintus*
barnacle	*Balanus* sp.
barracouta	*Thyrsites atun*
bar-tailed godwit	*Limosa lapponica*
bat - long-tailed	*Chalinolobus tuberculatus*
bat - short-tailed	*Mystacina t. tuberculata*
bellbird	*Anthornis m. melanura*
bittern, Australasian	*Botaurus poiciloptilus*
black-fronted dotterel	*Charadrius melanops*
black mudfish	*Neochanna diversus*
* black swan	*Cygnus atratus*
blue cod	*Parapercis colias*
blue duck	*Hymenolaimus malacorhynchos*
blue moki	*Latridopsis ciliaris*
brown kiwi	*Apteryx australis mantelli*
brown mudfish	*Neochanna apoda*
* brown trout	*Salmo trutta*
bully sp.	*Gobiomorphus* sp.
Caspian tern	*Sterna caspia*
chiton	*Sypharochiton* sp.
clingfish	*Diplocrepis* sp.
* cockatoo, sulphur-crested	*Cacatua galerita*
cockle	*Chione stuchburyi*
conger eel	*Conger verreauxi*
coot	*Fulica atra. australis*
crayfish	*Jasus edwardsii*
dabchick	*Poliocephalus rufopectus*
* deer - fallow	*Cervus d. dama*
* - red	*Cervus elaphus scoticus*
* - sambar	*Cervus u. unicolor*
* - sika	*Cervus nippon mantchuricus*
dwarf galaxias	*Galaxias divergens*
eagle ray	*Myliobatis tenuicaudatus*
eastern bar-tailed godwit	*Limosa lapponica baueri*
eastern curlew	*Numenius madagascariensis*
eel - long fin	*Anguilla dieffenbachii*
eel - short fin	*Anguilla australis*
elephant fish	*Callorhynchus milii*
estuarine stargazer	*Leptoscopus macropygus*
fantail, North Island	*Rhipidura fuliginosa placabilis*
fernbird, North Island	*Bowdleria punctata vealeae*
flounder	*Rhombosolea* sp.
fluttering shearwater	*Puffinus gavia*
gecko - common	*Hoplodactylus maculatus*
gecko - forest	*Hoplodactylus granulatus*
gecko - gold stripe	*Hoplodactylus chrysosireticus*
gecko - green	*Naultinus elegans*

PLANTS

Common Name	Formal Name
harakeke (NZ flax)	*Phormium tenax*
hard beech	*Nothofagus truncata*
hard tussock	*Festuca novae-zelandiae*
* hawthorn	*Crataegus monogyna*
* hazel pomaderris	
* heather	*Calluna vulgaris*
* hedge woundwort	*Stachys sylvatica*
heketara	*Olearia rani*
* hempagrimony	*Eupatorium cannabinum*
* Himalayan honeysuckle	*Leycesteria formosa*
hinau	*Elaeocarpus dentatus*
holly-leaved senecio	*Senecio glastifolius*
* hornwort	*Ceratophyllum demersum*
* horsetail	*Equisetum arvense*
houpara	*Pseudopanaxlessonii*
hutu	*Ascarina lucida*
inaka	*Dracophyllum longifolium* var.
* ivy	*Hedera helix*
* Japanese honeysuckle	*Lonicera japonica*
* Jerusalem cherry	*Solanum pseudocapsicum*
jointed twig-rush	*Baumea articulata*
jointed wire-rush	*Leptocarpus similis*
kahikatea	*Dacrycarpus dacrydioides*
kaikawaka	*Libocedrus bidwillii*
kamahi	*Weinmannia racemosa* var. *racemosa*
kanuka	*Kunzea ericoides* var.
kapungawha	*Schoenoplectus validus*
karaka	*Corynocarpus laevigatus*
karamu	*Coprosma robusta*
karo	*Pittosporum crassifolium*
kawakawa	*Macropiper excelsum*
kiekie	*Freycinetia banksii*
king fern	*Marattia salicina*
kohekohe	*Dysoxylum spectabile*
koromiko	*Hebe stricta* var. *stricta*
kowhai	*Sophora microphylla* and/or *S.tetraptera*
* kumara	*Ipomoea batatus*
lacebark	*Hoberia populnea* var.
* Lawson's cypress	*Chamaecyparis lawsoniana*
mahoe	*Melicytus ramiflorus*
maire	*Nestegis* spp. and/or *Syzygium maire*
mangaeo	*Litsea calicaris*
manuka	*Leptospermum scoparium*
matai	*Prumnopitys taxifolia*
mingimingi	*Leucopogon fasciculatus*
miro	*Prumnopitys ferruginea*
monoao	*Dracophyllum subulatum*
* montbretia	*Crocosmia x crocosmiiflora*
moss grass	*Agrostis muscosa*
moth plant	*Araujia sericifera*
mountain beech	*Nothofagus solandri* var. *cliffortioides*
mountain ribbonwood	*Hoberia glabrata*
mountain toatoa	*Phyllocladus alpinus*
mouse-eared hawkweed	*Hieracium pilosella*
narrow-leaved maire	*Nestegis montana*
ngaio	*Myoporum laetum*

ANIMALS

Common Name	Formal Name
giant amphipod	*Tara taranaki*
* goat	*Capra hircus*
golden plover	*Pluvialis fulva*
grey duck	*Anas s. superciliosa*
grey-faced petrel	*Puffinus macroptera gouldi*
grey warbler	*Gerygone igata*
* hare	*Lepus europaeus*
harrier hawk	*Circus approximans*
heart urchin	*Echinocardium cordatum*
Hector's dolphin	*Cephalorhyncus hectori*
* hedge sparrow	*Prunella modularis*
hermit crab	*Pagurus novaeseelandiae*
inanga	*Galaxias maculatus*
isopod	Member of Class Isopoda (a group of Crustaceans)
jack mackerel	*Trachurus* sp.
John dory	*Zeus japonicus*
kahawai	*Arripis trutta*
kaka	*Nestor meridionalis septentrionalis*
katipo spider	*Latrodectus katipo*
kelp fish	*Chironemus marmoratus*
kereru (NZ pigeon)	*Hemiphaga n. novaeseelandiae*
kina	*Evechinus chloroticus*
kingfisher	*Halcyon sancta vagans*
* kiore	*Rattus exulans*
koara	*Galaxias brevipinnis*
kokako	*Callaeas cinerea wilsoni*
kokopu - banded	*Galaxias fasciatus*
- giant	*Galaxias argenteus*
- short jawed	*Galaxias postvectis*
koura	*Paranephrops planifrons*
lamprey	*Geotria australis*
lesser knot	*Calidris canutus canutus*
limpet	*Cellana* sp. and others
long-billed curlew	*Numenius madagascariensis*
mackerel family	*Scombridae*
* mallard	*Anas p. platyrhynchos*
marble fish	*Aplodactylus arctdens*
marsh crake	*Porzana pusilla*
mole cricket	*Triamescaptor aotea*
morepork	*Ninox n. novaeseelandiae*
mud crab	*Helice* sp.
mussel - black	*Modiolus areolatus*
- green lipped	*Perna canaliculus*
New Zealand falcon	*Falco novaeseelandiae*
New Zealand fur seal	*Arctocephalus forsteri*
New Zealand pipit	*Anthus n. novaeseelandiae*
paddlecrab	*Ovalipes catharus*
paradise shelduck	*Tadorna variegata*
paua	*Haliotis* sp.
* peafowl	*Pavo cristatus*
periwinkle	*Melarapha* sp.
pholad	*Pholadidea* sp.
pied oystercatcher	*Haematopus finschi*
pied stilt	*Himantopus h. leucocephalus*
pipi	*Paphies australis*
* possum	*Trichosurus vulpecula*
pukeko	*Porphyrio p. melanotus*
* quinnat salmon	*Oncorhynchus tshawytscha*

PLANTS

Common Name	Formal Name
neinei	*Dracophyllum latifolium*
New Zealand flax	*Phormium tenax* and/or *P.cookianum*
New Zealand spurge	*Euphorbia glauca*
nikau	*Rhopalostylis sapida*
northern rata	*Metrosideros robusta*
* old man's beard	*Clematis vitalba*
* pampas (grass)	*Cortaderia selloana* and/or *C.jubata*
parataniwha	*Elatostema rugosum*
* parrot's feather	*Myriophyllum aquaticum*
patotara	*Leucopogon fraseri*
pigmy pine	*Lepidothamnus laxifolius*
pinatoro	*Pimelea urvilleana* and/or *P.prostrata*
pingao	*Desmoschoenus spiralis*
pink pine	*Halocarpus biformis*
podocarp	Any member of Family Podocarpaceae (including rimu, totara, kahikatea, matai, miro)
pohutukawa	*Metrosideros excelsa*
pokaka	*Elaeocarpus hookerianus*
* privet	*Ligustrum* spp.
pukatea	*Laurelia novae-zelandiae*
Purua grass	*Bolboschoenus fluviatilis* and/or *B. caldwellii*
pyp grass	*Ehrharta villosa*
ramarama	*Lophomyrtus bullata*
rata	*Metrosideros* spp. (excluding *M.excelsa*)
raupo	*Typha orientalis*
red beech	*Nothofagus fusca*
red tussock	*Chionochloa rubra*
reed	Emergent aquatic plant with linear leaves or no leaves (including raupo, rushes, some sedges)
rewarewa	*Knightia excelsa*
ribbonwood	*Plagianthus regius* var. *regius*
rimu	*Dacrydium cupressinum*
* rowan	*Sorbus aucuparia*
rush	Any member of Family Juncaceae, F.Restionaceae
saltmarsh ribbonwood	*Plagianthus divaricatus*
sand coprosma	*Coprosma acerosa* var.
sand iris	*Libertia peregrinans*
sand pimelea	*Pimelea arenaria*
sea lettuce	*Ulva lactuca*
sea rush	*Juncus maritimus* var. *australiensis*
sedge	Any member of Family Cyperaceae (including species of *Carex, Uncinia Isolepis, Baumea)*
silver beech	*Nothofagus menziesii*
silver tussock	*Poa cita*
snow totara	*Podocarpus nivalis*
spartina	*Spartina anglica*
sphagnum (moss)	*Sphagnum* spp.
spindle tree	*Euonymus europaeus*
spinifex	*Spinifex sericeus*

ANIMALS

Common Name	Formal Name
* rabbit	*Oryctolagus cuniculus*
rag worm	Nemertea group
* rat	*Rattus* sp.
red billed gull	*Larus novaehollandiae scopulinus*
red cod	*Pseudophycis bachus*
red gurnard	*Chelidonichthys kumu*
reef heron	*Egretta s. sacra*
rifleman, North Island	*Acanthisitta chloris-granti*
robin, North Island	*Petroica australis longpipes*
rock oyster	*Crassostrea glomerata*
royal spoonbill	*Platalea regia*
rufous (Nankeen) night heron	*Nycticorax caledonicus*
sand dollar	*Fellaster zelandiae*
sand hopper	*Talorchestia quoyana*
sandpiper	*Tringa* sp.
scallop	*Pecten novaezelandiae*
scaup	*Aythya novaeseelandiae*
school shark	*Galeorhinus galeus*
sea anemone	*Cnidaria* group
sea cucumber	*Stichopus mollis*
sea slater/lice	Marine isopods
shrimp	*Palaemon, Alope, Alpheus,* and *Squilla* sp.
silvereye	*Zosterops l. lateralis*
shag - black	*Phalacrocorax carbo novaehollandiae*
shag - little	*Phalacrocorax melanoleucos brevirostris*
shining cuckoo	*Chrysococcyx l. lucidus*
skate	*Raja, Bathyraja* and *Arhynchobatis* sp.
skink - brown	*Oligosoma zelandicum*
skink - common	*Oligosoma nigriplantare polychroma*
skink - ornate	*Cyclodina ornata*
skink - small-scaled	*Oligosoma microlepis*
skink - speckled	*Oligosoma infrapunctatum*
skink - striped	*Oligosoma striatum*
skipjack tuna	*Katsuwonus pelamis*
* skylark	*Alauda arvensis*
snapper	*Chrysophrys auratus*
South Island pied oystercatcher	*Haematopus ostralegus finschi*
sooty shearwater	*Puffinus griseus*
southern black-backed gull	*Larus d. dominicanus*
southern bluefin	*Thunnus maccoyii*
southern olive shell	*Amalda australis*
spikey dogfish	*Squalus acanthias*
sponge	*Halichondria, Tethya, Callyspongia, Raspaila,* and *Lophon* sp.
spotted smooth dogfish	*Mustelus lenticulatus*
spotless crake	*Porzana tabuensis plumbea*
starfish	Echinoderms
* stoat	*Mustela erminea*
tarakihi	*Nemadactylus macropterus*
tattler	*Tringa* sp.
tomtit, North Island	*Petroica macrocephala toitoi*
trevally	*Pseudocaranx dentex*

PLANTS

Common Name	Formal Name
* strawberry dogwood	*Dendrobenthamia (Cornus) capitata*
supplejack	*Ripogonum scandens*
swamp greenhood orchid	*Pterostylis micromega*
swamp maire	*Syzygium maire*
swamp millet	*Isachne globosa*
swamp nettle	*Urtica linearifolia*
swamp toetoe	*Cortaderia toetoe*
* sycamore	*Acer pseudoplatanus*
tainui	*Pomaderris apetala*
* tall fescue	*Festuca arundinacea*
tanekaha	*Phyllocladus trichomanoides*
tangle-fern	*Gleichenia dicarpa*
tauhinu	*Cassinia leptophylla*
taupata	*Coprosma repens*
tawa	*Beilschmiedia tawa*
tawheowheo	*Quintinia serrata* var.
ti kouka (cabbage tree)	*Cordyline australis*
titirangi	*Hebe speciosa*
titoki	*Alectryon excelsus*
toetoe	*Cortaderia fulvida* and/or *C.toetoe*
totara	*Podocarpus totara*
tree-fern	*Cyathea* spp. and/or *Dicksonia* spp.
tuhara	*Machaerina sinclairii*
tutu	*Coriaria arborea*
* wandering willie	*Tradescantia fluminensis*
* watercress	*Rorippa microphylla, R.nasturtium-aquaticum*
* wattle	*Racosperma (= Acacia)* spp.
wharangi	*Melicope ternata*
whaririki	*Phormium cookianum*
* white bryony	*Bryonia cretica*
white maire	*Nestegis lanceolata*
* willow	*Salix* spp. (unidentified)
* willow, grey	*Salix cinerea*
* willow, crack	*Salix fragilis*
wind grass	*Anemanthele lessoniana*
wire-rush	*Empodisma minus*
wood-rose	Piece of host tree to which *Dactylanthus taylorii* was attached
* Yorkshire fog	*Holcus lanatus*

ANIMALS

Common Name	Formal Name
triplefin	*Tripterygion* sp.
tuatua	*Paphies subtriangulata*
tubeworm	*Polychaete worms*
tui	*Prosthemadera n. novaeseelandiae*
variable oystercatcher	*Haematopus unicolor*
venus shell	Family Veneridae
* wallaby	*Macropus eugenii*
warehou	*Seriolella brama*
weka, North Island	*Gallirallus australis greyi*
* weasel	*Mustela nivalis*
whelk	*Cominella* sp.
whimbrel	*Numenius phaeopus*
whitebait	general term for juveniles of *Galaxius* spp.
white-faced heron	*Ardea n. novaehollandiae*
white-fronted tern	*Sterna striata*
whitehead	*Mohoua albicilla*
wrybill	*Anarhynchus frontalis*
yellow-eyed mullet	*Aldrichetta forsteri*

Appendix 10

RECREATION OPPORTUNITY SPECTRUM CLASSES (ROS) - WANGANUI CONSERVANCY

ROS LAND CLASS	URBAN - URBAN FRINGE (U)	RURAL (R)	BACKCOUNTRY DRIVE IN (incl. 4WD) (D)	BACKCOUNTRY WALK IN (B)	REMOTE - WILDERNESS (W)
PHYSICAL SETTING - Modification and Environment	Urban areas will be intensely modified with human activities predominating. Urban fringes will only exist around larger urban areas with urban sights and sounds present. Fringes will contain mixed urban/rural land uses and be readily accessible from urban areas.	Predominantly cultural (man influenced) landscape with networks of roads, services and rural communities. Mainly farming, forestry, horticulture, etc.	Natural looking landscape dominated by natural vegetation, although some extensive cultural modification may have occurred (i.e. roads, some farming, and forestry, and environment based facilities).	Mainly natural environment although signs of earlier occupation may be present. Facilities mainly limited to huts, tracks, bridges and signs.	Highly natural landscape with little apparent cultural modification. There will be few facilities, limited to light tracks, occasional huts and signs. In wilderness, there will be no modifications or facilities.
Accessibility	In urban areas there will be many modes of transport to all areas. Fringes will be accessible to a wide cross section of the community usually within one kilometre of the urban boundary. Fringes will have good transport or walking opportunities.	A general network of roads.	Generally within one kilometre of good access. Possible for off road vehicles/jet boats to use the area where permitted. Foot access often facilitated by high standard tracks.	More than one kilometre from formed roads and half a kilometre from any motorised access. Aerial and boat access where permitted. Foot travel facilitated by good, all-weather tracks.	More than half a day (or one kilometre) from all motorised access. Foot access only, facilitated by light tracks and some bridges in remote areas. Foot access often weather dependent.
Size and Boundaries	As a guide an urban area would be several hundred residents, 50 plus dwellings at greater than 4 per acre, plus shops, facilities and services. Outer limits would be residential/industrial development and urban transport systems. Small urban areas of less than 1,000 residents may not have a perceptible urban fringe. Fringe boundaries may be identified by change in cultural features, and natural features such as vegetation.	Rural boundaries will usually be defined by cultural influences on the landscape.	Backcountry will be large, generally in excess of 2000 ha and normally safe to hunt with centreline rifles. Boundaries defined by rural modification or natural features in remoter areas.	Generally greater than 1,000 ha. Boundaries defined by natural features (e.g. ridges).	Generally greater than 1,000 ha. Boundaries defined by natural features. The minimum size of a true wilderness area is 2,000 ha and would take two days to traverse on foot.
SOCIAL SETTING	Short visit duration of less than half a day, great variety of activities, high density of users, a lot of contact/interaction with other users, variety of group sizes.	Moderate visit duration often less than a day. Moderate contact between different groups.	Visit duration generally a full day or overnight(s). Social contact variable. In popular areas there may be large group sizes and a variety of user activities.	Visit duration generally overnight(s) but can also be part day. Group size variable. Groups may encounter each other.	Visit duration invariably overnight or several nights. Group size usually small. Group encounters less likely.
MANAGERIAL SETTING - Regulations, facilities and services and maintenance	High degree of regulation, time and location of activities controlled, signs and staff oversight. There will be intensive provision of both public and commercial facilities/services. Sites will often be highly developed and activity specific. There will be regular, visible maintenance.	High degree of regulation controlling activities, often subject to land tenure. There will be a high degree of facilities centering on rural communities, roadside stalls, clubs, community reserves, natural resources, etc.	High degree of regulation controlling activities. May be subject to land tenure. Facilities and services often dependent on access. On sealed roads there will be maintained roadside facilities, campgrounds, visitor centres, skifields, high standard tracks, boat ramps, etc. Where there is poor access there will be few facilities.	Moderate regulation controlling activities. Sign-posted benched tracks and huts. Some visible maintenance.	In remote areas, some bridges and huts and non obvious maintenance. No facilities in wilderness areas.
ENCLAVES	Areas of vegetation that may be highly modified but have natural appearance or be dominated by self sustaining vegetation. Unless formally protected, it would not be areas of less than five ha.	Generally a smaller area of vegetation. May be considerably modified or grazed but contains much natural looking character. Unless formally protected, areas would not be less than five ha or greater than 500 ha.	Developed inclusions may be "islands" of forestry and farming in predominantly natural vegetation.	No developed inclusions.	No developed inclusions.
ACTIVITIES Land	Sports participation, jogging, cycling, relaxation, gardens, viewing activities, viewing scenery,walking, day trips, picnics, outdoor education, orienteering, mountain biking, four wheel driving, horse riding, hang gliding, cycling, rock climbing, paragliding.	Viewing scenery, viewing activities, camping, picnics, car and bus touring, hang gliding, paragliding, cycling, mountain biking, walking, jogging, horse riding, driving for pleasure, outdoor education, four wheel driving, sports participation.	Viewing scenery, viewing activities, camping, picnics, mountain biking, skiing, paragliding, rock climbing, tramping, relaxation, walking, day vehicle trips, photography, horse riding, bird watching, recreational use of baches, outdoor education, nature study, four wheel drive, hunting, jogging.	Viewing scenery, tramping, walking, paragliding, climbing, camping, outdoor education, hunting.	Viewing scenery, tramping, camping, climbing, hunting, paragliding, ski touring.
Lakes and Rivers	Swimming, bathing, model boating, pleasure boating, canoeing, fishing, water skiing, sailing, windsurfing.	Swimming, fishing, sunbathing, canoeing, water skiing, jet skiing, sailing, photography, snorkling/diving.	Fishing, rafting, canoeing, swimming, boating, water skiing, sailing, sunbathing, photography.	Fishing, rafting, canoeing, swimming, jetboating.	Fishing, rafting, canoeing, swimming.